

EE/CprE/SE 491 WEEKLY REPORT 3

Start Date – End Date: 10/07/2025 - 10/14/2025

Group number: sdmay26-16

Project title: AI Home Design Moodboard

Client &/Advisor: Md Maruf Ahamed

Team Members & Roles:

- **Prakeerth Regunath:** Frontend & Scheduler/Organizer
- **Onur Onal:** Project Lead/Project Manager & Full-stack
- **Kemal Yavuz:** Lead backend
- **Erroll Barker:** Lead Frontend
- **Bae Meh:** Backend
- **Om Sanghvi:** Backend

Weekly Summary

- o ***This week, backend progress was achieved with the implementation of user authentication, Google login integration, and role-based access. The backend structure was reorganized for better scalability, and database migrations were completed. Frontend integration for login/signup began, while the landing page and design elements continued development. Progress continued through new Git issues, task assignments, and code reviews to align the backend and frontend development efforts.***

Past Week Accomplishments

- **Prakeerth Regunath:** I was able to connect the backend endpoints to the frontend login/signup. I researched and learned more about the Google Identity Service SDK and how it can be applied towards the creation of a simple user account in Renova.
- **Onur Onal:** This week, I completed our full backend setup for users, implementing authentication, Google login integration, and role-based access control. I restructured the backend to include proper routing, middleware, and controller separation. I also updated the schema to include user roles and Google login support, and verified database migrations. Additionally, I created Git issues for new frontend and backend tasks, assigned follow-up work to Erroll, Prakeerth, and Om, and conducted code review of Kemal's initial backend implementation.
- **Om Sanghvi:** Focused on improving backend reliability by implementing a `/health` endpoint (`localhost:8080/health`) to monitor service status and detect failures easily. Researched different GenAI image and video generation models that could be integrated into the Moodboard feature, allowing users to add AI-generated visuals and customize their designs directly within the app.

- **Erroll Barker:** I'm still working on the landing page, adding all the essential details that users will first encounter, such as animations, feature highlights, subscription sections, and various design elements. I'm also preparing everything so that once the backend is up and running, we can easily integrate the endpoints.
- **Kemal Yavuz:** Refactored the backend project structure to follow a cleaner controller–router–middleware organization. Set up the foundation for role-based access control (RBAC) by extending the Prisma User model with a role field (USER / ADMIN), and implemented token-based authorization for protected routes. Researched and configured a Dockerized MySQL environment for the project to ensure consistent database setup across all developers. Tested and verified local database connection via Prisma migrations. Created a new user controller with CRUD endpoints: GET /users, GET /users/:id, PATCH /users/:id, and DELETE /users/:id, restricted by access level. Fixed git workflow by re-aligning commits under the correct feature branch (feat/auth-users) following team feedback.
- **Bae Meh:** This week, I pulled the latest repository updates to ensure my local environment is up to date. I verified that both the front and backend ran successfully. Researched how Prisma works with MySQL. After I began working on the database initialization, setting up the MySQL schema for core entities.

Rough Sketches/Drafts

- <Insert Sketches and Description here if needed>

Pending issues

- I'm having an issue adding an object file to the render. I'm having trouble finding the right resources(not any more.. Was having), and the object won't rotate in the landing-page animation; it stays pinned to a fixed point instead of rotating with everything else. -Frontend EB
- Docker setup is working locally but still requires team-level testing to ensure all members can connect seamlessly.

Individual Contributions Table

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Prakeerth Regunath	Connected Backend endpoints to frontend login/signup. Did research on Google Integration documentation and application.	6	18
Om Sanghvi	Implemented backend health monitoring system and researched GenAI image/video generation tools for the Moodboard.	6	15
Erroll Barker	Still contributing to the frontend, trying to get a good UI UX interface going Also working on rendering objects files in	~7	30
Onur Onal	Completed full backend setup with authentication, Google login, and role-based access. Reorganized backend structure, updated Prisma schema, and conducted code reviews.	12	33
Kemal Yavuz	Backend refactor (controllers, routers), RBAC system, Docker DB setup	9	21
Bae Meh	Verified that both the frontend and backend ran without errors. Began working on database initialization. Research more about Prisma and how it interacts with MySQL	6	6

Plans for the upcoming week

- **Prakeerth Regunath:** Research and understand how to apply the Pinterest integration onto the Moodboard overview on Renova, as well as fully implementing the full auth flow of login/signup.
- **Onur Onal:** Begin developing the Moodboard page based on the Figma UI design. Implement the board entity on the backend with defined user-board relationships and write the frontend code for the page.
- **Om Sanghvi:** Begin connecting all backend services, integrate database and health monitoring routes, and start exploring prototype integration of GenAI visual generation into the Moodboard workflow.
- **Erroll Barker:** Finishing the landing page then start working on the user page or The checkout for subscription page (We'll need to look into how to add a credit/debit card Withdrawal) and adding a small little detail to the login sign page regarding animation
- **Bae Meh:** This week I plan to finish setting up the mysql schema for core entities, run migrations to create the tables, and test the backend connection to ensure everything is working correctly.
- **Kemal Yavuz:** Finalize the Docker Compose setup and share documentation for teammates to use a uniform local MySQL container. Complete testing for CRUD user routes and ensure role-based protection works correctly. Begin backend integration with frontend authentication forms using Axios requests. Help the team connect Prisma to the Dockerized MySQL instance.