MANGALORE INSTITUTE OF TECHNOLOGY AND ENGINEERING

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
(NBA Accredited)

A PROJECT SYNOPSIS ON
"VIRTUAL LEARNING PLATFORM FOR STUDENTS"

SUBMITTED BY

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Project Guide

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1. ABSTRACT

This study proposes an integrated system to support Academic Service-Learning (ASL) activities, which combine the community service and experiential learning. The whole integrated system includes the mobile system, the online headquarter system and cloud computing platform. First, the Android-based mobile system is designed to assist participants providing service for community and to help them getting information and online troubleshooting advice from backend server. Besides, it is also developed to facilitate mobile learning and collaborative learning modes to complete the tasks in service programs. Second, the web-based system is constructed for administrators and instructors to offer information and missions to each learner in community service.

2. PROBLEM STATEMENT

At present students go through a lot of hustle to find the right study material at right time, this can consume a lot of time & human efforts finding it in traditional manner, as things progressed the mode of learning has evolved as well. From old shelf libraries to E book learnings but one major problem students still face is the bridge between Students and The Professors due the parting of notes and its updatation in E learning platform ,only way to fulfil this drought is E-learning platform, still 49% of students in India have still not found the way to adopt the existing e learning platform.

3. OBJECTIVE AND SCOPE OF THE PROJECT

Objectives:

- Providing an online interface to the students.
- Decrease the time required to access the study materials.
- Increase the efficiency of the web application.

Scope:

As far existing systems have established an understanding of how useful web platform is for e-learning due to its open source nature and free availability of a number of e-learning websites. However a lot of work needs to be done yet for the development for the e-learning websites.
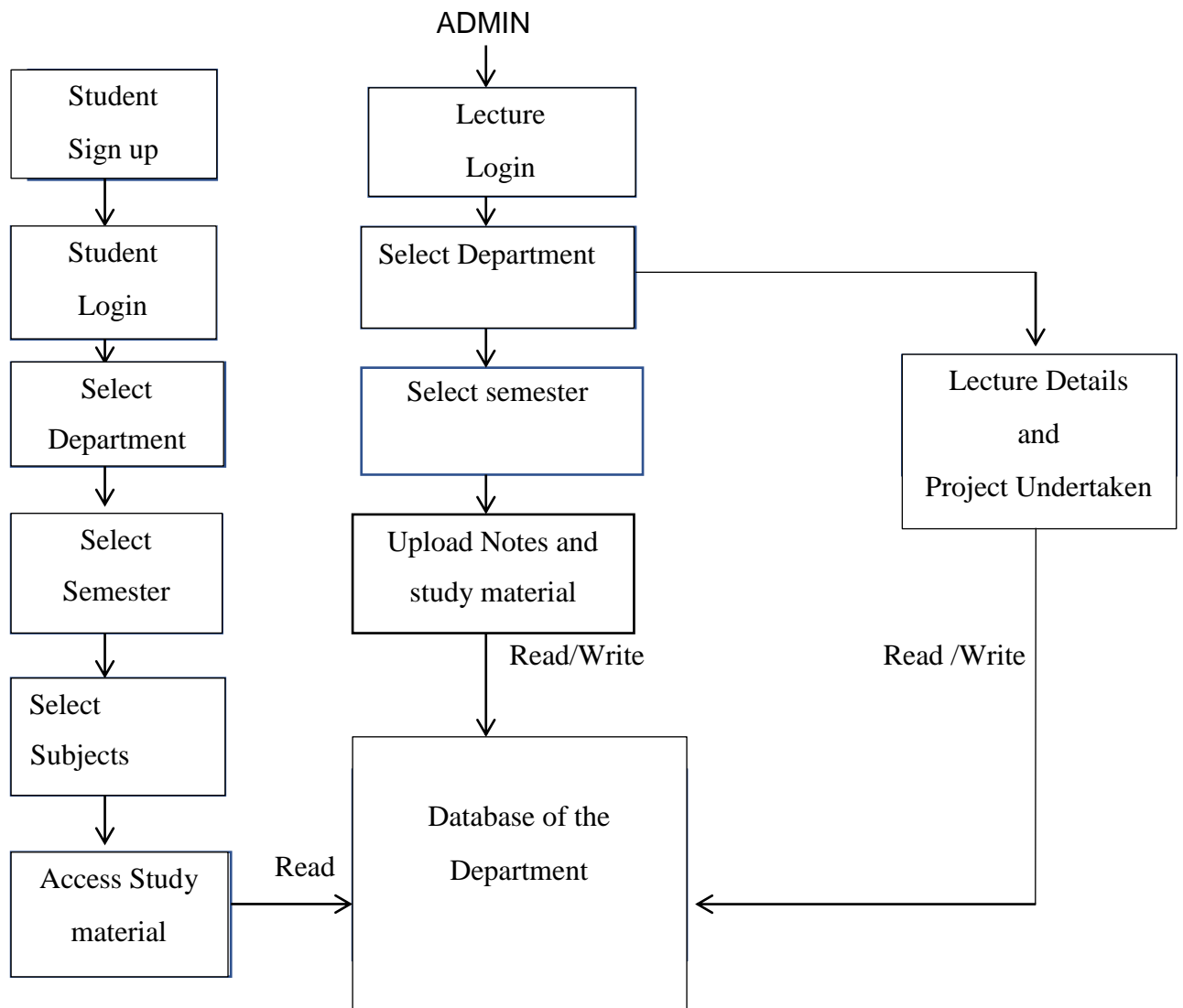
The scope of this project is to develop a web site which makes possible for the users to access study materials. User needs to access the website using their system. Once they visit the webpage, user can easily access to all subjects of engineering according to branches. When the user clicks on particular branch, the user will get the list of semesters, after selecting particular semester list of subjects will display according to the branch and semesters. Later the user can click on particular subject to get access to the study materials.

4. PROJECT DESCRIPTION

Virtual Learning Platform for Students is the combination of both android and web application. User can easily access the required study material through mobile application. It consists of two sections i.e. lecture login and student login/signup. Lectures are allowed to upload any data related to subject and students are only allowed to access data. After login, list of the branches are displayed. Then the semester wise subjects are displayed. In each section of subject students are allowed to access prescribed textbook as well as notes or ppt provided by different lecturers. Student can choose any material regarding to the subject.

In sub-category of branch there is a section called lecture details which includes complete details of lectures of their respective branches and the details of the projects under taken by them.

5. METHODOLOGY

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                              ADMIN
                                |
                                v
 ┌─────────────┐         ┌─────────────┐
 │   Student   │         │   Lecture   │
 │   Sign up   │         │    Login    │
 └─────────────┘         └─────────────┘
        |                       |
        v                       v
 ┌─────────────┐         ┌──────────────────┐                    ┌─────────────────────┐
 │   Student   │         │ Select Department│───────────────────>│   Lecture Details   │
 │    Login    │         └──────────────────┘                    │         and         │
 └─────────────┘                │                                │  Project Undertaken │
        |                       v                                └─────────────────────┘
        v                ┌─────────────┐                                    |
 ┌─────────────┐         │Select semester│                                  |
 │   Select    │         └─────────────┘                                    |
 │ Department  │                |                                           |
 └─────────────┘                v                                           |
        |                ┌──────────────────┐                               |
        v                │ Upload Notes and │                               |
 ┌─────────────┐         │  study material  │                               |
 │   Select    │         └──────────────────┘                               |
 │  Semester   │                | Read/Write              Read /Write        |
 └─────────────┘                v                                           |
        |                ┌────────────────────────┐                         |
        v                │                        │                         |
 ┌─────────────┐         │   Database of the      │<────────────────────────┘
 │   Select    │         │     Department         │
 │  Subjects   │         │                        │
 └─────────────┘         └────────────────────────┘
        |                      ^
        v                 Read │
 ┌─────────────┐               │
 │Access Study │───────────────┘
 │  material   │
 └─────────────┘
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6. HARDWARE AND SOFTWARE SUPPORT

Software: HTML, CSS, JavaScript

Tools: Android Studio, Visual Studio

Database: Mongo DB (NoSQL database)

Hardware: 4 GB RAM, 1TB Hard disk.

7. POSSIBLE OUTCOMES

- Easily accessible for Students as well as Lecture.
- Easily maintainable.
- Multimedia Access.
- Offers access to updated content.

8. REFERENCES

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