SAPTHAGIRI COLLEGE OF ENGINEERING

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

Department of Computer Science and Engineering

Certificate

Certified that the Project Work entitled **"REPAIRING THE FAILED NODE IN DISTRIBUTED STORAGE SYSTEM"** carried out by **Nikhil Sharan (1SG14CS067), Pranay Prakash (1SG14CS080), Priyanshu (1SG14CS085), Jibin Thomas (1SG14CS408)**, bonafide students of **Sapthagiri College of Engineering**, in partial fulfillment for the award of **Bachelor of Engineering** 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 in the department library. The project report has been approved as it satisfies the academic requirements in respect of **Project Work (10CS85)** prescribed for the said degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
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EXTERNAL EXAMINATION:

Name of the Examiners	Signature with Date
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ABSTRACT

In Repair Tree, jobs are assigned to two or three systems with certain cost like CPU, RAM, Hard disk etc. If the system fails due to certain attacks, the impact of failure affects the overall distributed systems. A potential application is introduced which shows the simulation and working of distributed storage environment. The application simulates the infrastructure of a CSP, that is, a cloud service provider. It takes a text file as an input which is considered a cloud data. The data is divided into number of servers purchased by the client in the cloud space using a data distribution algorithm which distributes the data among the servers equally or unequally depending on size and type of data. Lastly when an attacker tries to attack a particular server, the data is eventually lost in that server. A Repair Tree algorithm is hypothetically introduced to repair the attacked server and recover the data.