**Project Management Tool (PMT)**

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**Introduction**

**Objective:**  The objective of ‘Project Management Tool’ is to distribute different project modules to different project developer and teams and developer team develop the project according to module and duration after that each member of development team upload their work status daily to daily that can view by admin. It provides work report, project status report, duration, time estimation of project. In this client can see their project status and any query then can able to ask to experts of development team.

**Project Management Tools contains following modules:**

1. **Administrator:** This module provides all facilities to admin to handle project, developer, project manager and client report.

Admin can also view the whole project report. This module provides following features: Approve Block Developer means admin can approve developer to work on project and can also block the developer if work completed, Approve Block Project means admin can approve any project to start development and can block the project after completion, Approve Block Project Manager means admin can approve project manager to manage project and block the manager to manage project, Approve Block client means approve client to post their project and query if needed, View Project Report means admin can see project report that is developed.

1. **Project Manager:** This module provides facilities to project manager to handle project. Project Manager can handle following activities: add project, edit project, delete project and project assignment to project developers. Project Manager can perform all activities after login. Initially Project manager need to register.
2. **Developers:** This module will be able manage all activities of developer related to project development. Developer can register and login by this after that can submit daily work report and also can see self work log in their profile, after doing required activities developer can logout.
3. **Clients:** By the help of this module client can do registration for posting their project and after login can asks from expert if has any query. There is view project status option by which client can see their project status if wants after that can logout by the help of logout option.

Now-a-days, almost all organizations are doing their works online by the application, like Storing records of daily activities and any advertisement related to project development. It saves clients, developer, manager and admin time to perform activities of project development. Because All Activities related to development perform direct in hardcopy or by mail is very complex as well as time consuming.

We are conceptualizing this software as a solution so that any software company employees and client can communicate through this Software for the software development in a secure way. And maintain the security of the project development within company.

Organization can also easily check the performance of the manager and developers. It will be very easy to track all the activities within organization and admin and manager able to so the performance of developer. It also helps the company to make project development very easily.

According to today’s requirement, any developer live in out of company location and not able to come in organization if any company wants to hire for project development then this software can be helpful. By the help of this software manager can assign the project module to developer in very secure way very easily.

The system also provides facilities to client that can view their project status and if client wants modification or query from expert then he can ask from this software. System also tracks the tips and suggestion online.

System provides facility to approve and block the project, employee and clients. System also provides facility to upload daily to daily work report by developer and manager. By the help of this software it is possible that no need to come into company to do work.

This system is providing more memory for the company to maintain data related to project development.

**Front End and Back End Tools**

**Front End Tools**

After making the java program the structure which comes after running in front of user called Front End. Lookup of webpage’s and applications come under the Front End. . Several technological tools will use for front end in this project; each is summarized in the sections that follow:

# Html

Html stands for hyper text markup language. A markup language is a language that annotates text in a way that is syntactically distinguishable so that the computer can manipulate it. It is a set of markup tags used to describe web pages. The tags are what separate normal text from html code. They are the words between the <angle-brackets>. Markup is what html tags do to the text inside them. They mark it as a certain type of text. Html documents contain html tags and plain text.

**CSS**

CSS stands for cascading style sheets. It is used to control the style and layout of multiple web pages all at once. Styles define how to display html elements. They are stored in css files. Style sheets contain rules, composed of selectors and declarations that define how styles will be applied.

**JavaScript**

JavaScript is the scripting language of the web. All modern html pages are using javascript. A scripting language is a lightweight programming language. JavaScript code can be inserted into any html page, and it can be executed by all types of web browsers. JavaScript is easy to learn.

# Bootstrap

# Bootstrap is a free and open-source front-end framework for designing websites and web applications. It contains html- and css-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Unlike many earlier web frameworks, it concerns itself with front-end development only.

**Features of bootstrap**

* **Easy to begin with**

It is pretty easy, to begin with. Being easy to get started with is probably the first quality which makes bootstrap very appealing.

* **Less as well as css files**

Bootstrap not only offers less files but also includes the old css files.

* **Responsive utility classes**

Another prominent feature of bootstrap is its responsive utility classes. Using responsive utility classes, a particular piece of content can be made to appear or hide only on devices depending on the size of the screen being used.

**Components of bootstrap**

Some of the components that come pre-styled in bootstrap are

* Drop-downs
* Button
* Navigation
* Badges alerts
* Progress bar

**Core Java:** Core java is used to create the structure of the web document. It defined the outlook of the page. Everything that is watch able in the screen in front of user is made by java. Here provides great features to making our applications pages good in watch.

**Advance Java:** advance java is available to use some extended features. Here available some heavy features for creating the pages of very better quality. The task done by advance java will be very good as compared to the core java. Many extended features are available here to perform some very special tasks.

**Back End Tools**

When a page of web or of application or etc comes in front of user and that wants inputs from user side to perform the particular task according to user. The inputted information by the user will be going to the Database through the Hibernate using MySQL database.

* **Hibernate:** Hibernate is the ORM tool given to transfer the data between a java (object) application and a database (Relational) in the form of the objects.  Hibernate is the open source light weight tool given by **Gavin King**. Hibernate is a non-invasive framework,  means it won’t forces the programmers to extend or implement any class or interface, and in hibernate we have all POJO classes so its light weight. Hibernate can run with in or without server, means it will suitable for all types of java applications

Hibernate is purely for persistence (to store or retrieve data from Database).

* **Spring:** Spring is a light weight and open source framework created by Rod Johnson in 2003. Spring is a complete and a modular framework, means spring framework can be used for all layer implementations for a real time application or spring can be used for the development of particular layer of a real time application unlike struts ( only for front end related ) and hibernate ( only for database related ), but with spring we can develop all layers. Spring framework is said to be a non-invasive means it doesn’t force a programmer to extend or implement their class from any predefined class or interface given by Spring API, in struts we used to extend Action Class right that’s why struts is said to be invasive.

Spring having this much of demand because of the following 3 reasons:

* Simplicity
* Testability
* Loose Coupling

**MySQL Database:** MySQL is [free and open-source software](https://en.wikipedia.org/wiki/Free_and_open-source_software) under the terms of the [GNU General Public License](https://en.wikipedia.org/wiki/GNU_General_Public_License), and is also available under a variety of [proprietary](https://en.wikipedia.org/wiki/Proprietary_software) licenses. MySQL was owned and sponsored by the [Swedish](https://en.wikipedia.org/wiki/Sweden) company [MySQL AB](https://en.wikipedia.org/wiki/MySQL_AB), which was bought by Sun Microsystems (now [Oracle Corporation](https://en.wikipedia.org/wiki/Oracle_Corporation)). In 2010, when Oracle acquired Sun, Widenius forked the [open-source](https://en.wikipedia.org/wiki/Open-source) MySQL project to create [MariaDB](https://en.wikipedia.org/wiki/MariaDB).

**Problem Domain**

In Existing System all works are perform manually or by e-mail like-work report, project status report, duration, time estimation of project which are developing in a company, so some problems are occurred as follows:

* The existing system not provide feature to assign project module to developer in secure way, so here is less security.
* This existing system is not providing secure registration and profile management of all the users properly.
* The system doesn’t provide facility to track all the activities of project manager and under working project developer. So can’t track any activity of project development of a company easily.
* This manual system gives us very less security for saving data and some data may be lost due to mismanagement.
* The system doesn’t provide any facility to maintain any query to expert by client. So any client asks their own queries to expert. So there is no interaction of client with company.
* The system doesn’t provide any functionality to upload project status by manager, so client can’t view their project status, it is more complex that if any client want to see their project status.
* This system doesn’t provide approve and block developer, project, project manager and client through online. These all work done by manually.
* The system doesn’t provide any functionality to Secrete Admin and client chatting online chatting.

So we need to solve all problems as mentioned above by developing a project that is Project management tool that will be very helpful to perform all activities related to project development within a company very easily.

**Solution of Problems**

According to short out the problems which are given above, the Project Management Tool will be very helpful. Here we are trying to develop an application that provides a secure way to perform all activities related to project development within company. In this project client direct interact to the company experts after accessing it. And admin and all employees can immediate starts their work very easily and frequently.

The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach.

* This system maintains client’s personal address, contact and project details.
* User friendliness is provided in the application with various controls provided by system rich user interface.
* This system makes the overall project management much easier and flexible.
* Various classes have been used for maintain the details of all the clients, developer and managers and work log.
* Authentication is provided for this application only registered users can access.
* Report generation features is provided using to generate different kind of reports.
* The system provides facilities to track the all activities of project development by the admin and project manager.
* System can also helps to track all the employees work report and [project status daily to daily.
* System provides facility to approve and block the project, clients, project manager and developer.
* System also provides facility to upload project work status daily to daily by developers.
* This system is providing feature to see project status by the client any time by login. **Scope of the Project**

We need more time saving and more secure system as the number of applications is increasing day by day. So, Project Manager Tool is very useful today. It is very important to use this application to perform the tasks immediately related to the project development within a company. Now-a-days pollution is growing exponentially, so this project helps to prevent the environment by saving papers.

Because of the lots of the benefits for the user by using this application, Peoples must use it. This application will be very effective to perform project management related tasks. Any company should use it always, because we will always try to add more features time to time according to the requirements. So the project or Application will be run able in future also like now. The updated versions of this application will be available in future made by us for making user’s requirements full fill. So we are sure about to update it according to the need of users. Now-a-days as the number of software companies are growing exponentially so that required an system that manage these activities in less effort, Such that Project Management Tool application System is helpful by reducing manual work as well providing extra features (like increasing efficiency and time saving).

The Project Management Tool has great scope in different any software development company. Here I am trying to develop an application that provide a way for communication and also provide facility to store work report and project status within company. In future I will try to enhance this application that provide a secure way for communication and also provide facility to store all records within organization in secure way. This will be possible by using encryption techniques.

The given terms and policies of our application may also be change according to the updating of our project in future. So it is very important to read the terms and policies at least one time for awareness of the client.

**Conclusion**

Now-a-days, almost all organizations are doing their works online by the application, like Storing records of daily activities and any advertisement related to project development. It saves clients, developer, manager and admin time to perform activities of project development. Because All Activities related to development perform direct in hardcopy or by mail is very complex as well as time consuming.

The objective of ‘Project Management Tool’ is to distribute different project modules to different project developer and teams. It provides work report, project status report, duration, time estimation of project.

The development of this new system contains the following activities like Administrator - Approve Block Developer, Project, Project Manager, client, View Project Report, Project manager Registration, Add/Edit/Delete Project, Project Assignment, Developers- Registration, Submit Daily, Work Report, and View Work Log, Clients – Registration, ASK to Expert, View project Status, which try to automate the entire process keeping in the view of database integration approach.

This system provide various features like- this system maintains user’s personal, address, and contact details. User friendliness is provided in the application with various controls provided by system rich user interface. This system makes the overall project management much easier and flexible. Various classes have been used for maintain the details of all the users and employee catalog. Authentication is provided for this application only registered users can access. Report generation features is provided using to generate different kind of reports.

The system provides facilities to track the all activities of whole development team. System also tracks the project manager, developers and clients queries status online. In this project information related to the organization whatever entered by user will always same but not any fault. So that we can say that, My Project Management Tool application is best approach to manage all activities related to a project development process as compared to manual System.