

# Task Management

## Introduction

Drowning in to-dos? Task management is your lifeline! It's the art of planning, organising, and tracking your tasks to boost productivity, reduce stress, and achieve your goals. From students to professionals, anyone can benefit by prioritising tasks, setting deadlines, and utilising various tools to finally conquer that never-ending list.

## Description Of Application

The Task Management application has the following components.

- **Entities**

- Users
- Tasks

- **Features**

- Registration of users
- Create new tasks
- Update tasks
- Delete tasks

## **Design and Architecture, system operations, and services identified**

The Design and Architecture of Idea Log is as follows:

### **Frontend:**

The frontend of the application will be responsible for providing a user-friendly interface to users to log their ideas.

The frontend will communicate with the backend server through RESTful APIs to perform actions like adding notes, updating notes and deleting notes.

The UI is responsive, allowing users to access the application from both desktop and mobile devices.

### **Backend:**

The backend will handle all the business logic, process requests from the frontend and interact with the database.

The backend exposes RESTful APIs to be consumed by the frontend and any other potential clients.

### **Database:**

The application's data is stored in the MongoDB database.

It is used to store the user's details and tasks.

### **Authentication:**

JWT (JSON Web Token) authentication is used for user's authentication. It is a secure and efficient method implemented in my project to verify user identity. It enables users to access resources with a token that contains their identity information, enhancing data protection and authorization while simplifying user management. JWT's self-contained structure and digital signatures make it a trusted choice for securing access to the project's features and data.

### **Tasks Management:**

Implemented a search functionality that allows users to search their tasks.

Provided an user friendly interface for users to create,update or delete their tasks.

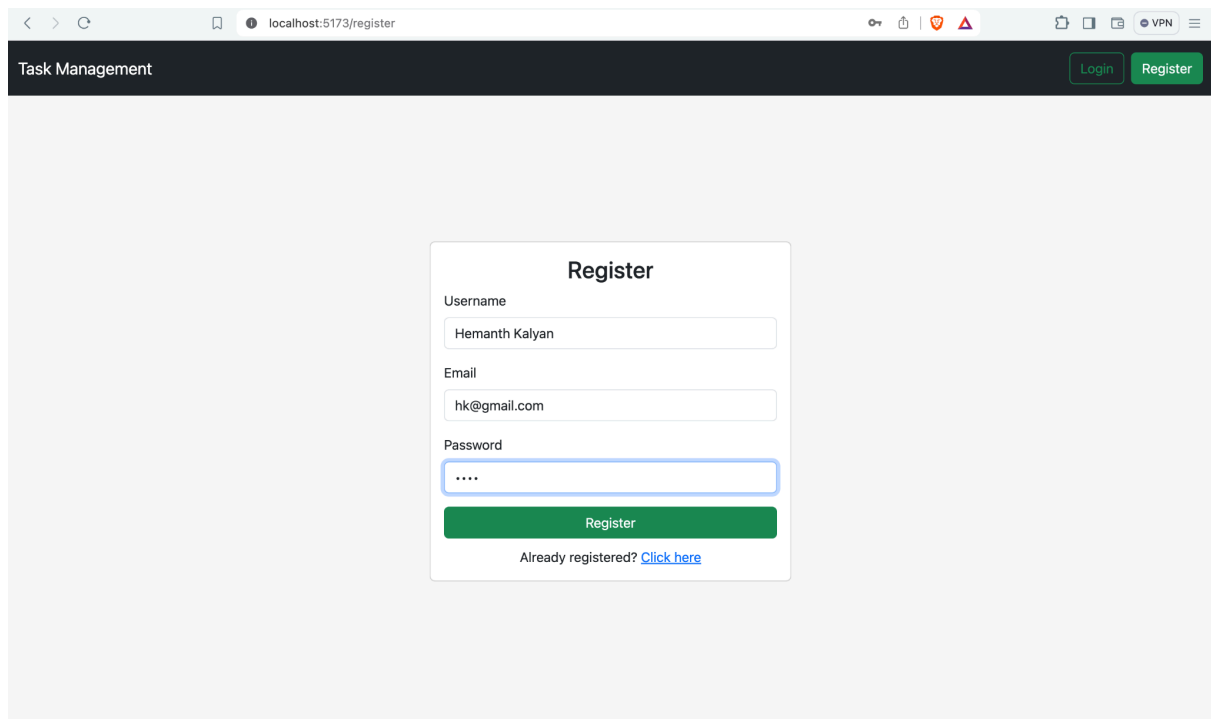
## **REST API endpoints with URI and HTTP methods**

Serial No	Entity	Http Method	URI
1	User	POST	/api/users/register
		POST	/api/users/login

2	Tasks	POST	/api/tasks
		GET	/api/tasks
		PUT	/api/tasks/update
		DELETE	/api/tasks/delete:id

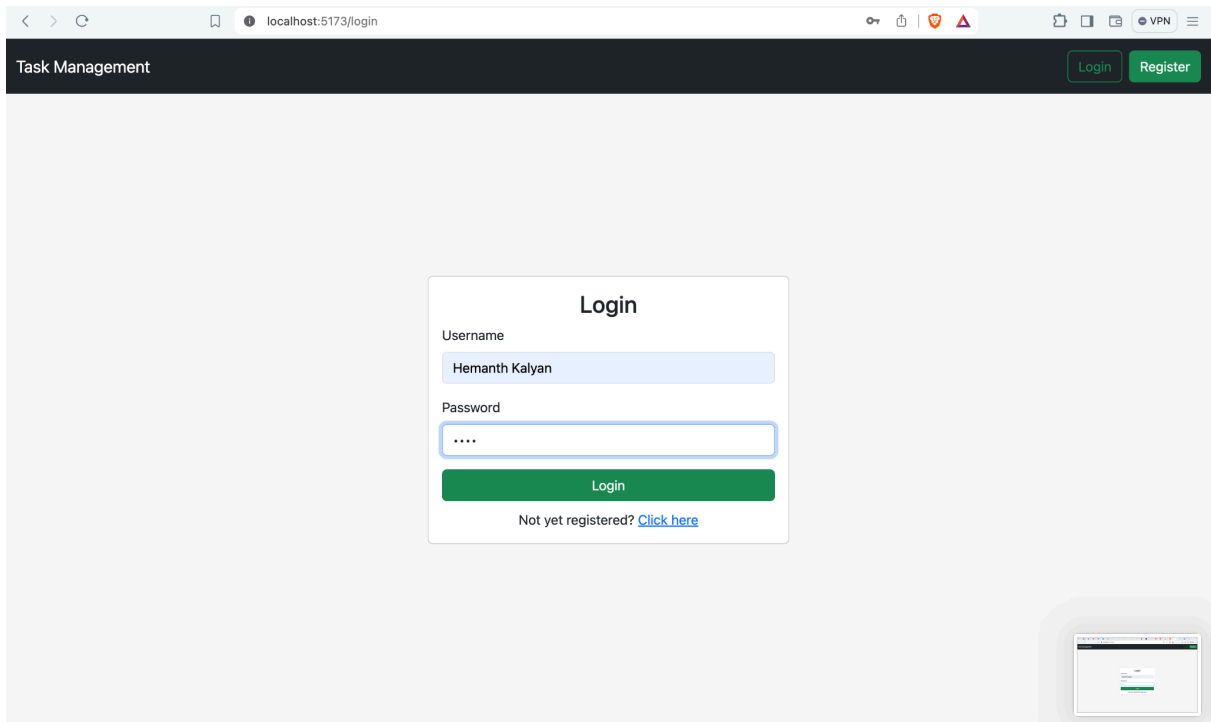
## Task Management Frontend Screenshots

### 1. User Registration



The screenshot shows a web browser window with the URL `localhost:5173/register`. The page has a dark header with the text "Task Management" on the left and "Login" and "Register" buttons on the right. The main content area is light gray and contains a white "Register" form. The form has three input fields: "Username" (containing "Hemanth Kalyan"), "Email" (containing "hk@gmail.com"), and "Password" (containing four dots). Below the inputs is a green "Register" button. At the bottom of the form, it says "Already registered? [Click here](#)".

## 2. User Login



The screenshot shows a web browser at localhost:5173/login. The page has a dark header with "Task Management" on the left and "Login" and "Register" buttons on the right. The main content area is light gray and contains a white login form. The form has a title "Login", a "Username" label with a text input containing "Hemanth Kalyan", a "Password" label with a password input showing four dots, a green "Login" button, and a link "Not yet registered? [Click here](#)". A small thumbnail of the page is visible in the bottom right corner.

Task Management

Login Register

### Login

Username

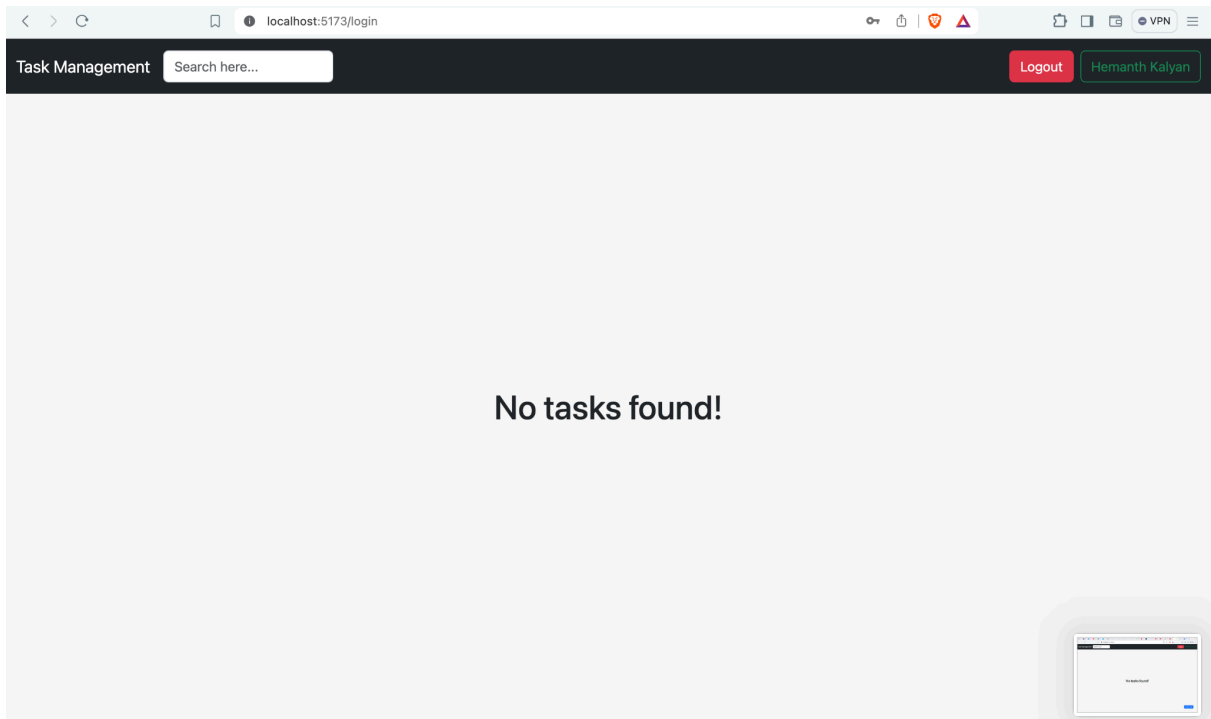
Hemanth Kalyan

Password

....

Login

Not yet registered? [Click here](#)



The screenshot shows the same web browser at localhost:5173/login, but the user is now logged in. The header now includes a "Search here..." input field. The "Login" button has changed to a red "Logout" button, and a green button with the user's name "Hemanth Kalyan" has appeared. The main content area is light gray and displays the text "No tasks found!". A small thumbnail of the page is visible in the bottom right corner.

Task Management Search here...

Logout Hemanth Kalyan

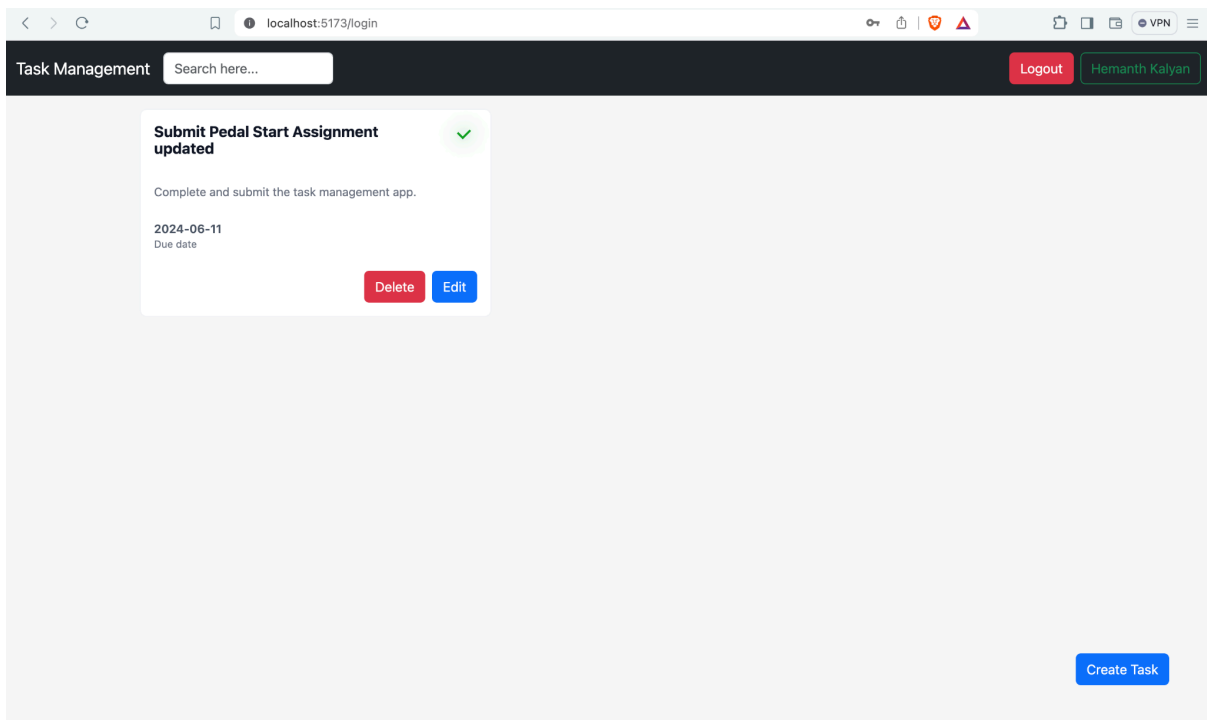
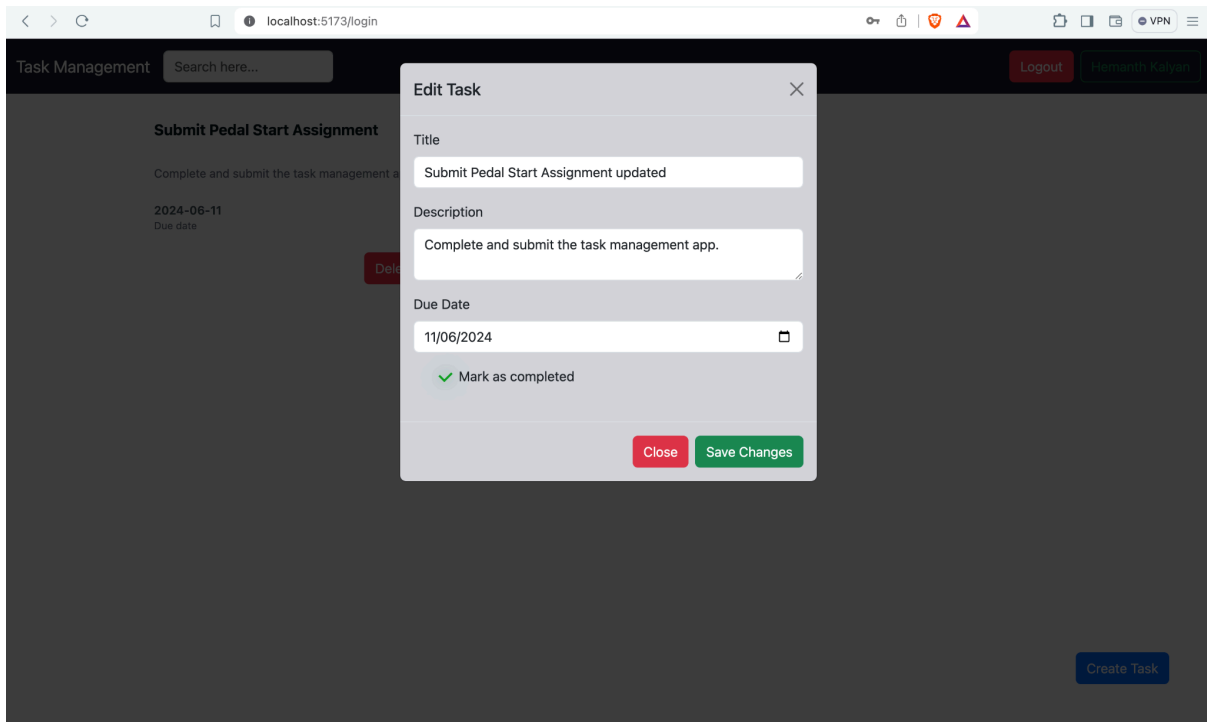
No tasks found!

### 3. Creating Tasks

The screenshot shows a web browser window at localhost:5173/login. The application has a dark header with 'Task Management' on the left, a search bar, and 'Logout' and 'Hemanth Kalyan' on the right. A modal titled 'Add New Task' is open in the center. It contains three input fields: 'Title' with the text 'Submit Pedal Start Assignment', 'Description' with 'Complete and submit the task management app.', and 'Due Date' with a date picker set to '06/2024'. Below these is a checkbox labeled 'Mark as completed' which is unchecked. At the bottom of the modal are two buttons: 'Close' (red) and 'Add Task' (green). In the bottom right corner of the page, there is a 'Create Task' button.

The screenshot shows the same web browser window, but the 'Add New Task' modal is closed. The task list area now displays a single task card for 'Submit Pedal Start Assignment'. The card includes the title, a green checkbox, the description 'Complete and submit the task management app.', and the due date '2024-06-11' with 'Due date' written below it. At the bottom of the card are 'Delete' (red) and 'Edit' (blue) buttons. The 'Create Task' button remains in the bottom right corner of the page.

## 4. Updating Tasks



## 5. Deleting the Task

