Class Attendance Management System

13.03.2018

Md. Ashfaq-ur-Rahman
Reg No: 2011331018

Project Supervisor
Professor Dr Mohammad Reza Selim
Department of Computer Science and Engineering
Shahjalal University of Science & Technology

Introduction

In our university teachers take class attendance manually. This is time consuming and often boring. Not only that, teachers has to calculate the class attendance to get attendance marks. There should be an automated process to make this task easier and smart. Also there should be a smart process to monitor students and teachers activities.

Motivations

I always think of a university management system for our university. I believe this kind of software will make our university life easy and smart. So I contact with my project supervisor for guideline. He told me to develop a central attendance management system by which teacher can take class attendance easily.

Project Overview

This is a kind of software that will make class attendance take and attendance marks calculation process automated. Students can check their attendance sheet by creating an ID so there will be transparency. University management or Department Head can also monitor student's and teacher's activity

Objectives and Goals

- Develop an automated system to take class attendance
- Develop an automated system to calculate class attendance marks
- Develop an automated system to monitor how many class a student attend and how many class a course teacher has taken
- Develop a smart process to inform university management about irregular student
- Develop an Android version of this web application

Expected Feature

- There will be multi role and multi authentication system
- Group permission will be our expected feature. So a group of people has specific access to the application
- Department Head can monitor how many class his/her department's teacher has taken
- Teachers can monitor how many class a student attend in a particular semester

- There will be a super admin. If a student is absent for a specific period of time(e.g., a student is absent completely for 15 days) super admin will be informed by mail automatically
- Students can see his/her attendance sheet and his/her attendance marks
- Student can see all of his/her department teacher's contact info
- Finally there will an android version of this project

Methodology

1. **Research and Analysis**: I like to study some of the project that has already been made for other universities. Then I like to analyze which is needed for us
2. **User Interface Design**: The second step will be designing the user interface. The most important part of this segment is the user experience. This should come through a lot of thought process to ensure best user experience in a more conventional way.
3. **Use Case Diagram Design**: Generate all the possible use case that user can made
4. **Database Design**: Database design is an integral part of the application. Database should be robust & redundancy-free.
5. **Logic and Design Implementation**: Design implementation & logic setting through coding will be done simultaneously
6. **Testing and Debugging**: After implementing all the logics & designs this software will be tested for all kinds of scenarios & use cases.
7. **Documentation** When this software will pass all the testing and bugs will fix, documentation of the project will be done.

Timeline

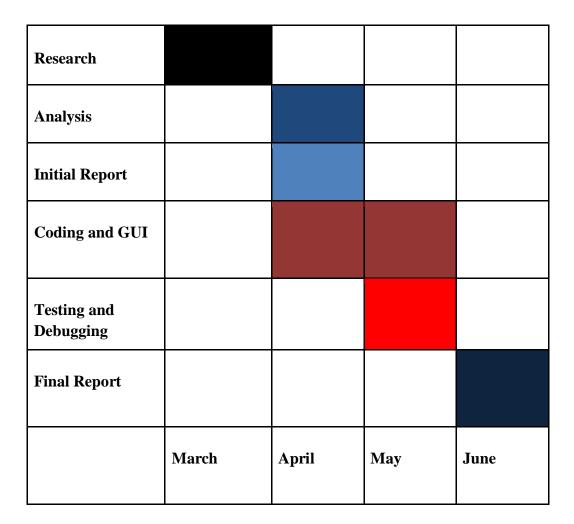|	March	April	May	June
Research	■			
Analysis		■		
Initial Report		■		
Coding and GUI		■	■	
Testing and Debugging			■	
Final Report				■

Figure: A Gantt chart of Project Timeline

Deliverable

- Class attendance and attendance marks calculation will be automated
- Students and Teachers activities will be monitored in smart way
- University Management will be aware of irregular students