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Project Management System

Objective

The main objective of project management is to achieve all of the project goals and constraints. This information is usually described in a user or project manual, which is created at the beginning of the development. The challenge is to optimize the allocation of necessary inputs and integrate them to meet pre-defined objectives.

Problem Statement

The problem statement is making a tool to automate processes involved in project management system that are currently being done manually. The processes involve a lot of manual labor and waste of computer resources.

Abstract

Project management deals with all aspects related to the working of the project with project management the beginning of the project till the end of it meet certain goals and objectives can be undertaken properly. In this we are designing a project management software that will deal to manage the pbl courses efficiently. In this software a particular work is given by the head of the department will be distributed under some faculties and then those faculties will distribute it to students registered under them. The head of the department can easily track the working of each task by each and every student. They can be able to track the work done by the students. In this software, the scheduling,planning,cost,resource allocations and all the things will be managed efficiently.

Overview

Project management is the discipline of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals. A project is a temporary endeavor designed to produce a unique product, service or result with a defined beginning and end undertaken to meet unique goals

and objectives, typically to bring about beneficial change or added value. The management of these system requires the development of distinct technical skills and management strategies.

The primary challenge of project management is to achieve all of the project goals and constraints. This information is usually described in a user or project manual, which is created at the beginning of the development. The challenge is to optimize the allocation of necessary inputs and integrate them to meet pre-defined objectives.

Project management software has the capacity to help plan, organize, and manage resource tools and develop resource estimates. Depending on the sophistication of the software, it can manage estimation and planning, scheduling, cost control and budget management, resource allocation, collaboration software, communication, decision-making, quality management and documentation or administration systems.

The main purpose of this tool is to automate processes involved in project management system that are currently being done manually. The processes involve a lot of manual labor and waste of computer resources. Our aim is to build an efficient project management system that can be used to complete all processes associated with project management with minimum manual effort.

The Project Management System will automate the following processes –

Project Creation – Take project details and necessary team details as input and create a project with these inputs

Assignment of team members to projects.

Creation of tasks for each project.

Assignment of tasks to team members in a project.

Status updates - Check how much percent of a particular task has been updated.

File upload - Include option to upload necessary documents for project tasks.

Reviews and review status for all processes.

Project Closure - Close your project quickly and efficiently with required details.

Project cost estimation analysis.

System Generation

Project Management system will help track project details such as creation, updates, and assignments and give updates about the status of the projects to all stake holders (such as Students , Firm manager, Team manager , Project manager)through auto emails. It aids the

efficient generation of reports thereby contributing towards effective project management in the organization

The following are the user requirements for the system:

Three different classes of users exist in the system – FM, Project Manager and Team Member. Logins will be provided for each and every one.

The FM has the following duties –

The Excel sheet consisting of student details has to be uploaded so that the MySQL database can be filled.

Login IDs have to be provided for other users such as PMs and TMs.

He should be able to create, modify and delete a project.

He should be able to view status and reports for any project.

Project Creation should be the first task for a FM. The necessary tasks involved in Project Creation are –

Creation of a form for input and assignments of necessary people for a project.

Form should have proper validations.

Assignment of TMs to a project.

Assignment of PMs to a project.

Every Project has different tasks assigned to it. Task creation involves the following-

The PM logs in using his username and password.

Creates a task with proper name and description with appropriate deadlines using a form interface.

Automated increment of task id.

Has an option to modify or delete a task.

Every task has to be completed by some TM. The assignment of TM to a project task is done by PMs. In addition to this, the assignment can be modified and necessary deletions can be performed.

Option for file upload by a TM. The file should be sent to the PM via e-mail. The TM should be able to write comments about how much work has been completed. He can also give reasons if a task has not been completed to the client's demands.

Files should be reviewed by the PM.

Status Updates for all files should be reported to the PM and the status of the whole project should be calculated.

Project Costs should be calculated using the actual number of hours spent on each task.

Project Closure details should be updated using a form interface.

User Characteristics

The proper user interface and online help must be sufficient to educate the users on how to use the system without any problems. The FM, Project Manager and Team Member should have at least some basic knowledge of computer systems to adapt to the form based user interfaces offered by the system. If the users find it difficult to get used to the system, then they are provided with sufficient documentation and training.

Constraints

Converting Excel data of students to MySQL files.

Migration of all existing student data on paper to system.

Training of certain users with less knowledge of computer systems.

Assumptions and Dependencies

The FM should create a project and assign login IDs to all employees, that is, Project Managers and Team Members.

The student database file uploaded by the FM should be in Excel format

PM should be officially in charge of the team and project assigned to him.

Deadlines of individual tasks for a project should be well within the deadlines of the project.

Project Costs and Closure details should only be filled after the project has been completed.

Generation of the final project report should be the final step in our process.

All files uploaded by employees should be in the same format.