Academic Management System
Project Management Document

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1 Activity list

1 Formulation of the problem

In this Project we are going to create an Academic Management System. This will be used in an academic institute in order to manage the institute. The system will allow the instructor to create and manage classes. Students can join classes and get the material posted in the class. The Admin is able to take care of other important parts like creating and managing the accounts of students on the platform.

In an academic institute there is a need for a management software which will allow them to function properly. The three users of our product will be the student which has been enrolled in the institute, the instructor which teaches a particular course in the institute and the admin which manages other activities not related to studies. The admin is the person which will be able to create or modify other users and details of courses of the institute. Our Application should be able to work with this three users and a set of given functionalities of the users.

1.1 Reading relevant background information

For relevant information and background. We should look at the current systems that are in place and read their documentation carefully, the current systems being moodle and classroom. Read the documentation of these and take a look at the functionalities that these systems provide. Carefully look at the interface and identify how the flow of the application will work. The basic features provided by these platforms are as follows

- Creating and managing a Classroom.

- Adding PDFs, Videos, and other material in the classroom timeline.

- Giving assignments that have a deadline so students can submit certain types of files as the solution of the assignment.

- Instructors can create a class and add students to that class.

- Students get an account through which they can access the materials and submit assignments.

1.2 Understanding and documenting the requirements

The requirements of the project are mentioned in the design document. Some of the basic requirements are, for the Instructor to create a class and add students to it and being able to post material on it. The Student should be able to access all the materials posted in the class. The Admin should be able to manage and create new accounts for the Students as well as the Instructor.

After taking a look at the relevant documentation and guides, list out all the basic requirments that are provided by them

1.3 Discussions

2 Designing a solution, documentation

There will be a login page at first. For study material there is page contains all material of all courses. Student profile section will contain all information about the students. For grading there is result section. In academic section there is system for courses registration. To access resource there is resource management system.

3 Relevant learning

For this project the relevant technologies should be learnt. The relevant technologies include

Frontend Developer

- HTML, CSS and JavaScript - For designing the basic User Interface.

- React - For making interactive UIs.

- Axios - For fetching data from the backend.

Backend Developer

- Python - The Scripting language for the backend.

- Django/Django with REST - Framework for creating the backend.

Database

- PostgreSQL - SQL database

- PgAdmin - A UI for managing the database

All of the technologies mentioned above should be learnt by the members according to the roles assigned to them. Besides these technologies everyone should have the basic understanding of how a web application functions about HTTP, request response, how the server commuinicates with the frontend and how the server uses the database.

4 Coding and unit testing

All the codes and documentation will be on GitHub so in order to access the codes you can access it through git. All the details for the testing of a function or a unit will be available in the code and it will also describe how we will test it. The Unit tests will be performed by the testing team. Make sure that the code written by a programmer is testable.

5 Documentation

The Documentation should be maintained by the person that writes the code and a User guide will also be maintained which will help with the functionalities provided by the platform. The Documentation is available on the GitHub and if someone creates a part of the code than he should create the documentation for that part of the system. Documentation should update as per daily basic. Documentation need to be handle by all over the team. We should ensure that all stakeholders are informed about the progress.

6 Testing

In this section developer team need to check or testing of all functionalities in given system. This is all responsibilities of developer team that how project is developed till now and how efficiently it worked in real life scenario. we are continuously testing our project at each phase of our project. testing a project is really help us to understand how we can achieve optimized market ready project.

7 Reviews

For the bug and error free optimised web application review of project is very helpful. For review, some online application like Google Classroom and Moodle can help so that we achieve optimised web application. In review we should Determine whether the project goals were achieved or not. also Determine the satisfaction of stakeholders. Also review the project's cost and benefits. In review we should identify areas for further development and also identify lesson we learned. For reviewing the project we identify that project cost and time is not matched with our planning so we decided to get some functionality out so that we can achieve project as per documentation. In development of back-end there are some bugs and error so we are going to change some functionality of project so that customer will not be disappointed at the end.

8 Re-work and de-bugging

2 Project Plan: For each activity, your estimated start date, end date, responsible person(s)

3 Testing Strategy:

1 For each requirement, test transactions, expected results

- **Student Profile :**

Edit Profile

Schedule	02-04-2022
Responsible person	Charitya

Input : Roll-Number,Password,New Data(Name,DOB,Address,phone number)
Output : Show profile with updated data.

Add new profile

Schedule	02-04-2022
Responsible person	Karabhai Hun

Input : Roll-Number,Password,New Data(Name,DOB,Address,phone number)
Output : Show profile with input data.

- **Courses :**
  Add Courses

Schedule	02-04-2022
Responsible person	Dhawal Katriya

Input : Courses name, credits, Lab number, Instructor,etc
Output : Show that Course in course list with unique course code

Edit Courses Info

Schedule	02-04-2022
Responsible person	Rameshkumar

Input : course code, detail which you want to update
Output : Show that Course in course list with updated details

- **Committees/Clubs :**
  Add Committees/Clubs

Schedule	02-04-2022
Responsible person	Tarun Boricha

Input : Committees/Clubs name, budget, Activities name,member names, etc
Output : Show that Committees/Clubs in Committees/Clubs list

Edit Committees/Clubs Info

Schedule	02-04-2022
Responsible person	Vivek Makwana

Input : login info, updated info
Output : Show that updated info

2 Test cases for the design

- All buttons are working fine.

- All database related operation (insertion, deletion and update) are working properly

3 Test cases & expected results for integration

3.1 Module integration

3.2 User Interface integration

4 Test data, expected results for unit testing

4 Any other special activities and an appropriate breakup with estimation, as recommended by the standard fixed.