**Department of Computer Applications.**

**4th Sem MCA - MINI PROJECT**

**Jan - May 2019**

**Synopsis**

**Project Title**: *Vibhaag App* – Companion mobile authentication application for the original *Vibhaag* web application. (A college analytics, abstract and session management tool)

**Abstract:** An all in one college management Software as A Service (SaaS) built on the MongoDB, Express.js, React.js, Node.js (MERN) stack. The application consists of two components, one being the mobile application for Android and iOS devices that acts as a companion and authentication for this web application. The web application is a separate abstract entitled as “*Vigbhaag*”. Further details of the web application are provided in the other abstract. The mobile application is responsible for scanning and registering participation of the faculties. It also records the time, date and location of the incident. The app sends a secured request to the web application which in turn stores and processes the information. The app is also responsible for authentication, meaning that it is unique to every individual.

Key features of *Vibhaag* mobile appinclude:

* Authenticating users into the mobile and web application
* Faculties can register their attendance and time taken for a session
* Uses Camera SDK to scan QR codes and processes the information

**Software Requirements:**

* Front End:
  + React.js, Redux, React Native
* Back End:
  + Node.js, Passport.js
* Database:
  + MongoDB
* Deployment and DevOps:
  + Ubuntu Sever 18.04, Android SDK, iOS SDK

**Hardware Requirements:**

* AWS Elastic Cloud Compute instances x3, each of 2 GB RAM, 30 GB SDD
* 1 Android phone and 1 iOS phone for testing and debugging

**Team Details:**

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