

Task Management Tool

Longterm internship Project Submitted

In partial fulfillment of the requirements for the award of the degree

Of

BACHELOR OF TECHNOLOGY

By

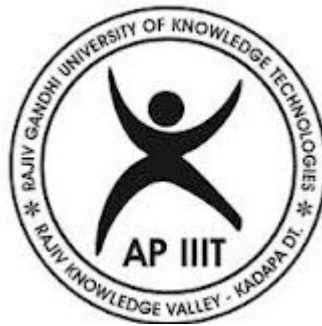
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CERTIFICATE

This is to certify that the project work titled “**Task Management Tool**” is a long internship submitted by **K. Vennela (R170029)** in the department of Computer Science and Engineering in partial fulfillment of requirements for the award of degree of Bachelor of Technology for the year 2022-2023 carried out the work under the supervision

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CERTIFICATE OF EXAMINATION

This is to certify that the work entitled, "Task Management Tool" is the bonafied work of **K. Vennela(R170029)**. Here by accord our approval of it as a study carried out and presented in a manner required for its acceptance Major of Bachelor of Technology for which it has been submitted. This approval does not necessarily endorse or accept every statement made, opinion expressed or conclusion drawn, as a recorded in this thesis. It only signifies the acceptance of this thesis for the purpose for which it has been submitted.

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DECLARATION

I am **K.Vennela (R170029)** hereby declare that the project report entitled , “Task Management Tool” done under the guidance of **Mr Mahendra** is submitted for minor project of **Bachelor of Technology in Computer Science and Engineering**, is an authentic record of our own work carried out under the supervision of **Mr Mahendra** , the Major Project January 2022 - April 2023 at RGUKT – RK Valley.

We also declare that this project is a result of our own effort and has not been copied or imitated from any source. Citations from any websites are mentioned in the references.

The results embodied in this project report have not been submitted to any other university or institute for the award of any degree or diploma.

K. Vennela (R170029)
Date: 03-05-2023
Place: RK Valley.

ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of any task would be incomplete without the mention of the people who made it possible and whose constant guidance and encouragement crown all the efforts success. We are extremely grateful to our respected Director, **Prof. K. Sandhya Rani** Mam for fostering an excellent academic climate in our institution. We also express my sincere gratitude to our respected Head of the Department **Mr. SatyaNandaram** Sir for his encouragement, overall guidance in viewing this project a good asset and effort in bringing out this project. We would like to convey thanks to my project guide **Mr. Mahendra** Sir for his guidance, encouragement, co-operation and kindness during the entire duration of the course and academics.

My sincere thanks to all the members who helped me directly and indirectly for the completion of project work. I express my profound gratitude to all our friends and family members for their encouragement.

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1.ABSTRACT:

Task Management Tool:

A Task Management Tool is used by an individual, team, or organization to complete projects efficiently by organizing and prioritizing related tasks. In Task Management tool user can create, amend, update and delete a task.

Build an option based Web UI to request, register and automatic execution of Client Operations Tasks. The request is to build & implement a web based system to request, schedule, track automatically trigger as applicable various operational tasks requested by clients as part of the day to day UAT testing and product operations.

Currently client submit various operations requests like overnight Batch run, Environment reset, Special save, Turning on options, Date reset, Return of jobs, Bringing up various job operations, bringing up various links to external systems, request for IDET files. Through Emails or phone calls, which is turning extremely difficult to track, execute & report and many resulting in escalation and dissatisfaction to clients.

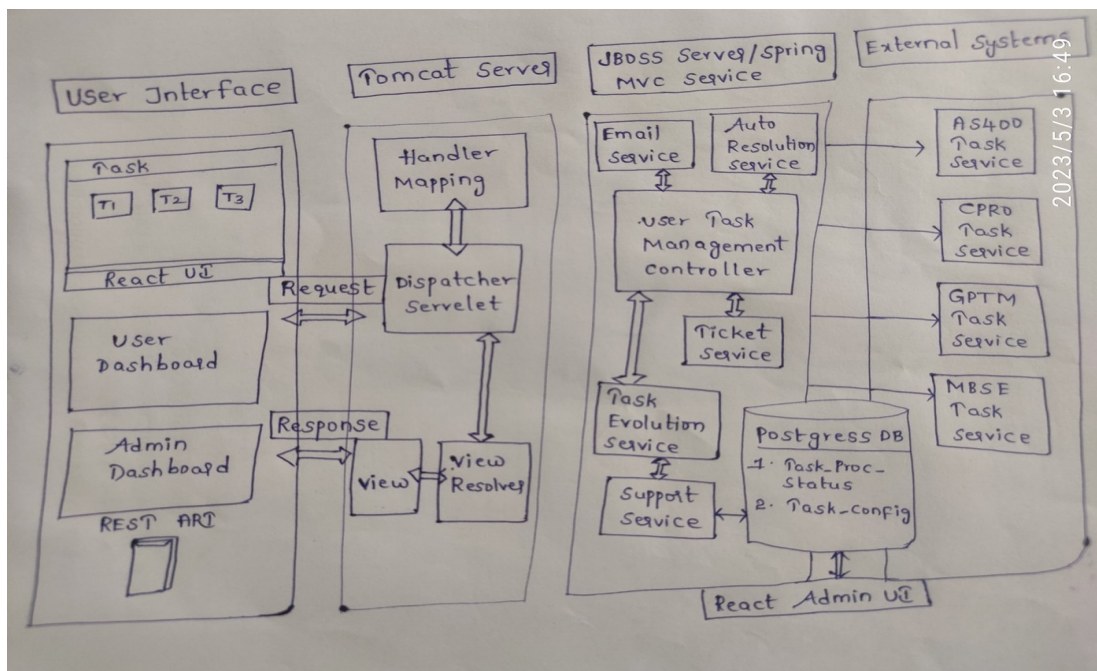
Sometimes the request could be future dated which is difficult to maintain and schedule. This system is intended to be used by Client services team, Test Ops & Service delivery L2 Teams. So in order to overcome the above difficulties the web based system is proposed.

2.OVERVIEW:

Task Management Tool

- Task management is the process of monitoring your project's asks through their various stages from start to finish. This involves actively making decisions for your tasks to accommodate changes that can occur real-time, with your end goal being the successful completion of your tasks. Project task management also means managing all aspects of a task like budget, time, scope, resources, recurrence and so on effectively.
- Task management is the process of managing an individual task from conception to closing. A task needn't necessarily have any goal or even specific deadlines. A group of tasks together contribute towards the execution of a project. Therefore task management is inherently a function of project management.

High Level Diagram:



3.OBJECTIVES OF TASK MANAGEMENT TOOL:

Prioritization: Whatever tool you use to manage your tasks, whether a simple to-do list or a comprehensive project task management tool, the most important aspect of task management is prioritization. This helps in efficiently completing all the tasks involved while maintaining the planned constraints.

Milestone tracking: The findings of this study also show that establishing clear goals is essential to the successful completion of a project. Although for task management an end goal isn't necessary, defining milestones helps motivate teams to execute tasks successfully.

Schedule management: Making sure your task gets completed on time is something that has an impact on the overall project health. Attributing the right time frame by estimating the effort involved is key here.

Resource allocation: Optimum resource management is the next step to ensure effective task management. Depending on the budget and schedule, assign the right talent and amount of resources to get work done.

Collaboration: For all the steps mentioned above, collaboration is key. While working in teams usually means more work gets done, keeping team members in sync can be difficult. Task management software for teams can help you keep your team connected.

4.INTENDED AUDIENCE:

Task management systems benefit anyone who has tasks to do—which is everyone. People who pursue project and task management can fall into the following broad categories:

1. Project Leaders
2. Teams
3. Personal task management
4. Software employees

5.PRODUCT VISION:

Task management is the process of monitoring your project's tasks through their various stages from start to finish. This involves actively making decisions for your tasks to accommodate changes that can occur real-time, with your end goal being the successful completion of your tasks. Project task management also means managing all aspects of a task like budget, time, scope, resources, recurrence and so on effectively.

6.SCOPE:

From task planning to managing, task management software helps you log and track every piece of information related to your project. The ability to keep track of your tasks, deadlines, meetings, and team responsibilities makes task management tool a crucial tool for your business needs. If any issues arise, it only takes a click to gain insight into the exact source of the problem, take control immediately, and make changes to improve your work flow successfully. Additional collaboration features like chat, forums, and dashboard help your whole team stay connected and on top of the latest developments.

7. Technologies Used in Task Management Tool:

- Front end : HTML, CSS
- Middleware : Spring Boot java, Node Js
- Backend : DB2, Postgres
- IDEs : Eclipse, Visual studio code
- web server : Apache
- frameworks : Angular
- Library : ReactJs
- API : Rest ful

➔ HTML

HTML stands for HyperText Markup Language. It is used to design web pages using the markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages and markup language defines the text document within the tag that define the structure of web pages.

➔ CSS

CSS is the language we use to style an HTML document. CSS describes how HTML elements should be displayed.

➔ Spring boot Java

Spring Boot helps developers create applications that just run. Specifically, it lets you create standalone applications that run on their own, without relying on an external web server, by embedding a web server such as Tomcat or Netty into your app during the initialization process.

➔ **NodeJs**

Node.js is a software development technology that is used by some of the biggest players in global business, to build fast, high-quality applications.

➔ **Postgres**

PostgreSQL, also known as Postgres, is a free and open-source relational database management system emphasizing extensibility and SQL compliance. It was originally named POSTGRES.

➔ **Eclipse**

Eclipse is an integrated development environment used in computer programming. It contains a base workspace and an extensible plug-in system for customizing the environment. It is the second-most-popular IDE for Java development, and, until 2016, was the most popular.

➔ **Visual Studio Code**

Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.

➔ **Apache Tomcat**

Apache Tomcat is a free and open-source implementation of the Jakarta Servlet, Jakarta Expression Language, and WebSocket technologies. It provides a "pure Java" HTTP web server environment in which Java code can also run. Thus it is a Java web application server, although not a full JEE application server

➔ **Angular**

Angular is a TypeScript-based, free and open-source web application framework led by the Angular Team at Google and by a community of individuals and corporations. Angular is a complete rewrite from the same team that built AngularJS.

➔ **ReactJs**

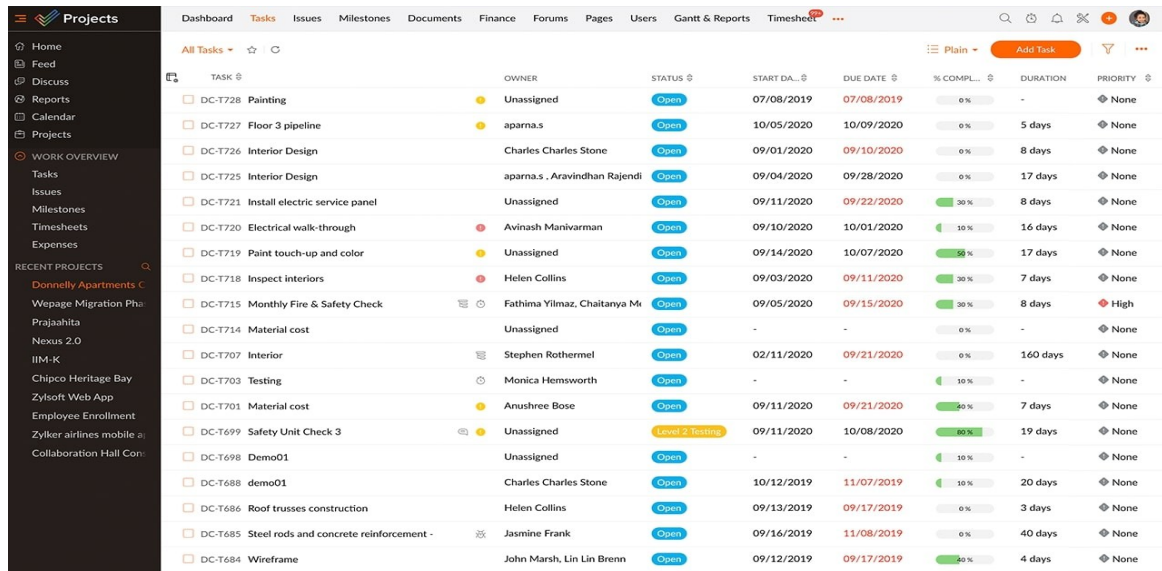
React is a free and open-source front-end JavaScript library for building user interfaces based on components. It is maintained by Meta and a community of individual developers and companies. React can be used to develop single-page, mobile, or server-rendered applications with frameworks like Next.js.

➔ **Restful API**

RESTful API is an interface that two computer systems use to exchange information securely over the internet. Most business applications have to communicate with other internal and third-party applications to perform various tasks.

8.Working of Task Management tool:

1. Manage project activities from a central place

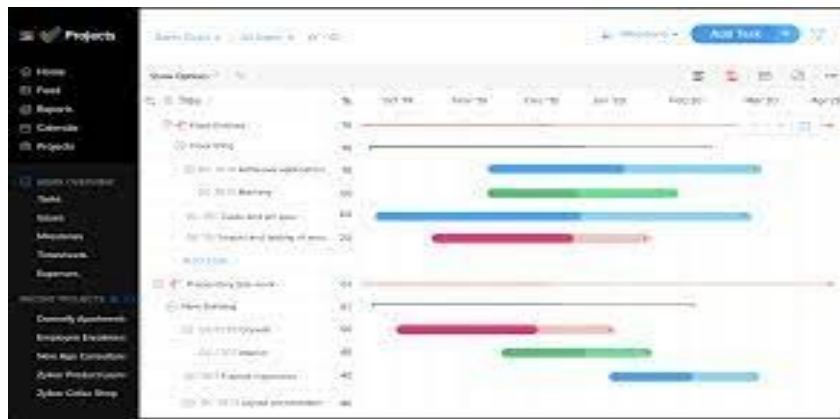


TASK	OWNER	STATUS	START DATE	DUE DATE	% COMPLET	DURATION	PRIORITY
DC-T728 Painting	Unassigned	Open	07/08/2019	07/08/2019	0%	-	None
DC-T727 Floor 3 pipeline	aparna.s	Open	10/05/2020	10/09/2020	0%	5 days	None
DC-T726 Interior Design	Charles Charles Stone	Open	09/01/2020	09/10/2020	0%	8 days	None
DC-T725 Interior Design	aparna.s , Aravindhnan Rajendi	Open	09/04/2020	09/28/2020	0%	17 days	None
DC-T721 Install electric service panel	Unassigned	Open	09/11/2020	09/22/2020	30%	8 days	None
DC-T720 Electrical walk-through	Avinash Manivarman	Open	09/10/2020	10/01/2020	10%	16 days	None
DC-T719 Paint touch-up and color	Unassigned	Open	09/14/2020	10/07/2020	50%	17 days	None
DC-T718 Inspect interiors	Helen Collins	Open	09/03/2020	09/11/2020	30%	7 days	None
DC-T715 Monthly Fire & Safety Check	Fathima Yilmaz, Chaitanya M	Open	09/05/2020	09/15/2020	30%	8 days	High
DC-T714 Material cost	Unassigned	Open	-	-	0%	-	None
DC-T707 Interior	Stephen Rothermel	Open	02/11/2020	09/21/2020	0%	160 days	None
DC-T703 Testing	Monica Hemsworth	Open	-	-	10%	-	None
DC-T701 Material cost	Anushree Bose	Open	09/11/2020	09/21/2020	20%	7 days	None
DC-T699 Safety Unit Check 3	Unassigned	Level 2: Testing	09/11/2020	10/08/2020	80%	19 days	None
DC-T698 Demo01	Unassigned	Open	-	-	10%	-	None
DC-T688 demo01	Charles Charles Stone	Open	10/12/2019	11/07/2019	10%	20 days	None
DC-T686 Roof trusses construction	Helen Collins	Open	09/13/2019	09/17/2019	0%	3 days	None
DC-T685 Steel rods and concrete reinforcement -	Jasmine Frank	Open	09/16/2019	11/08/2019	0%	40 days	None
DC-T684 Wireframe	John Marsh, Lin Lin Brenn	Open	09/12/2019	09/17/2019	30%	4 days	None

Project tasks and task lists make it easy to keep your work items organized and manageable in one centralized, accessible location. You can monitor the status of tasks, assign them to members, set task dependencies, send email reminders, and track the progress of your project. You can even convert emails into tasks using our task tracking software.

2.View and manage tasks

You can now view tasks in several styles: Classic View, Plain View, Kanban View, Dependency View, and Gantt view. The different views help you look at tasks from various perspectives and provide a distinct status of the project's deliverables.



3. Track milestones

Milestones can be used to group tasks together and quickly evaluate how close the project is to completion. This tool Projects categorizes milestones as upcoming, overdue, archived, or completed.



4. Activate timer for tasks

Start the timer for a task to record your actual working hours. After completing the task, you can stop the timer and your entries are automatically logged in the timesheet. You can log time for tasks daily or weekly at your convenience and easily calculate the billable.



5. Work with Subtasks

Split a larger task into a number of subtasks that can be assigned and tracked separately in the project. Splitting tasks into subtasks often provides a better picture of the project progress.



6. Analyze task reports

You can instantly view task reports under Tasks & Milestones. Task reports provide a consolidated view of all open and closed tasks in the selected project. You can click and view details of any owner, milestone, or priority in our project task management software.



7.Update tasks in one go

You can update tasks selectively or in bulk. In Classic View, you can close tasks, set priority, change the task owner, and move a task from one task list to another. In Plain View, you can close tasks, set priority, and change the task owner.

8.Setup task reminders and duration

With task reminders in Task Management Projects, you can stay on top of what's going on through timely email reminders so you don't miss any important milestones. Set task duration in days or hours based on your project's needs. You can create tasks even if you are unsure of the start time in this task tracking software



Projects has a multitude of strong task management features like reminders, recurrence, status timeline, Kanban view, task timers, reports, task automation and more at an affordable price. These are available in an easy-to-use platform that supports team collaboration and remote work, making it one of the best task management software. This tool also values your privacy and data security. We even have the option for you to create PII fields which is encrypted to store sensitive client information. Customization is another aspect of our task management app that sets it apart. From custom fields and layouts to custom roles and profiles, you have the capability to truly make your tasks your own. For all these reasons and more, This tool Projects can be considered the best task management tools.

List of tasks :

Task	Task Description
1	Creation of environment
2	Copy library and its contents
3	Y2k environment and reset a given environment
4	Run batch for Business Date of XXXXXXXXX
5	Background jobs starting
6	Bring Up/Down Background jobs
7	Copy files from Loc X to Location Y
8	Data Area reset
9	Entity addition
10	Entity deletion
11	Installation of fix
12	Static data setup entry
13	MQ channels updates
14	NDM/ FTP files
15	On Demand Reports
16	On line error
17	On Request service
18	Restore library environment
19	Restore data
20	Execute a robot job
21	Setup Environment
22	Source code
23	Special requests
24	Special save
25	Execute SQL
26	T/C change

9.ADVANTAGES:

Helps you to organize, assign, and prioritize tasks using color codes

- With the help of Gantt charts, it helps you monitor your progress and mark milestones to keep your project on schedule.
- Allows you to set goals, keep track of deliverables, and manage deadlines
- Offers comprehensive, customizable schedules to facilitate uninterrupted workflows
- Eliminates the need to remember all tasks yourself and keeps you on track with timely reminders
- Customizable options help you work with what you find comfortable

10.Few Contributions I've Made in Task Management Tool

- created a login and registration page using React js, HTML and CSS.
- Connected those login screen and registration screen to the API's.
- Created a Custom dropdown module for the user to select the tasks.
- Connected a database to it by using Java Eclipse and MySQL.
- Created a task scheduler module/Component which will help in scheduling the tasks

11.CONCLUSION:

Task management tool is a planning, assessing, evaluationg and reporting on the progress of a certain task. It is an important part of project management, since it allows you to properly follow each job reardless of the assignment size or complexity, task management is a must when it does to finishing a project on time and under budget.

To ensure that the task management project process is successful and efficient, the project manager must adhere to a schedule that covers all crritical components of each job such as status, time, dead line, costs, and allocateed resources.

Task management tool allows a simple two way communication between team members and project managers.