AI - HABIT TRACKER MOTIVATOR

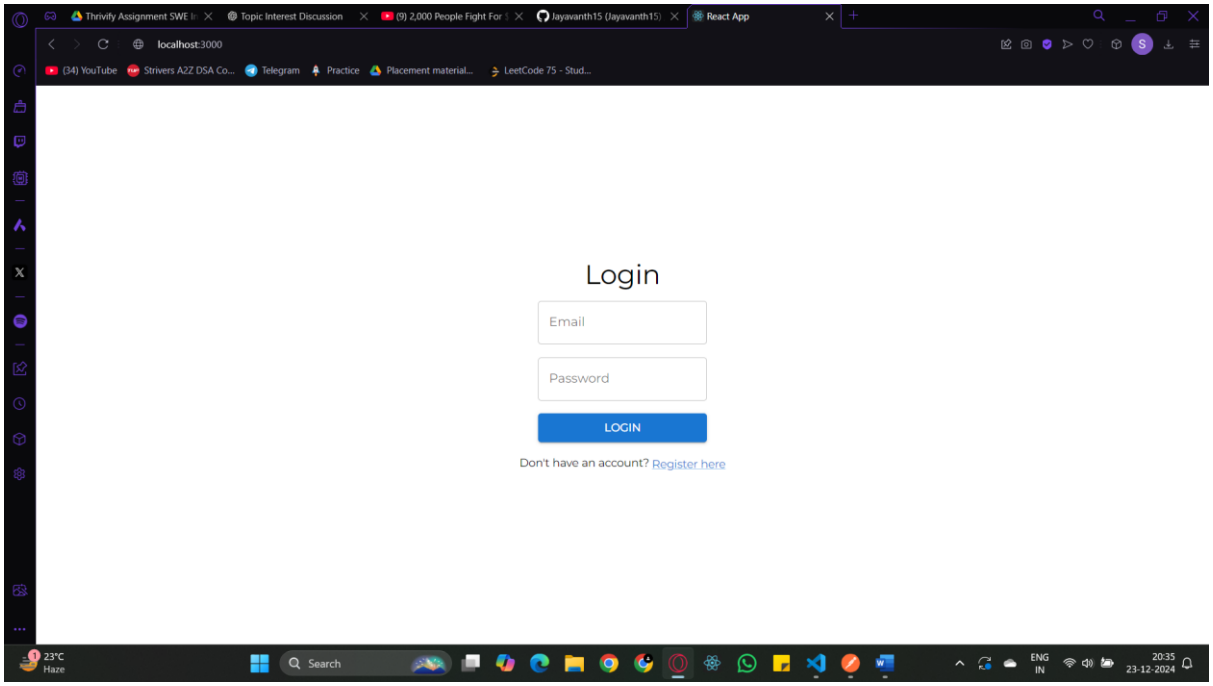
FRONTEND

I have implemented the Login and Register pages, as well as the Dashboard page. The Dashboard consists of three components: Habits Progress, Habit List (with CRUD functionality), and AI suggestions for habits. Lastly, there's a Profile section where users can change their name and password. I've also added light mode and dark mode features.

To access the frontend:

1. Navigate to the frontend folder: cd frontend/habit-tracker
2. Start the application: npm start

LOGIN PAGE



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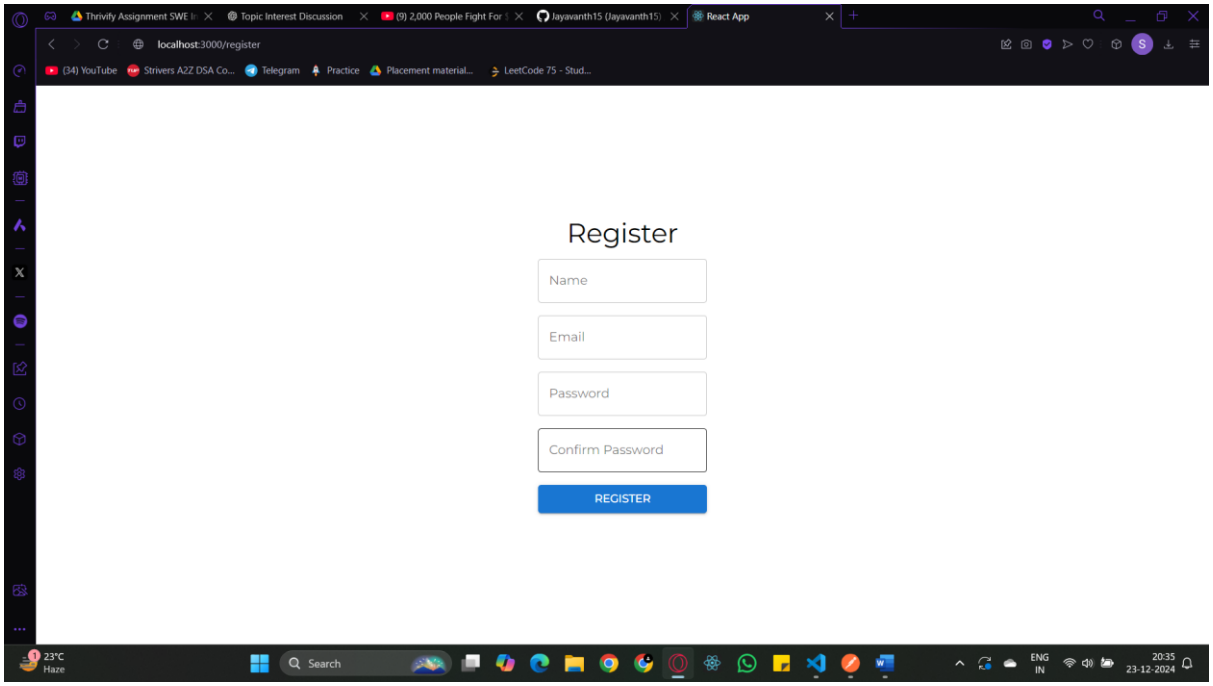
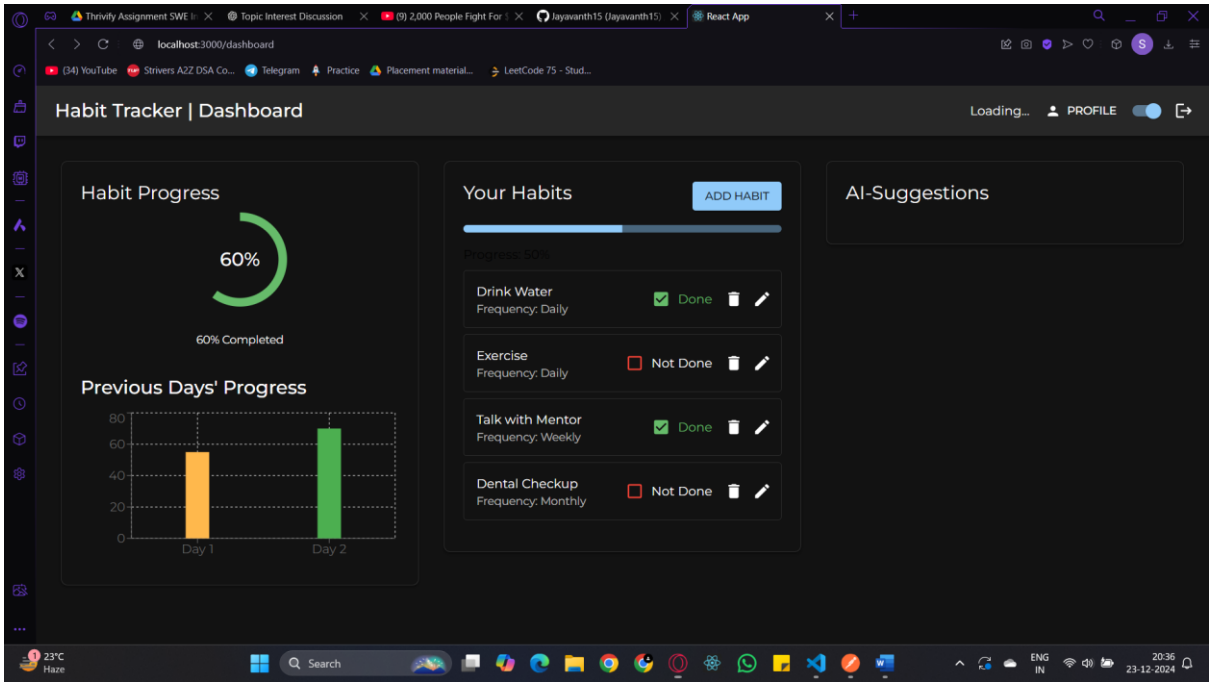
REGISTER PAGE:



DASHBOARD UI:



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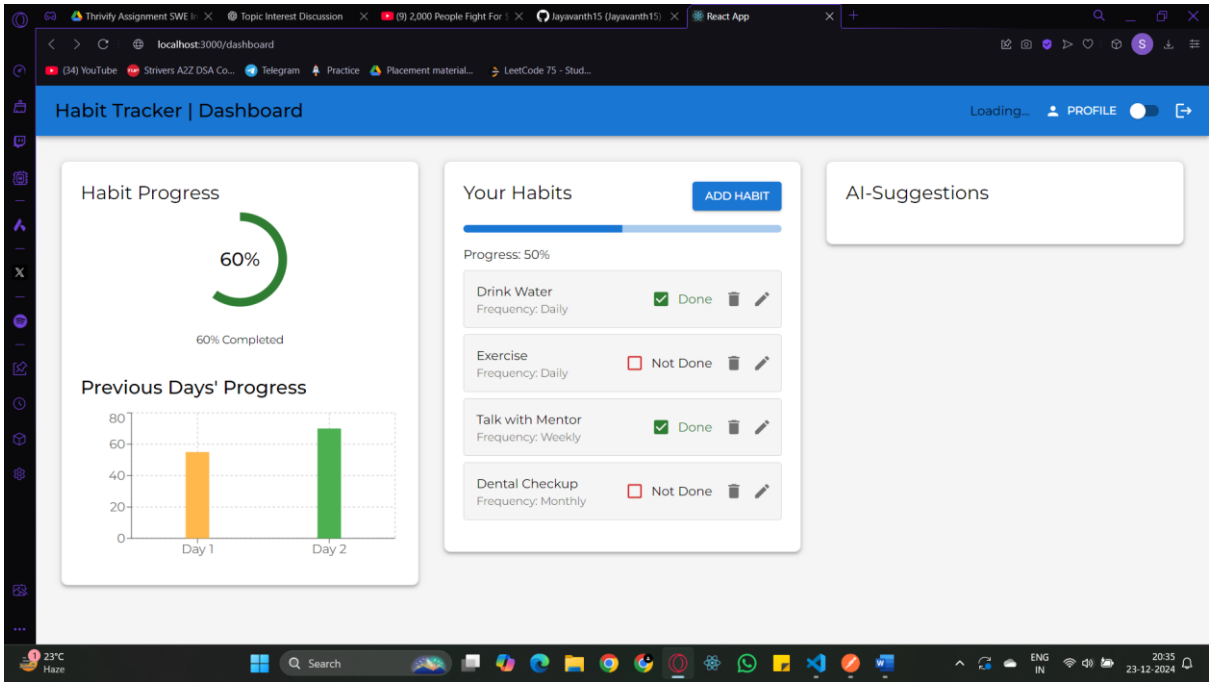
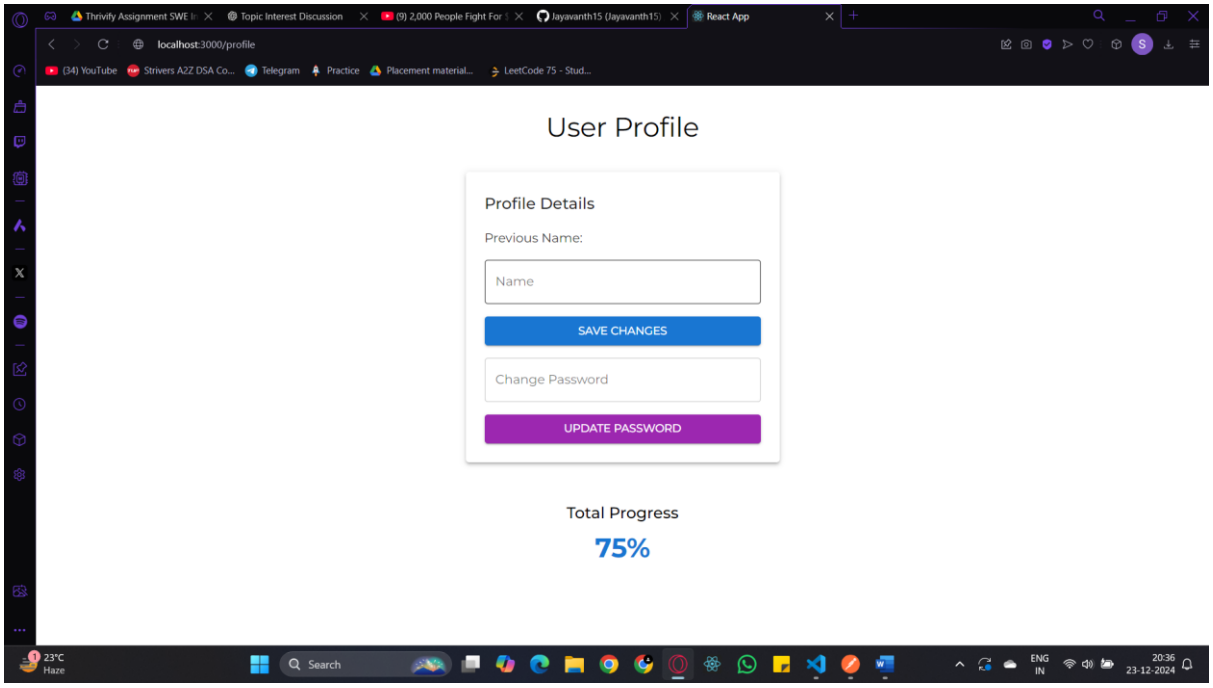


USER PROFILE PAGE:



BACKEND

In the backend, I have implemented API routes for each functionality and tested them in Postman. The APIs handle operations for users (localhost:5000/api/users) and habits (localhost:5000/api/habits). The data is stored in a local MySQL database. Additionally, I have successfully implemented user authentication in the project.

To access the backend:

1. Navigate to the backend folder: cd backend

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2. Start the server: node app.js

In detail API functionality

Create a New User	**Method**: POST **URL**: http://localhost:5000/api/users	{ "name": "John Doe", "email": "john@example.com", "password": "password123" }	{ "message": "User created successfully", "userId": 12 }
Login User	**Method**: POST **URL**: http://localhost:5000/api/users/login	{ "email": "john@example.com", "password": "password123" }	{ "message": "Login successful", "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VySWQiOjEyLCJlbWFpbCI6ImpvaG5AZXhhbXBsZS5jb20iLCJpYXQiOjE3MzQ5Njc5MjMsImV4cCI6MTczNDk3MTUyM30.U4DCgYK1U_pOrBc6AuCln7DeQtkxrrP6_wqmYSGNJ2U" }
Get User by ID	**Method**: GET **URL**: http://localhost:5000/api/users/:userId	-	{ "name": "John Doe", "email": "john@example.com" }
Update User by ID	**Method**: PUT **URL**: http://localhost:5000/api/users/:userId	{ "name": "John Updated", "email": "john.updated@example.com" }	{ "message": "User updated successfully" }
Create a New Habit	**Method**: POST **URL**: http://localhost:5000/api/habit	{ "userId": 1, "habitTitle": "Morning Jog", "startDate": "2024-12-23", "frequency": "Daily", "status": "Done" }	{ "message": "Habit created", "habitId": 4 }
Get Habits for a User	**Method**: GET **URL**: http://localhost:5000/api/habit/:userId	-	[{ "habit_id": 3, "user_id": 6, "habit_title": "Drink Water",

			"start_date": "2024-12-20T18:30:00.000Z", "frequency": "Daily", "status": "Not Done", "created_at": "2024-12-21T08:10:00.000Z" }]
Update Habit Status	**Method**: GET **URL**: http://localhost:5000/api/habit/:userId	{ "status": "Not Done " }	

Delete a Habit	**Method**: DELETE
	URL: http://localhost:5000/api/habit/:userId
		-	{
			"message": "Habit deleted"
			}

AI Suggesting system

This Flask app generates habit recommendations based on a user's existing habits by comparing habit categories using cosine similarity. It loads a predefined list of habits, vectorizes their categories, and calculates the similarity between the user's habits and the available habit categories. The app then returns the top 3 habit suggestions in JSON format when the /generate-habit-suggestions route is accessed.

http://127.0.0.1:5000/generate-habit-suggestions

To access to Flask code:

- To start your Flask application,navigate to the folder : cd ai_service
- Run the Flask app using: flask run

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