GLA UNIVERSITY MATHURA

Final Year Project Synopsis
B.Tech. (CSE)-Session 2019-2020

PROJECT TOPIC: COMPARING TIME SERIES WITH MACHINE LEARNING BASED PREDICTION APPROACHES FOR VIOLATION MANAGEMENT IN CLOUD SLAS.

CCV Group No. : 6

Project Group Members:

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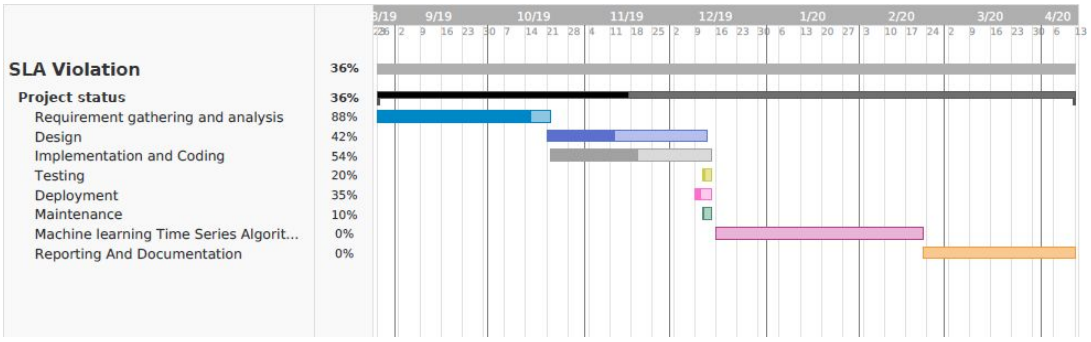
Project Supervisor: Mr. Saurabh Singhal, Assistant Professor

About the Project: In cloud computing, service level agreement(SLAs) are legal agreements between a service provider and consumer that contain a list of obligations and commitments which need to be satisfied by both parties during the transaction. Violation of such a commitment leads to penalties in terms of money and reputation and thus has to be effectively managed.

We test and report the accuracy of the time series and machine learning based prediction approaches. Our analysis helps the cloud service provider to choose an appropriate prediction approach and further to utilize the best method depending on input data patterns to obtain an accurate prediction result and better manage their SLAs and to avoid violation penalties.

Motivation: Violations in SLAs leads to penalties in form of money and loss of reputation and thus it needs to be effectively managed. Our analysis will help to test and report the accuracy of time series based machine learning prediction approaches and help the cloud service provider to choose an appropriate prediction approach and utilize the best method depending on input data patterns.

Project Planning:



Tools required:

- **Hardware Requirements:**
  - Computer with minimum 4GB RAM and 4 cores
- **Software Requirements:**
  - Flask
  - Python 3.6
  - HTML5
  - CSS3

Signature of Project Supervisor: