# Zenith – PlanTracker Application

Introduction

Zenith is a goal-tracking and productivity web application built with **Next.js** and powered by **Supabase** for authentication and cloud-native data management. It helps users structure their tasks, goals, and progress logs in a minimal and intuitive interface, with both short-term and long-term planning features. It supports visual analytics and personalized dashboards to encourage daily progress and growth.

https://github.com/IamMubashir/Zenith..git

Methodology

Zenith is developed following the **Waterfall Software Development Model**, ideal for projects with well-defined scopes and minimal iterative feedback. The model ensures structured progression from requirement analysis to deployment and maintenance.This software methodology has been illustrated below in the figure:
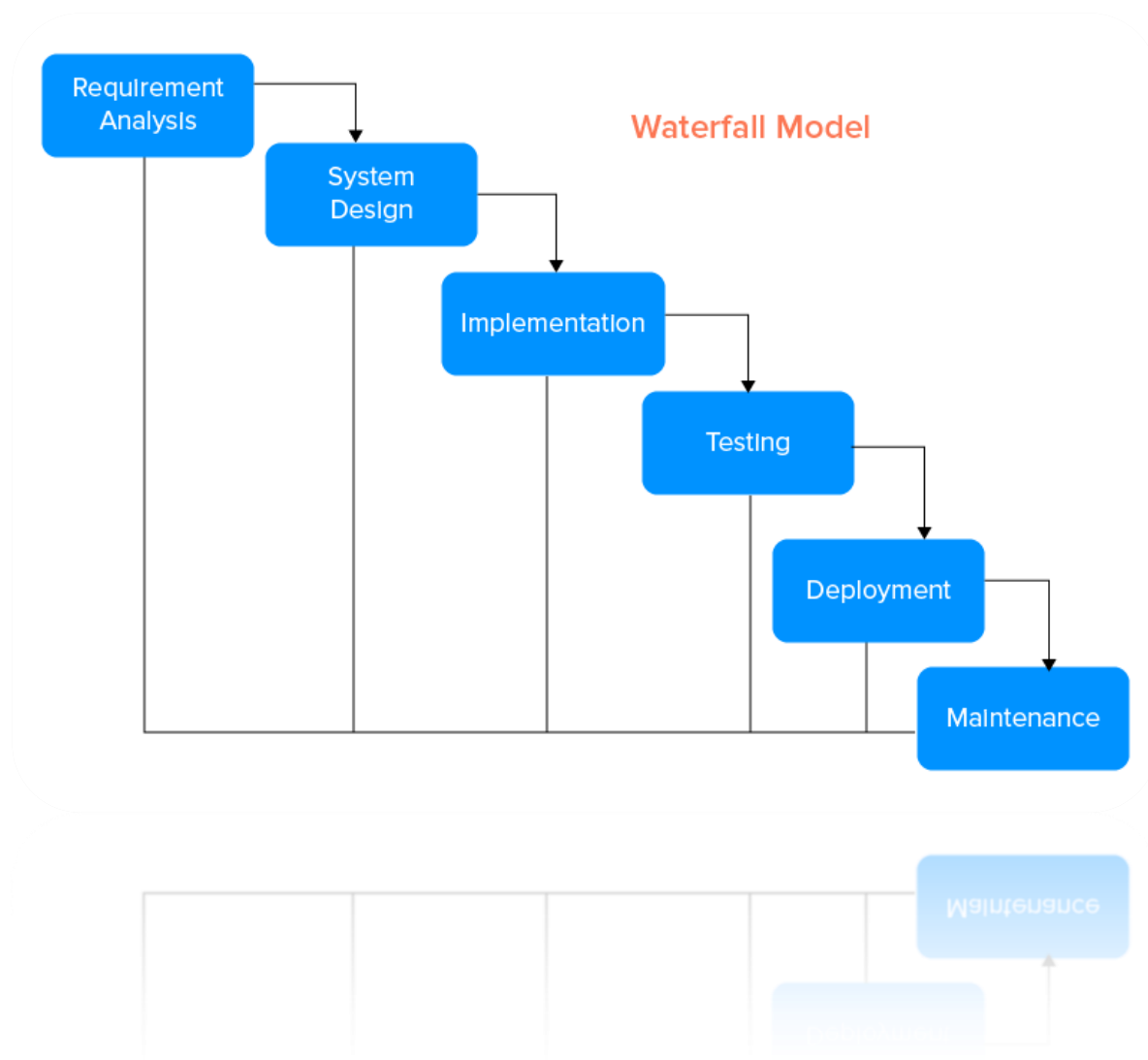
Functional Requirements

- **User Registration & Email OTP Verification Using Supabase**
- **Login & Session Handling**
- **Create / Update / Delete Daily Tasks**
- **Link Tasks to Projects or Long-Term Goals**
- **View Weekly & Monthly Progress Logs**
- **Track Goal Completion Visually**
- **Set Personal Preferences and Profile Data**
- **Admin Authorization of New Users**
- **Password Reset via Email Verification**

Non-Functional Requirements

- **Security:** Supabase authentication, email verification, role-based access
- **Performance:** Efficient rendering with lazy loading and indexed queries
- **Usability:** Clean and mobile-responsive design
- **Reliability:** Hosted on Vercel with Supabase's managed services
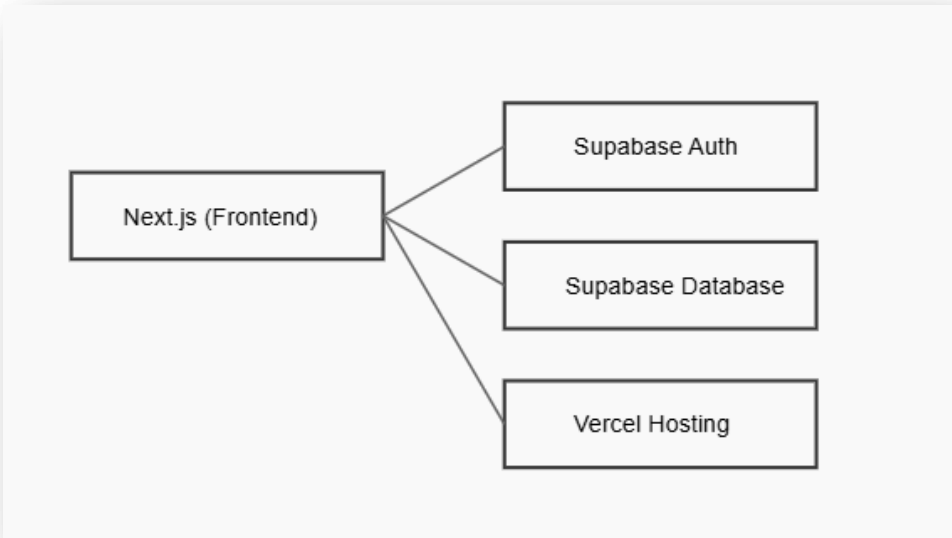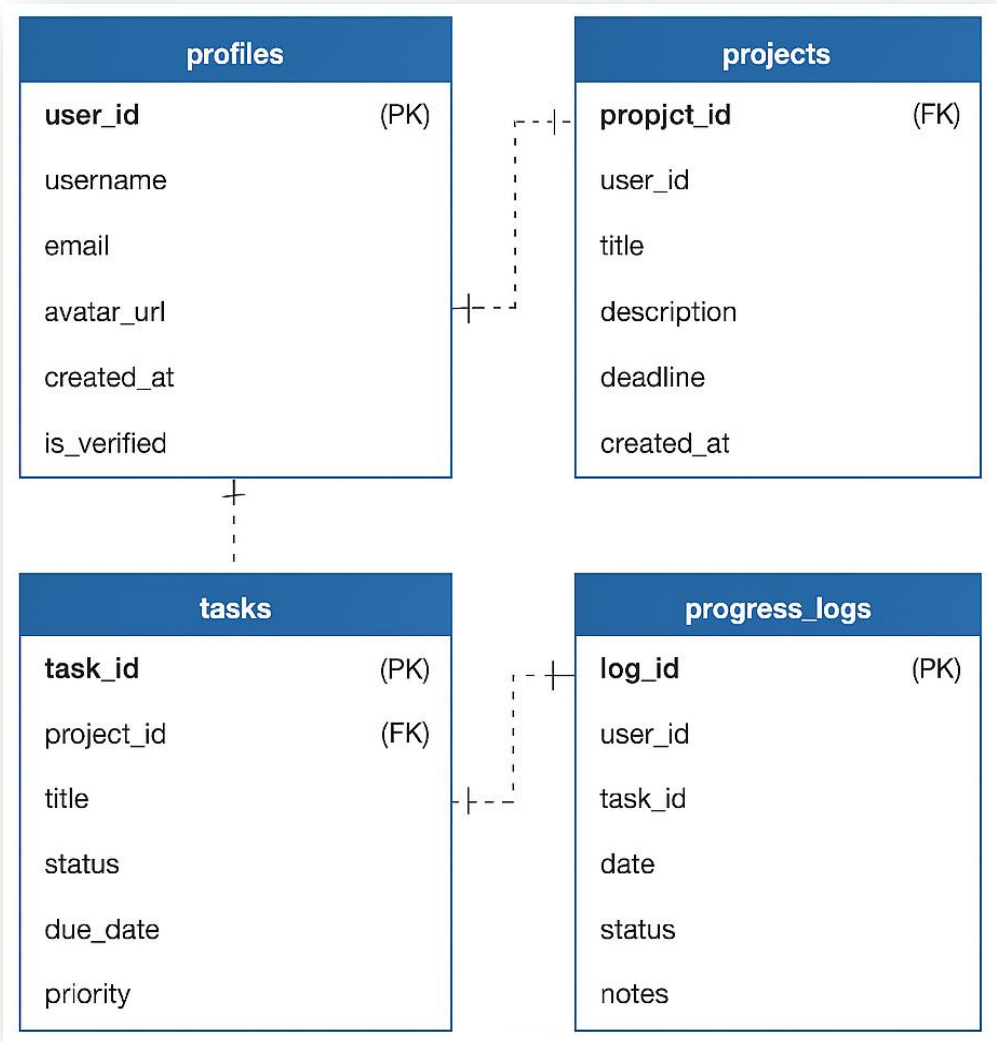- **Maintainability:** Modular React component structure and Next.js routing
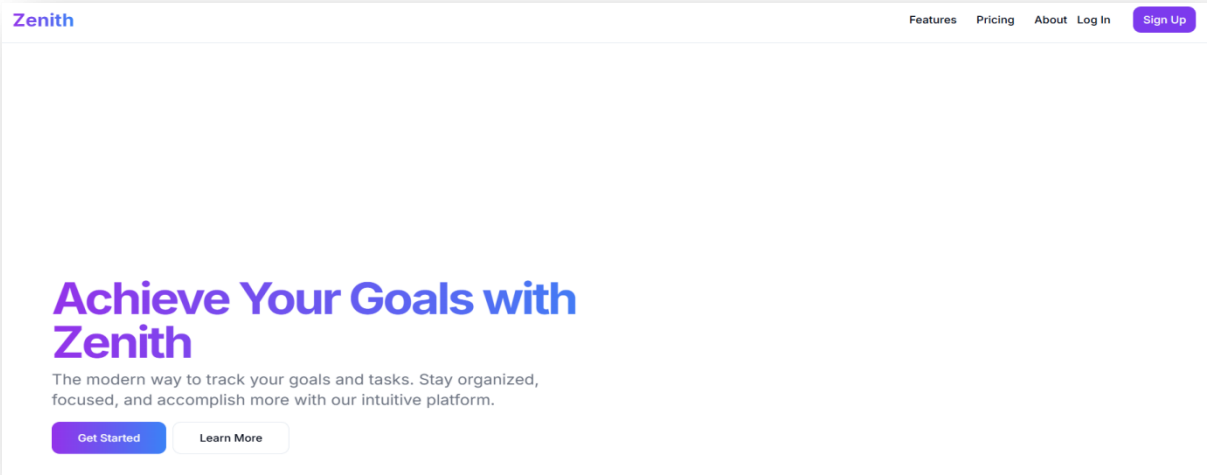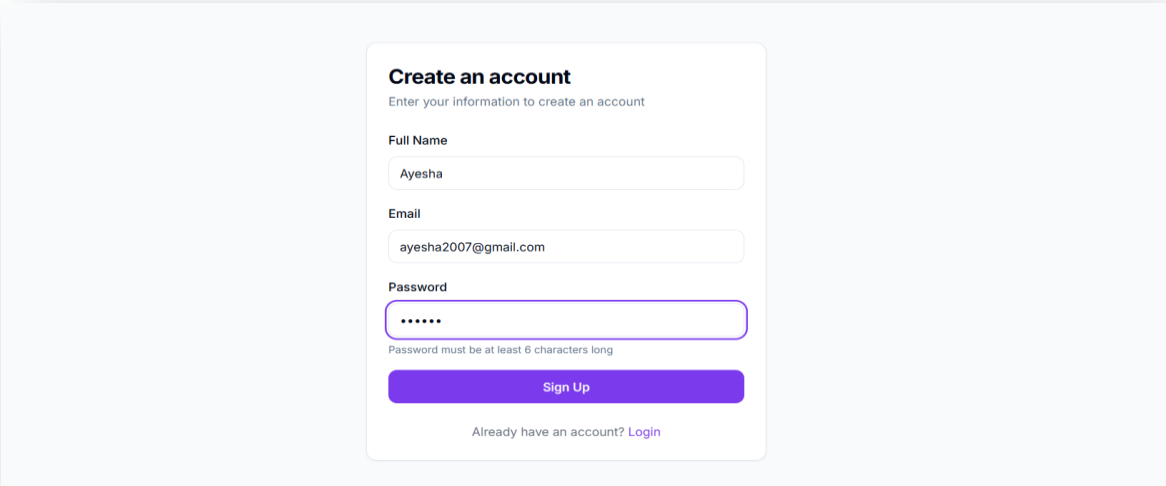
Use-Case Diagram:
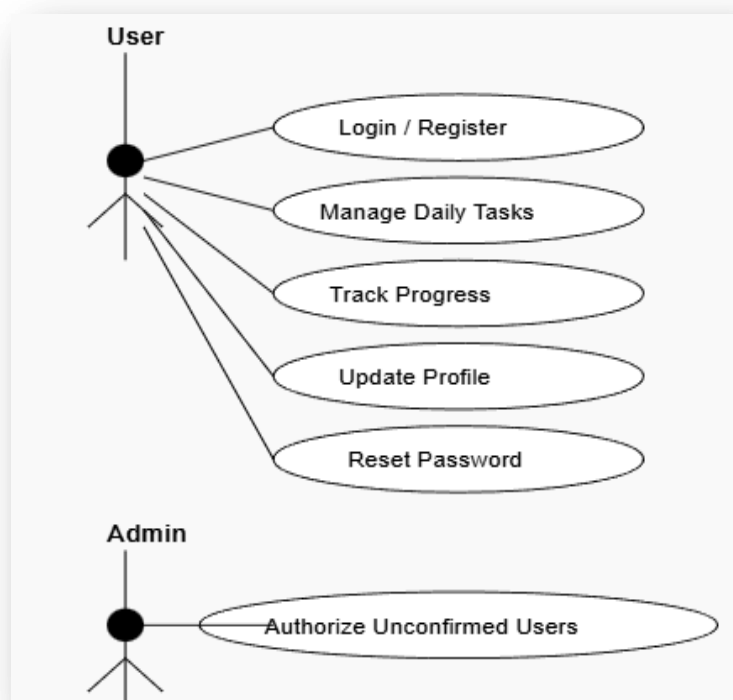
ERD:
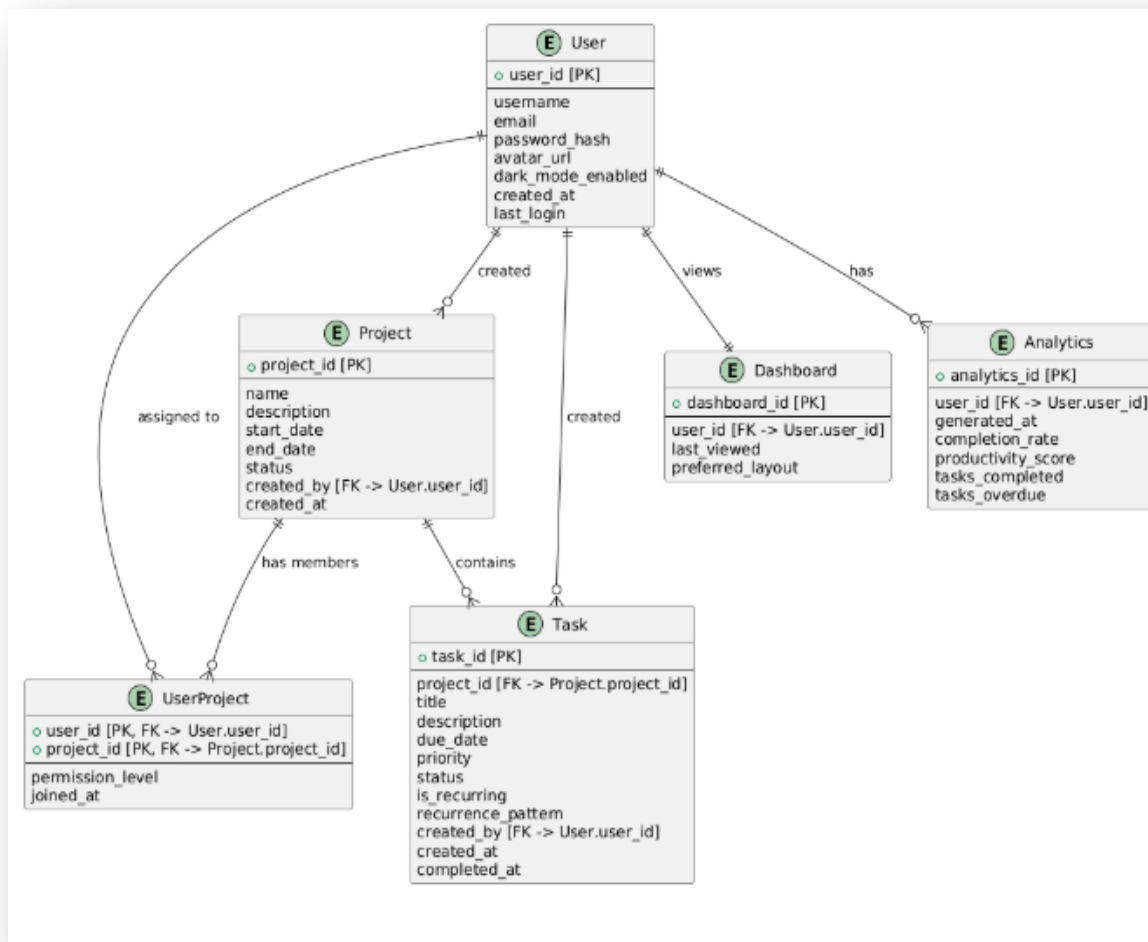
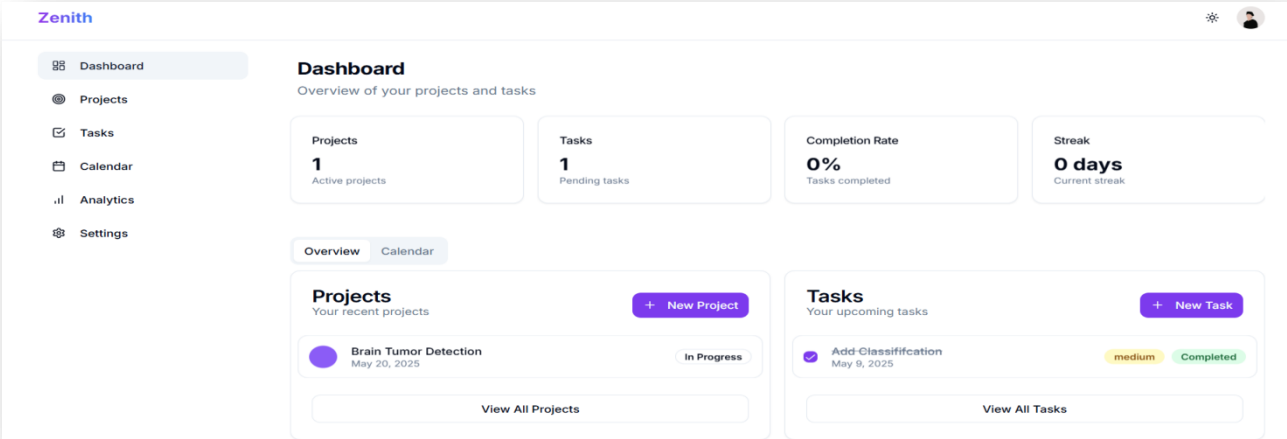## Architectural Design:

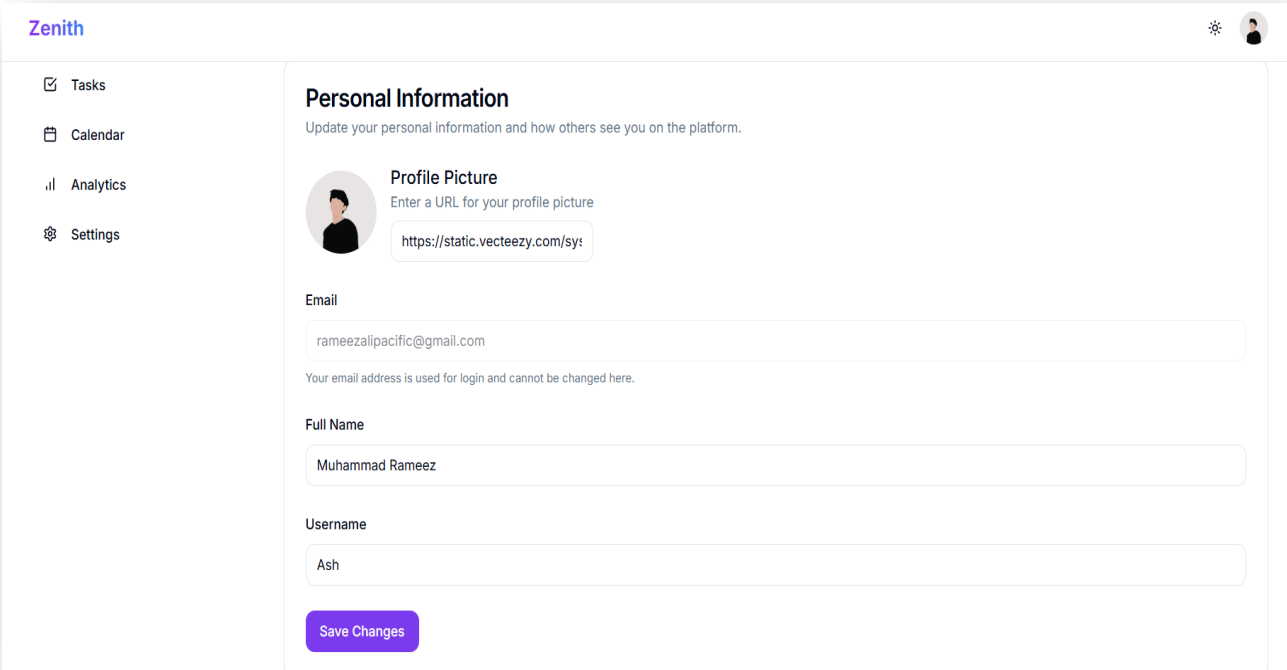## Database Schema Design:

Login page:

Sign up page:

Home Page:

Dark Mode:
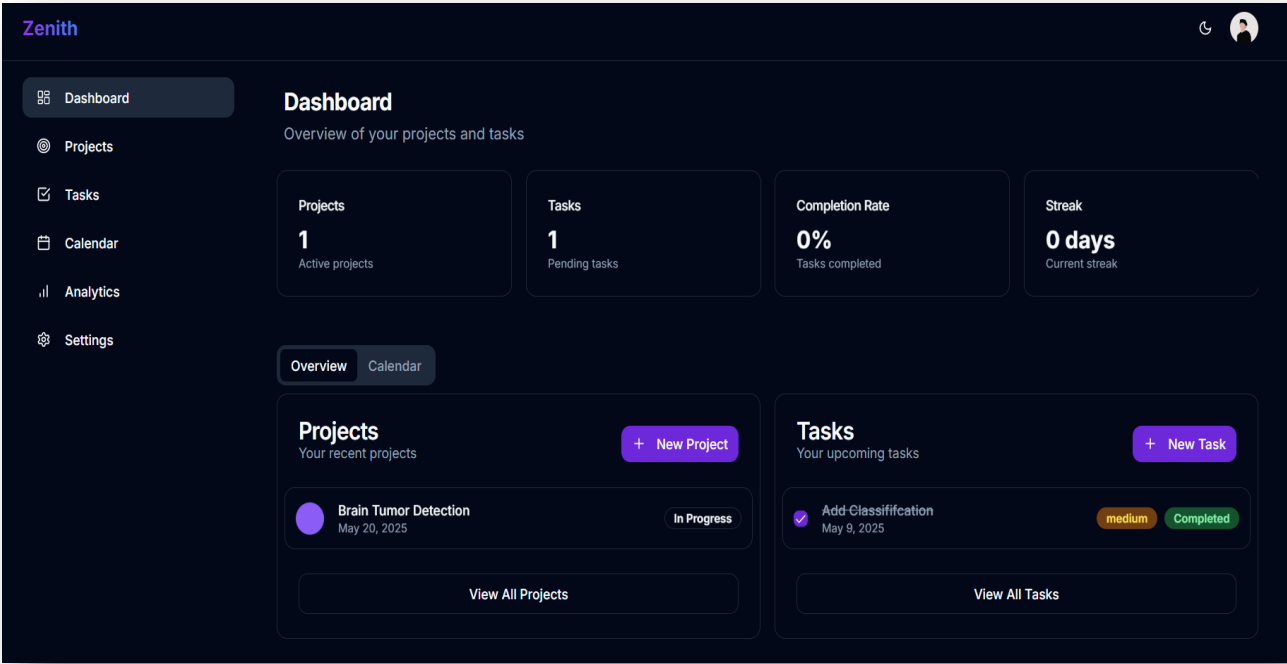
Profile Settings:

Create Task/Project:

Tasks:

Calendar View:

Zenith

- Dashboard
- Projects
- Tasks
- **Calendar**
- Analytics
- Settings

Calendar
View your tasks by date

Calendar
View your tasks by date

	May 2025	

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Tasks for 5/14/2025
1 task scheduled

Deploy Model `high`
Make the trained model accessible within the application by integrating it into the backend for real-time or scheduled predictions. Ensure it's tested and ready for production use.

Analytics:

Zenith

- Dashboard
- Projects
- Tasks
- Calendar
- **Analytics**
- Settings

Analytics
Track your productivity and progress

Overview Projects Tasks Time Tracking
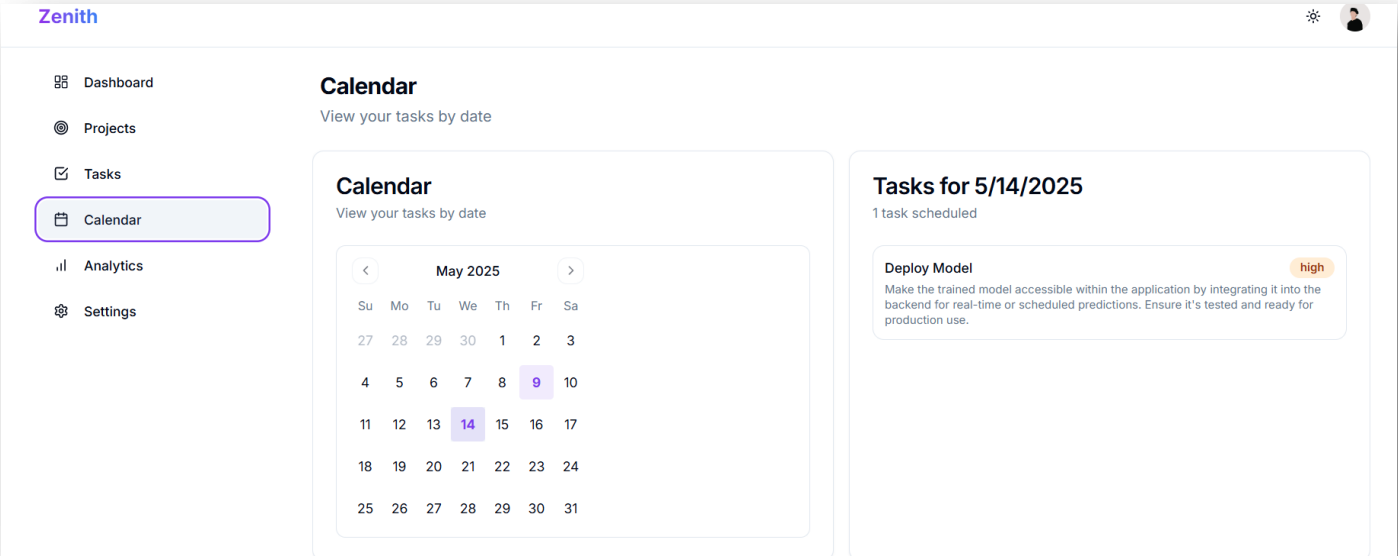
Total Projects	Total Tasks	Completion Rate	Time Tracked
1	**2**	**0%**	**0h 0m**
0 completed	2 completed	Project completion rate	Total time spent on tasks
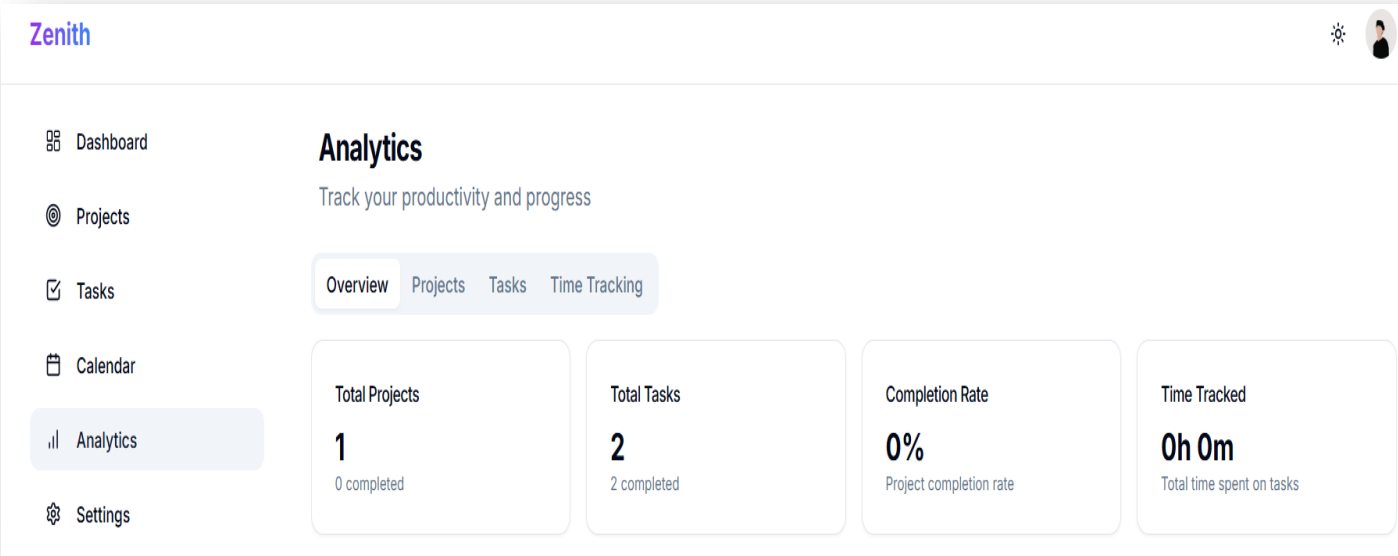
Database
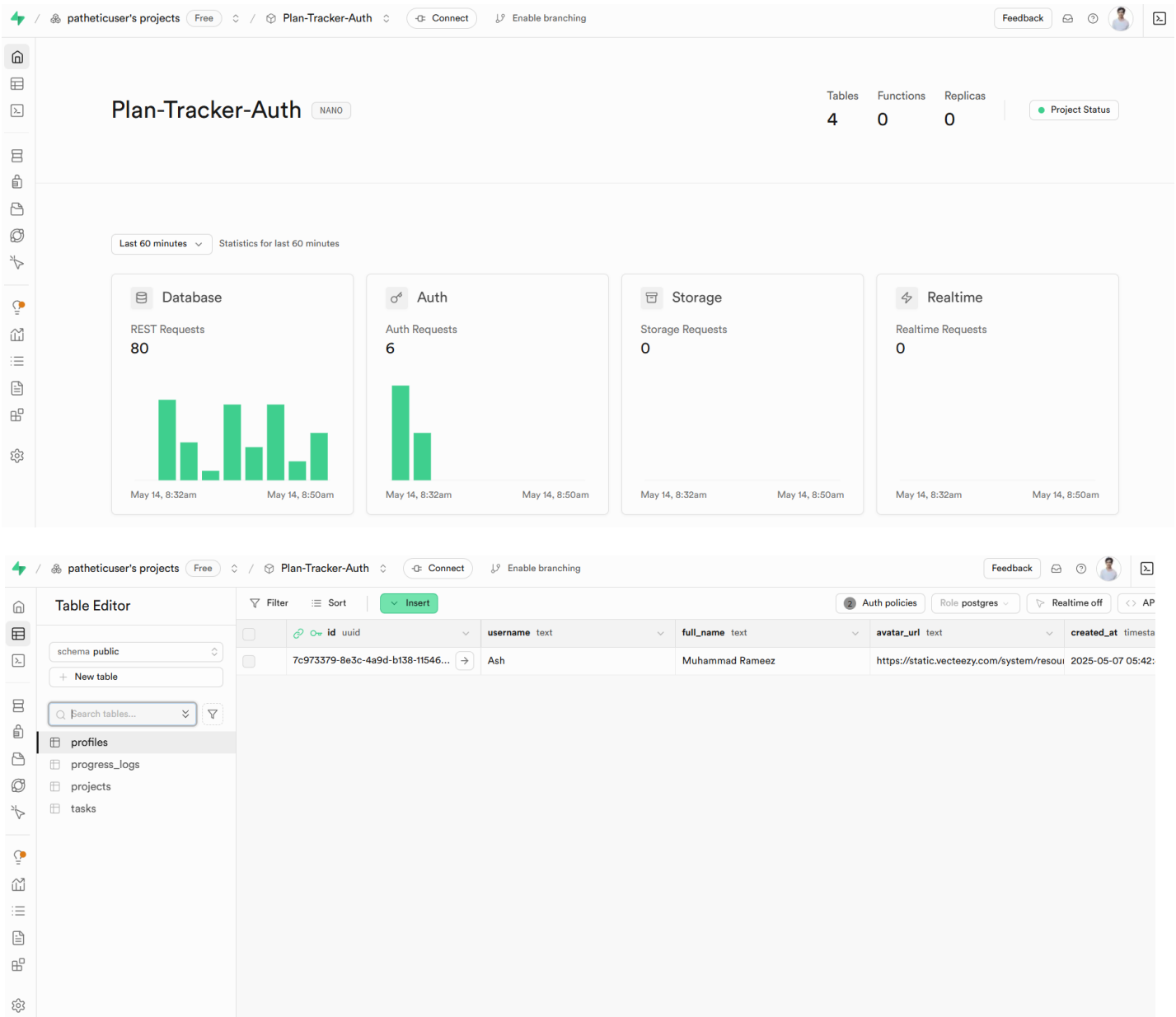
User Confirmation
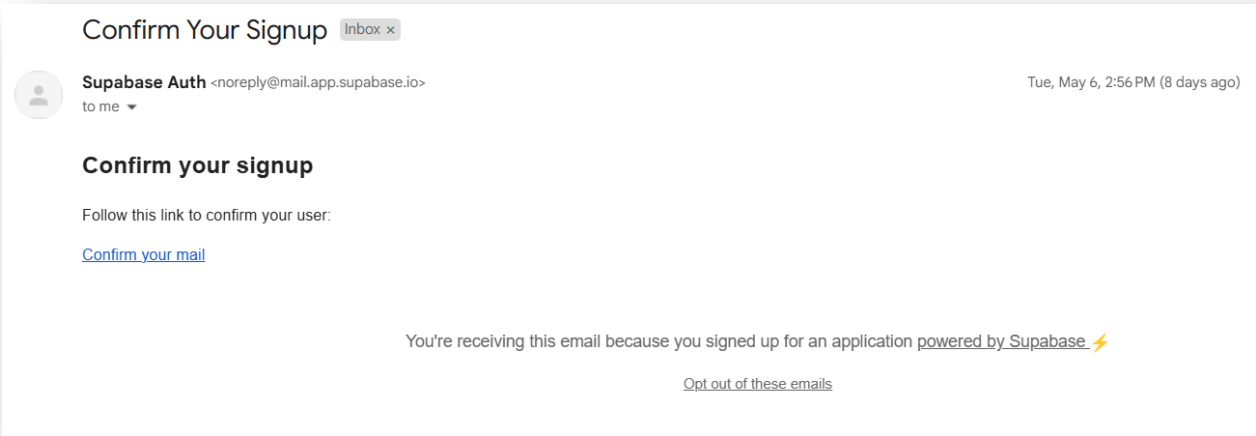
Test Case Title	ID	Description	Precondition	Action	Postcondition	Exception Case	Actor
User Signup with OTP	TC_Z001	Register user with Supabase OTP verification	Valid email	Fill form and submit	Email verification triggered	Invalid email format	User
Add Daily Task	TC_Z002	Add task with title and due date	User logged in	Open dashboard, add task	Task appears in today's list	Title missing	User
Goal-Task Linking	TC_Z003	Link task to a specific long-term goal	Task and goal exist	Select task, link to goal	Task listed under goal	Task or goal missing	User
Password Reset	TC_Z004	Reset password via Supabase auth flow	Email exists	Trigger reset via email	Reset link sent	Unregistered email	User
Progress Chart Accuracy	TC_Z005	Validate correct progress graph	Tasks with various statuses	View dashboard chart	Graph represents completion correctly	Tasks not updated	User
Admin Blocks a User	TC_Z006	Verify admin can block a suspicious user	Admin logged in	Select user and click "Block"	User flagged as blocked in DB	Unauthorized access	Admin
Re-assign Task Due Date	TC_Z007	Allow user to modify a task's due date	Task exists	Open task editor and change date	New due date saved	Invalid date format	User
Mobile Responsiveness	TC_Z008	Verify app responsiveness on small screens	App deployed	Open app on mobile	Layout adapts fluidly	Content overflow or clipping issues	QA Team