



(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi)
#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057
Phone:080-28372800/1/2 www.sapthagiri.edu.in Fax: 080-28372797

1.3.3 Percentage of students undertaking project work/field work/ internships
1.List of students undertaken mini project program wise

Sl. No	1.List of students under Sl. No Programme name		List of students undertaken mini project	
1	Computer Science Engineering	Code	Sushmitha M	
2	Computer Science Engineering	CS	Swapna D	
3	Computer Science Engineering	CS	Tanmay Gupta	
4	Computer Science Engineering	CS	Sujith K M	
5	Computer Science Engineering	CS	Suman R	
6	Computer Science Engineering	CS	Shilpashree.M.C	
7	Computer Science Engineering	CS	Shreevidya.H.S	
8	Computer Science Engineering	CS	Pooja V Asangihal	
9	Computer Science Engineering	CS	Shashank Shekar	
10	Computer Science Engineering	CS	Saurabh Dokaniya	
11	Computer Science Engineering	CS	Saurav Sirohi	
12	Computer Science Engineering	CS	Shravani V	
13	Computer Science Engineering	CS	Sindhu R V	
14	Computer Science Engineering	CS	Soujita Ghosh	
15	Computer Science Engineering	CS	Suruchi Rani	
16	Computer Science Engineering	CS	Ujjwal Shankar	
17	Computer Science Engineering	CS	Vishwanatha Bhat	
18	Computer Science Engineering	CS	Vijaya Kumar S H	
19	Computer Science Engineering	CS	Nitin Mundhara	
20	Computer Science Engineering	CS	Vatsala Parmar	
21	Computer Science Engineering	CS	Yashaswinijs	
22		CS	Ranjita Ganapati Hegde	
	Computer Science Engineering	CS	Vibha M S	
23	Computer Science Engineering	CS		
24	Computer Science Engineering	CS	Unnati Gupta Madiha Amber A N	
25	Computer Science Engineering	CS	Pavithra.S	
26	Computer Science Engineering			
27	Computer Science Engineering	CS	Ranjini.R	
28	Computer Science Engineering	CS	Sanjana.K	
29	Computer Science Engineering	CS	Darshan V D	
30	Computer Science Engineering	CS	Jagadish J	
31	Computer Science Engineering	CS	Chethan Kumar G	
32	Computer Science Engineering	CS	Hemanth Kumar Gr	
33	Computer Science Engineering	CS	Saurajeet Banarjee	
34	Computer Science Engineering	CS	Rakshitha S N	
35	Computer Science Engineering	CS	Rahul Kumar Verma	
36	Computer Science Engineering	CS	Ribanshu Keshri	
37	Computer Science Engineering	CS	Kavya N G	
38	Computer Science Engineering	CS	Meghana A Nayaka	

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore- 560 057



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Fax: 080-28372797

Sl. No	Programme name	Program Code	List of students undertaken mini project	
39	Computer Science Engineering	CS	Shwetha S K	
40	40 Computer Science Engineering		Yashaswini N	
41	Computer Science Engineering	CS	Yashi Sikligar	
42	Computer Science Engineering	CS	Sunny Kumar Sharma	
43	Computer Science Engineering	CS	Adity Dey	
44	Computer Science Engineering	CS	Ankit Kumar	
45	Computer Science Engineering	CS	Balraj	
46	Computer Science Engineering	CS	Bhuvan Reddy	
47	Computer Science Engineering	CS	Priya Kumari	
48	Computer Science Engineering	CS	Rashmi Kumari	
49	Computer Science Engineering	CS	Sidheeraj	
50	Computer Science Engineering	CS	Sachinkumar S	
51	Computer Science Engineering	CS	Rakhi Kumari	
52 Computer Science Engineering		CS	Payal	
53	Computer Science Engineering	CS	Rahul Prabhu.M	
54	Computer Science Engineering	CS	Rajeev Srinivas	
55	Computer Science Engineering	CS	Santosh Juntpally	
56	Computer Science Engineering	CS	Puneeth A	
57	Computer Science Engineering	CS	Salil Sankritya	
58	Computer Science Engineering	CS	Shantanu Pawar	
59	Computer Science Engineering	CS	Rashmi Surya	
60	Computer Science Engineering	CS	Shobha K	
61	Computer Science Engineering	CS	Rakshitha G	
62	Computer Science Engineering	CS	Rashmi S P	
63	Computer Science Engineering	CS	Anjal D	
64	Computer Science Engineering	CS	Bhavya V	
65	Computer Science Engineering	CS	Shwetha.R	
66	Computer Science Engineering	CS	Samreen Azmi M	
67	Computer Science Engineering	CS	Devanshu Singh	
68	Computer Science Engineering	CS	Jai Venkata Sai Sriram	
69	Computer Science Engineering	CS	Jeevan B K	
70	Computer Science Engineering	CS	Karthik L	
71	Computer Science Engineering	CS	Ramya R	
72	Computer Science Engineering	CS	Swathi H S	
73	Computer Science Engineering		Navya.S	
74	Computer Science Engineering	CS	Tejaswini N R	
75	Computer Science Engineering	CS	Priyanka D	
76	Computer Science Engineering		Shreelakshmi M M	
77	Computer Science Engineering		Harshitha Bh	
78	Computer Science Engineering		Anagha R	

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road Bangalore-560 057



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Fax: 080-28372797

		Program Code	List of students undertaken mini project	
79	Computer Science Engineering	CS	Niharika.S	
80	80 Computer Science Engineering		Kavya C	
81 Computer Science Engineering		CS	Vrunda C	
		CS	Manu M C	
		CS	Punith Kumar B N	
84	Computer Science Engineering	CS	Meghala S	
85	Computer Science Engineering	CS	Nalini J	
86	Computer Science Engineering	CS	Lokesh Kumar N	
87	Computer Science Engineering	CS	Naveen K	
The state and meeting		CS	Harisha N	
89	Computer Science Engineering	CS	Harshita P – 1	
90	Computer Science Engineering	CS	Chathurya Kandiraju	
91	Computer Science Engineering	CS	Laxmi Tripathi	
92	Computer Science Engineering	CS	Kumaresh Prakash	
93	Computer Science Engineering	CS	Mallikarjun S C	
94	Computer Science Engineering	CS	Suhana D	
95	Computer Science Engineering	CS	Shilpashree N	
96	Computer Science Engineering	CS	Monica M	
97	Computer Science Engineering	CS	Ashwini S	
98	Computer Science Engineering	CS	Kiran M	
99	Computer Science Engineering	CS	Manoj R	
100	Computer Science Engineering	CS	Aishwarya S	
101	Computer Science Engineering	CS	Ananya R	
102	Computer Science Engineering	CS	Adarsh R M	
103	Computer Science Engineering	CS	Amul L. Kathre	
104	Computer Science Engineering	CS	Bindushree G L	
105	Computer Science Engineering	CS	Chitra G	
106	Computer Science Engineering	CS	Tejashwini C A	
107	Computer Science Engineering	CS	Sushmitha B Tangadagi	
108	Computer Science Engineering	CS	Likhitha R	
109	Computer Science Engineering	CS	Arpitha B Y	
110	Computer Science Engineering	CS	Bindhu M V	
111	Computer Science Engineering	CS	Divya	
112	Computer Science Engineering		Aditya Deep	
113	Computer Science Engineering		Abhinetra Kumar	
114 Computer Science Engineering			Mahera Alam	
115 Computer Science Engineering			Medha Mansi	
116	Computer Science Engineering		Muskan Kedia	
117	Computer Science Engineering		Madhura K	
118	Computer Science Engineering		Abhinav Anand	

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CINI. Decreammename		Program Code	List of students undertaken mini project
119	Computer Science Engineering	CS	Amir Ali Rangwala
120	Computer Science Engineering	CS	Anjana R
121	Computer Science Engineering	CS	Chaitra V
122	Computer Science Engineering	CS	Ajith S
123	Computer Science Engineering	CS	Akash Kumar Jaiswal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road. Bangalore- 560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "SHIP SAILING" carried out by SWAPNA D (ISG16CS111), SUSHMITHA M (ISG16CS110), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2017-2018. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited n the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

12 lis 19/19 Signature of the HOD Dr.Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

2. Anusadha B

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

Bangalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru ... 560957.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "different phases of moon using Open GL" carried out by TANMAY GUPTA (ISG16CS112), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K.R Assistant Professor

Signature of the Guide Mrs.AnuradhaBadage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

Professor & Head of the Department Computer Science Engir cering Sapthagiri College of Engineering Bangalore-57

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Principal Santhagiri College of Engineering

Chikkasandra, Hesaraghalta Road,

Bancatote San 557

SAPTHAGIRI COLLEGE OF ENGINEERING 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "3D ROOM SCENE" carried out by SUJITH K M (18G16CS106) & SUMAN R (18G16CS107), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Nagann

Professor & Head of the Hebartment Computer Science Engineering Sapthagiti College of Engineering

Bangalore-57

EXTERNAL EXAMINATION

Name of the Examiner

1. VEL DE

2. Anuscolla B

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Roed,
Bangalore- 560 057

Signature with date

28/1/19

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057,

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Beautiful Scenario of Nature using Open GL" carried out by SHILPASHREE M.C(ISG16CS100) and SHREEVIDYA H.S(ISG16CS103), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Min Project (15CSL68) prescribed for the said Degree.

Mrs. Veena K.R. Assistant Professor Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Kleb 19 1 Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Principal

Sapthagirl College of Engineering Chikkasandra, Hesaraghatta Road,

Bangalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 5/69057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Bike Simulation" carried out by POOJA V. ASANGHAL (18G16CS069) and SHASHANK SHEKHAR (18G16CS099), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor Signature of the Guide Mrs. Anuradha Badage Assistant Professor Signature of the HOD
Dr. Kamalakshi Naganna
Professor & H.O.D(INC)
Department of Computer Sicence & Engg.
Sapthagiri College of Engineering
145. Chahasantra Has: a Man Road.

EXTERNAL EXAMINATION

Bengaluru-pou 057,

Name of the Examiners

1. Lotistuk Kal

2. Anusadha Po

Signature with Date

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Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

Bandaforo FE0.657

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Music Visualizer Implementation using OpenGL" carried out by SAURABH DOKANIYA (1SG16CS095), SAURAV SIROHI (1SG16CS096), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor Signature of the HOD
Dr. Kamalakshi Naganna
Professor & H.O.D (IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Sobiteth Kal

2. Anusedha B

Signature with Date

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road;

Bangalore- 560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "FESTIVALS OF INDIA" carried out by SHRAVANI.V(ISG16CS102) and SINDHU R.V(ISG16CS104) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Mrs. Veena K.R Assistant Professor Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC) Department Of Computer Sicence & Engg. Sapthagiri College of Engineering 145, Chikkasandra, Hesaraghatta Main Road. Bengaluru-560 057.

EXTERNAL EXAMINATION

Signature with Date

Name of the Examiners

Principal

-Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road, Bangalore- 560.057

12215/19

14/5, Chikkasandra. Hesaraghatta Main Road, Bengaluru - \$60057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "N-Queen's algorithm using Open GL" carried out by SURUCHI RANI(ISG16CS108) and SOUJITA GHOSH(ISG16CS105), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Mrs. Veena K R Assistant Professor

Signature of the Guide Mrs.AnuradhaBadage Assistant Professor

Signature of th Dr. Kamalakshi Naganna PRINCESON SHADOW DATE DONNE Computer Science Englisco Sapthagiri College of Engineer Bancalore-57

EXTERNAL EXAMINATION

Name of the Examiners Signature with Date Principal Sapthagiri College of Engineering Chikkasandra; Hesaraghatra Road Bangalore-560.057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



certificate

Certified that the Mini Project Work entitled "Christmas tree and snowman" carried out by UJIWAL SHANKAR (ISGI6CS116) & VISHWANATHA BHAT (ISGI6CS122), bonafide students of Sapthagiri SHANKAR (ISGI6CS116) & VISHWANATHA BHAT (ISGI6CS122), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it incorporated in the report deposited in the department library with Mini Project (15CSL68) prescribed for satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs.Veena K R Assistant Professor Signature of the Guide Mr.Srikantha Gowda R Assistant Professor Signature of the HOD

Dr. Kamalakshi Naganna

Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Very D. R.

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore- 560 057

Scanned with CamScanner

SAPTHAGIRI COLLEGE OF ENGINEERING 14/5, Chikknsandra, Hesaraghatia Main Road, Bengalura - 260037.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Exhibition using Open GL" carried out by VUAYA RUMAR SII (ISG16CS120), bonafide student of Sapthagiri College of Engineering, in partial millment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited all corrections. The project report has been approved as it satisfies the academic requirements in the department library. The project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor Signature of the Guide Mr. Srikantha Gowda R Assistant Professor Signature of the HOD

Dr. Kamalakshi Naganna

Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

2. Anneadha B

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road;

Bangalore-560 057

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28/1/19

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "The Maze" carried out by NITIN MUNDHARA (ISG16CS126), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the (Mrs. Veena K. R Assistant Professor

Assistant Professor

Signature of the HOD Mr. Srikantha Gowda Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

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Name of the Examiners

Signature with Date

Sauthagiri College of Engineering Chikkasanera, Hesaraghatta Road, Bangalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057,

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Fishing Occupation" carried out by VAISALA PARMAR(ISGI6CS119), VASHASWINI J S(ISGI6CS123), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs.Veena K R Assistant Professor

Signature of the Guide
Mr. Srikantha Gowda R
Assistant Professor

Signature of the HOD

Dr.Kamalakshi Naganna

Professor & HOD (IC)

Department Of Computer Sicence & Engg

Sapthagiri College of Engineering

145. Chikkasandra, Hesaraghatta Main Road

Bengaluru-560 057.

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Very

B

Principal

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

Bancalore 500 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Ring Moves" carried out by VIBHA.M.S (ISG16CS127) & RANJITA.G.HEGDE(ISG16CS125), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena.K.R Assistant Professor

Signature of the Guide Mr.Srikantha Gowda R Assistant Professor Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

Les 16/19

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

2. Anusadha B

Principal

Sapthagiri College of Engineering

Ghikkasandra, Hesaraghatta Road,

Bangalore-560 057

Scanned with CamScanner

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Paint Application using OpenGL" carried out by UNNATI GUPTA (ISG16CS117), MADIHA AMBER AN (ISG16CS129), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (ISCSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K. R Assistant Professor

Signature of the Guide Mr. Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

2. Anueadha B

Principal

Sapthagiri College of Engineer ng Chikkasandra, Hesaraghatta Road,

Bangalore- 559 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Clock" carried out by PAVITHRA S (ISG16CS067), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University.

Signature of the Guide Mrs. Veena K R Assistant Professor Signature of the Guide Mr. Srikantha Gowda R Assistant Professor Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

14/5, Chikkasan fra, 1 esaraghatta Main Road, Bengaluru - 560057

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work enlitled "Archery Game Block Shooting" carried out by RANJINLE (ISG16CS132). SANJANA.K (ISG16CS133), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mr. Srikantha Gowda R Assistant Professor Signature of the Guide Mrs. Veena K.R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& Head

EXTERNAL EXAMINATION

Name of the Examiners	Signature with Date
1.	
2.	
	Principal
	Sapthagiri College of Engineering Chikkasandra, Hesarachatta Road,

14/5, Chikkasandra, Hesaraghatta Main Road, Bengal aru 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Graphical Implementation of Selective Repeat ARQ using Open GL" carried out by DARSHAN V D (1SG17CS405), JAGADISH J (1SG17CS408) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guid Mrs. Chaithra Associate Professor

Assistant Professor & Head

lél22/5/19 Signature of the Guide Signature of the HOD Mr. Srikantha Gowda R Dr. Kamalakshi Naganna

EXTERNAL EXAMINATION

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Name of the Examiners

1. Asif ulla khan
2. Boilcontha Garda. P.

Signature with Date

Sapthagiri College of Engineering

Chikkasanera, Hesaraghalta Road,

Bangalore 560 657

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 550057

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "FIRST COME FIRST SERVE ALGORITHM" carried out by CHETHAN KUMAR G (ISGI7CS404) and HEMANTH KUMAR G R (ISGI7CS407), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections'suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CS_68) prescribed for the said Degree.

Signature of the Gui Mrs. Chaithra Associate Professor

Signature of the Guide Signature of the HOD Mr Srikantha Gowda R Assistant Professor ellegate Togicaling lands Carl at Carl at Lands and a

on those the work

Dr. Kamalakshi Naganna Professor & H.O.D (IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Asit illa klar 2. Eskarthahonda.R

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Sapthagiri College of Engineeri Chikkasan

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 566057

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Graphical Implementation of 3d Reflection of cartoons using Open GL" carried out by SAURAJEET BANERJEE(ISG15CS096) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2013-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K.R Assistant Professor

Mr. Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

Eleba1/5/19

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

2. Anna la R

Principal

Sapthagiri College of Engineering

Chikkasandra, Hesaraghana Road,

Bangalore: **

14/5, Chikkasandra. Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Depiction of seasons using leaves using Open GL" carried out by RAKSHITHA S N (18G16C8412), bonafide students of Sapthagiri Cellege of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs.Veena K R Assistant Professor

Mr.Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Mulhadha B

Sapthagiri College of Engineering Chikkasandra 11455 1 114 Moad,

14/5, Chikkasandra, Hesaraghatta Main Road, Bengabura - 550057

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work emitted "WIND ENERGY USING OPEN GL" carried out by RAHUL KUMAR VERMA (ISGI6CS078) & RIBANSHU KESHRI (ISGI6CS087), bonafide students of Sapthagiri College of Engineering, in partial fulfilment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Mini project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (ISCSL88) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K.R Assistant Professor Signature of the Guide Mr. Srikantha Gowda.R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna

Professor & Head of the Department Computer Science Engineering Sapthagiri College of Engineering Bangalore-57

EXTERNAL EXAMINATION

Name of the Examiners

Loli Auth Kol

2. Anusadha B

Signature with Date

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road.

Bangalore - 560 057

mandia

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "MOVING BICYCLES" earried out by KAVYA N G (1SG15CS040), MEGHANA A NAYAKA (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), MEGHANA A NAYAKA (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana A Nayaka (1SG15CS053) bonafide students of Sapthagiri College of (1SG15CS040), meghana (1SG15CS053) bonafide

Signature of the Guide

Signature of the Guide Dr.Kamalakshi Naganna Professor & H.O.D(IC) Signature of the Guide Mrs. Anuradha Badage Assistant Professor

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Signature of the HOD

Signature of the HOD

Froisso Kamplakshin Saganaalment
Computes of Selection of Engineering
Sapthagin College of Engineering
Bangalore-57

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

2. Anueadira B

Principal

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Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

Bannelman fragget

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "TRAINS COLLISION DETECTION USING OPEN GL" carried out by SHWETHA S.K (1SG15CS102) & YASHASWINI N (1SG15CS126), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K.R Assistant Professor

Signature of the Guide Mr.Srikantha Gowda.R Assistant Professor Signature of the HOD Dr. Kamalakshi Naganna Professor & HOD

EXTERNAL EXAMINATION

Name of the Examiners

, Lotitesh Kal

2_ Anuradha B

Signature with Date

23715/19

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road.

Bangalore - 580 057

Scanned with CamScanner

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Graphical implementation of Move Light around Fixed Objects carried out by SUNNY KUMAR SHARMA (ISG16CS128) & YASHI SIKLIGAR (1SG16CS124), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K.R Assistant Professor

Mr. Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road

Bangalore-Sch 657

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Implementation of Tower of Hanoi using Open GL" carried out by ADITYA DEY(18G15CS005) & ANKIT KUMAR(18G16CS012) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2013-2019.It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

lis 22/5/19 Signature of the Guide

Dr.Kamalakshi Naganna Professor & H.O.D(IC)

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

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Name of the Examiners

Signature with Date

Principa

Sapthagiri College of Engineering Chikkasandra, Hasaraghalta Road,

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "WORKING OF NUCLEAR PLANT" carried out by BALARAJ B G (ISG15CS013) & BHUVAN REDDY M (ISG15CS018), bonafide students of Sapthægiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

kle 23/5/19

Signature of the Guide Dr. Kamalakshi Naganna Professor & H.O.D(IC) Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

2018-2019

SAPTHAGIRI COLLEGE OF ENGINEERING

14.5, Chikkasawira, Hesaraghatta Main Road, Bengaluru - 55/057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Taj Mahaf" carried cut by PRIVA KUMARI(ISGI6CS074) and RASHMI KUMARI(ISGI6CS083), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indizated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor Signature of the Guide Mr. Srikantha Gowda R Assistant Professor

EXTERNAL EXAMINATION

Signature of the HOD

Dr. Kamalakshi Naganna

Department for samp Set Scattle Englishering

Sapthagiri College of Engineering

Sapthagiri College of Engineering

145 Chiklasandra, Hesaraghata Man Road

Eengaluru-560 057.

Name of the Examiners

Signature with Date

1. Solitalk Rod

Principal

mally

1321510

2. Anuradha B

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

Pagazines 560 057

SAPTHAGIRI COLLEGE OF ENGINEERING 14/5. Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

This is to certify that the Mini Project Work entitled "Binary Search Tree" carried out by S. I. DHEERAJ (1SG16CS089) & SACHIN KUMAR S. (1SG16CS090) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visweshvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Mrs. Veena K R Assistant Professor

Mr. Srikantha Gowda R Assistant Professor

Ells 22/5/ Dr. Kamalakshi Naganna Professor & H.O.D (IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Principal

Sapthagiri College of Engineering

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Unidentified Flying Object" carried out by RAKHI KUMARI(ISG16CS081) PAYAL(ISG16CS068), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi dur ng the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Mrs. Veena K R

Assistant Professor

Mr. Srikantha Gowda R

Assistant Professor

Dr. Kamalakshi Naganna

Professor & Head of the Department Computer Science Enginee ing Sapthagiri College of Engineering Bongalore-57

22/5/19

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Ishitak K 2. Anusadha B

Sapthagiri College of Engineering Chikkasandra Hesarre bulta Road,

Bank Missi Gr. USF

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Graphical implementation of virtual lightsusing Open GL" carried out by RAJEEV SRINIVAS (ISG16CS80) and RAHUL PRABHU (ISG16CS079), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Belagaviduring the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department Ebrary. The project Internal Assessment have been incorporated in the report deposited in the department Ebrary. The project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena.K.R Assistant Professor Signature of the Guide Mr.Srikanth.G.R Assistant Professor Signature of the HOD Dr. Kamalakshi Naganna Professor&H.O.D (IC)

Ell 22/5/19

EXTERNAL EXAMINATION

Name of the Examiners

2. Ahuradha B

Signature with Date

13215/19

Principal

Sapthagiri College of Engineering

Chikkasani ia, Reseragnatia Road.

Bangatore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru _ 550057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "NETWORK FIRE WALL USING OPENGL" carried out by SANTOSH JUNTPALLY (ISG16CS094) AND PUNEETH A (ISG16CS131) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor Signature of the Guide Mr. Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. LOLIZEL KA

2. Anurodla B

Principal

1003 Islin

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

DRUMAN

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "ROTATING FAN" carried out by SALIL SANKRITYA (1SG16CS091) & SHANTANU PAWAR(1SG16CS097), bonafide students of Sapihagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Min. Project (15CSL68) prescribed for the said Degree.

Mrs. Veena K R Assistant Professor

Signature of the Guide Mr. Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

1/27/5/19

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Lotituk Kd 2. Anusadha B

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road. Cannatore 560 057

Scanned with CamScanner

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Visualized Traffic Signal" carried out by RASHMI SURYA (ISG16CS085). SHOBHA K (ISG16CS101), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guid Mrs.Veena K.R Assistant Professor Signature of the Guide Mrs. Anuradha Badage Assistant Professor Signature of the HOD Dr.Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Solitab Kd

Principal

1000 11/0

2. Anuradha B

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

Bangalore-560 057

14/5, Chickasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Working of nuclear power plant using Open GL" carried out by RAKSHITHA G (ISG16CS082), RASHMI S P (ISG16CS084), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor

Signature of the Guide Mr. Srikantha Gowda R Assistant Professor Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. SOLITEST KA

Principal

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

Bangalore-550,057

14/5. Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Water Cycle using Open GL"carried out by ANJAL D SG17CS401)&BHAVYA V(1SG17CS403),bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visveswaraiah Technological University, Belagaviduring the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Mrs. Chaithra Associate Professor

Mr. SrikanthGowda R Assistant Professor

Signature of the HOD Dr. KamalakshiNaganna Professor&H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Asif Ula Khan

2. Sollentha anedari

Signature with Date

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore-560 057

14/5. Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Visualizing System for Prim's Algorithm" carried out by MREEN AZMI M (ISG16CS135), SHWETHA R (ISG16CS137), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Chaithra ociate Professor

Signature of the Guide Mr. Srikanth Gowda R Assistant Professor

Signature of the H Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

2. Sollasta Crowe a R

Signature with Date

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore-560 057

SAPTHAGIRI COLLEGE OF ENGINEERING 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Network Communication through Firewall using OpenGL" carried cut by JAI VENKATA SAI SRI RAM BATCHU (1SG16CS039), DEVANSHU SINGH (G16CS028) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2019-2020. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Chaithra Associate Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

lel 22/5/19

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D (IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

Bangalore - 560 057

2018-2019

SAPTHAGIRI COLLEGE OF ENGINEERING

14.5 Childrennelm Henrydum Mein Road, Bengalum - 560057.

Department of Computer Science and Engineering



Certificate

sertified that the Mini Project Work entitled "Simulation of 3D Car"carried out by KARTHIK L[ISG16CS043] & JEEVAN B K(ISG16CS042),bonafide students of Sapthagiri College of I agineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed or the said Degree.

les JosiA ignature of the Guide Mrs. Chaithra Associate Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Eles 23/5/19

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Principal

Sapthagiri College of Engineering

2 Supretal

Chikkasandra, Hesaraghatta Road. Bangalore 550 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Environmental Pollution using Open GL" carried out by RAMYA R (1SG16CS413) & SWATHI H S (1SG16CS418), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Mrs. Veena K R Assistant Professor

Signature of the Guide Mr. Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

2. Sollangtha honolant

Signature with Date

Principal Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Roac.

Bangalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that he Mini Project Work entitled "CONGESTION CONTROL USING OPENGL" carried ut by TEJASWINI N R (ISG16CS134) AND NAVYA S (ISG16CS130) bonafide students of Sapthagiri Cellege of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor

Mr. Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

ey In land R

Principal Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057.

Department of Computer Science and Engineering



Certificate

ertified that the Mini Project Work entitled "3D WEATHER SIMULATION" carried out by PRIYANKA D(1SG17CS413) and SHREELAKSHI M M(1SG17CS415), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Irs. Veena K.R ssistant Professor Mr.Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

2 Solaphallonde Psi

Signature with Date

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road.

Bangalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

rtified that the Mini Project Work entitled "Graphical Implementation of Haloed Lines using Open GL" carried out by ANAGHA R(ISG16CS009) & HARSHITHA B H(ISG17CS406), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

1 leles 22/5/19 Signature of the Guide Dr.Kamalakshi Naganna Professor & H.O.D(IC)

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kanialakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Asif ulla Ichan
2. Ess Kanthalonola.

Sapthagiri College of Engineer

Chikkasandra, Hesaraghatta Road,

Bangalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

ified that the Mini Project Work entitled "Client Server Communication using Open GL" carried out by NIHARIKA S (ISG16CS062) & KAVYA C (ISG16CS136), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visveswaraiah Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Associate Professor

Name of the Examiners

Mr. Srikanth Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

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EXTERNAL EXAMINATION

2 Solangth alimba. R

Signature with Date

Sapthagiri College of Engineering Chikkasandra Hesart

Goad.

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "3D TEXT ANIMATION carried out by VRUNDA C 18G16CS139),bonafide student of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of th Mrs. Chaithra Associate Professor

Mr.Srikanth Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

2 Sylvantha Goude. P

Signature with Date

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

Bangalors - 560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Doubly Linked List" carried out by MANU M C 1SG17CS410) & PUNITH KUMAR B N (1SG17CS414) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K R Assistant Professor

Signature of the Guide Mr. Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Asif ulla khan
2. Sookartha hon o

Signature with Date

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road.

Bangalore- 560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "ROBOT" carried out by NALINI J (ISG17CS412) and MEGHALA S (ISG17CS411), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Veena K.R Assistant Professor

Mr.Srikantha Gowda R Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor&H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

2. Solaphalunda.L

Signature with Date

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

Bangalore-560.057

14/5. Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057.

Department of Computer Science and Engineering



Certificate

Confided that the Mini Project Work entitled "Car Parking Simulation "carried out by LOKESH KUMAR N (1SG16CS052) and NAVEEN K (1SG16CS061), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University. Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Chaithra ciate Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

lel 22/5/19

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Principal Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

Bangalore 500 057

SAPTHAGIRI COLLEGE OF ENGINEERING 14.5 Chell mandra, Henninghana Main Road, Hengalum - \$50057

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "3D HOUSE using Open GL carried out by HARISHA N 16CS038) and HARSHITA P(ISG16CS036) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Viscesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been acorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed or the said Degree.

signature of the Guide Chaithre riste Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

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EXTERNAL EXAMINATION

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Signature with Date

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

SAPTHAGIRI COLLEGE OF ENGINEERING 14-3, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

rtified that the Mini Project Work entitled "Bascule Bridge Simulation using Open GL" carried out by CHATHURYA.K(1SG15CS024),LAXMI TRIPATHI(1SG16CS050), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2013-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL63) prescribed for the said Degree.

s. Chaithra Associate Professor

Signature of the Guide Mrs.AnuradhaBadage Assistant Professor

F-liber 5 19 Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

Bangalore- 550 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Single linked list using Open GL" carried out by LLIKARJUN SC (ISG16CS055) & KUMARESH PM (ISG16CS049), benafide students of Sapthugiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide

Signature of the Guide Mrs. Anuradha Badage Assistant Professor Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Anithark

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

Bangalore- 560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

●HANA.D(ISG16CS138),SHILPASHREE.N(ISG17CS417) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagari during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the neademic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Chaithra Associate Professor

Signature of the Guide Mr.Srikanth Gowda.R Assistant Professor Signature of the HOD
Dr. Kamalakshi Naganna
Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. ATIF Ula Khah 2. Silogtha Gonda. E

Principal Principal

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Pengalah na Maria Roak

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Spherical Object Reflection using Open GL" carried out MONICA M (ISG16CS059) and ASHWINI S (ISG16CS017) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visveshvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Chaithra Ociate Professor

Signature of the Guide Mr. Srikantha Gowda R Assistant Professor Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Vanitha. K

2. Suprectul

ditera 31/5/19

Principal -

- 31/5/1

Sapthagiri College of Engineering Chikkasandra, Hesaranhatta Road.

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "snow man" carried out by KIRAN M (ISG16CS047) and MANOJ R (18G16CS057), borafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019, It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

has Josla Signature of the Guide Mrs. Chaithra Associate Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

Principal Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

Bangalore, 5507

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

rtified that the Mini Projec: Work entitled "Floating Ball" carried out by AISHWARYA S (1SG16CS005) ANANYA R(1SG16CS010), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2019-2020. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

lib 22/5/19

Signature of the Guide Dr. Kamalakshi Naganna rofessor& H.O.D(IC)

Signature of the Guide Mrs.Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Asit Ula Khan
2. Silanthagonda. K

Signature with Date

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road.

Bangalore, 560 057

14/5, Chikkasandra, Hesataghatta Main Road, Bengaluru - 560057,

Department of Computer Science and Engineering



Certificate

tified that the Mini Project Work entitled "Electromagnetic Induction using Open GL" carried out by ADARSH R M (ISG16CS003) & AMUL (ISG16CS008), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

les 2/5/19 Signature of the Guide)r. Kamalakshi Naganna Professor & H.O.D(IC)

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Asif ulla khan
2. Soskanthagonde. R

Signatury with Date

Principal Sapthagiri College of Engineering

Chikkasandra, Hesarachatta Road,

Bancalore - 560

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

ertified that the Mini Project Work entitled "Graphical implementation of Moving Doll using Open GL" carried out by BINDUSHREE G L (ISG16CS021) & CHITRA G (ISG16CS025), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Signature of the Guide r. Kamalakshi Naganna Professor& H.O.D(IC)

Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Alf Ulu kham
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road.
Bangatore, 560 057

Signature with Date

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

ertified that the Mini Project Work entitled "Ship and Iceberg Collision" carried out by FEJESWINI C A (ISG16CS113), SUSHMITHA B TANGADAGI (ISG16CS109), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University. Belagavi during the adademic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Leboratory with Mini Project (15CSL68) prescribed for the said Degree.

Mrs.Veena K R Assistant Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr.Kamalakshi Naganna Professor & H.O.D(IC)

Department Of Computer Sicence & Engg. Sapthagiri College of Engineering 145, Chikiasandra, Hesaraghata Main For

EXTERNAL EXAMINATION

Bengaluru-560 Cr

Name of the Examiners

Signature with Date

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,

Bangalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Train arrival and departure using Open GL" carried out LIKHITA R (ISGI6CS051) AND ARPITHA BY (ISGI6CS013), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide

Signature of the Guide Mrs.AnuradhaBadage Assistant Professor Eles 22/5/19

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & H.O.D.(IC)
Professor & Head of the United States

Computer Science Engines:
Sapthagiri College of Engineering
Bangaiore-57

EXTERNAL EXAMINATION

Name of t	ne E	xam	me	rs
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Signature with Date

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore- 560 057

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2. Supruty.

3113/12

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

rified that the Mini Project Work entitled "Propeller Simulation Using OpenGL" carried out by BINDHU M V (ISG16CS020) & DIVYA (ISG16CS030), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Chaithra ociate Professor

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Asit ula thay apthagiri College of Engineering Chikkasandra, Hesaraghatta Road.

Chikkasandra, Hesaraghatta Road.

Bangalore- 560 057

14.5. Chikkenandra, Hesaraphana Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Simulation of Windmill using Open GL" carried out by ITYA DEEP (ISG16CS004) and ABHINETRA KUMAR (ISG16CS001) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

les 22/5/19 Signature of the Guide

Dr. Kamalakshi Naganna

Caser

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

Therefore the contract of the second of the EXTERNAL EXAMINATION

Name of the Luminers

Signature with Date

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

3angalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

tified that the Mini Project Work entitled "Graphical implementation of Racecar Simulation using Open GL" carried out by MAHERA ALAM (ISG16CS054), MEDHA MANSI (ISG16CS058), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Bulagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Associate Professor

Mr. Srikantha Gowda R Assistant Professor

12les2015/19 Signature of the HOD Dr. Kamalakshi Naganna

Computer Science Engineering Sapthagiri College of Engineering

Bangalore-57

EXTERNAL EXAMINATION

Name of the Examiners

Principal

Signature with Date

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road,

Bangalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 550057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Graphical implementation of Flowing Fountain using en GL" carried out by MUSKAN KEDIA (ISG16CS060) & MADHURA K (ISG16CS053), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2013-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Signature of the Guide Mrs. Chaithra Associate Professor

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Agre of interaction of foundation.

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

Computer Science Engineering Sapthagir College of Engineering

Bangalore-57

EXTERNAL EXAMINATION

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Name of the Examiners

Signature with Date

Principal

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Sapthagiri College of Engineering

Chikkasandra, Heseraghatta Road,

Bargalore-560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Simulation of Leapin' Lizard using Open GL" carried out by ABHINAV ANAND (ISG16CS002) and AMIR ALI RANGAWALA (ISG16CS007) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Eles 23/5/19 Signature of the Guide Kamalakshi Naganna

Professor & H.O.D(IC)

Signature of the Guide Mrs. Anuradha Badage Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Asif ula Khan

Principal

2. Enkanthahanda. L. Sapthagiri College of Engineering
Chikkasanda, Hesaraghatta Road. R

Signature with Date

Bangalore- 560 057

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Working of Table Fan using Open GL"carried out by JANA r (1SG16CS011) & CHAITRA V(1SG16CS023), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringdegree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of CG Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

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Signature of the Guide Signature of the Guide Dr. Kamalakshi Naganna essor& H.O.D(IC)

Mrs.AnuradhaBadage Assistant Professor

Leles 22/5/19 Signature of the HOD

Dr. Kamalakshi Naganna Professor& H.O.D(IC)

EXTERNAL EXAMINATION

Name of the Examiners

1. Asif Ula khan

Principal

2. Snokartha Gowda - P Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road, & Bangalore- 560 057

Signature with Date

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Computer Science and Engineering



Certificate

Certified that the Mini Project Work entitled "Graphical Implementation of Face Maker using Open carried out by AJITH S (1SG17CS400), AKASH (1SG16CS006) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is cert fied that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Computer Graphics Laboratory with Mini Project (15CSL68) prescribed for the said Degree.

Mrs. Chaithra

Signature of the Guide Associate Professor Assistant Professor

Signature of the HOL Mr. Srikantha Gowda R Dr. Kamalakshi Naganna Professor & Head

EXTERNAL EXAMINATION

We take extend our operate Preside to all the Preside removing the species while

Name of the Examiners

Principal

Cilianthan ala. P. Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road.
Bangalore- 560 057

Signature with Date