

EE/CprE/SE 491 WEEKLY REPORT 8

Start Date – End Date: 11/11/2025 - 11/18/2025

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: Full-stack**
- **Erroll Barker: Lead Frontend UX/UI**
- **Bae Meh: Backend**
- **Om Sanghvi: Backend**

Weekly Summary

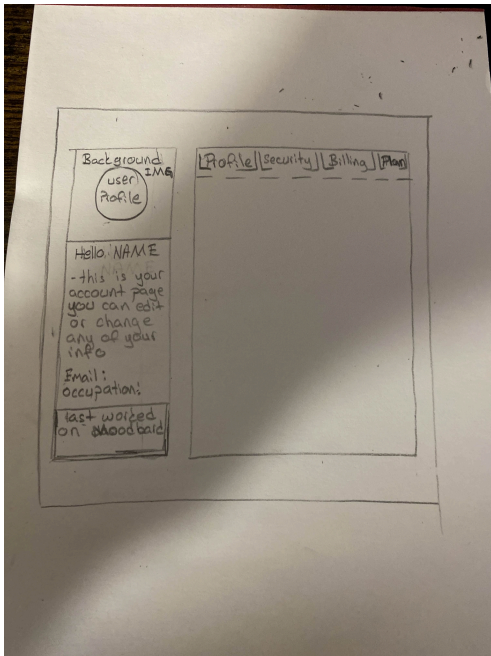
- o ***This week we made solid progress across frontend, backend, and infrastructure. We fixed token and sign-in issues, improved the auth flow, added new moodboard features, set up AWS/S3 image handling, and completed backend S3 upload support. We deployed the project to the VM, advanced CI/CD automation, added a login page animation, built and tested the account page with a mock backend, and continued Stripe integration work. We also built backend endpoints and tables for accounts and payments, researched Stripe needs, advanced the Explore page layout, and added backend and integration testing.***

Past Week Accomplishments

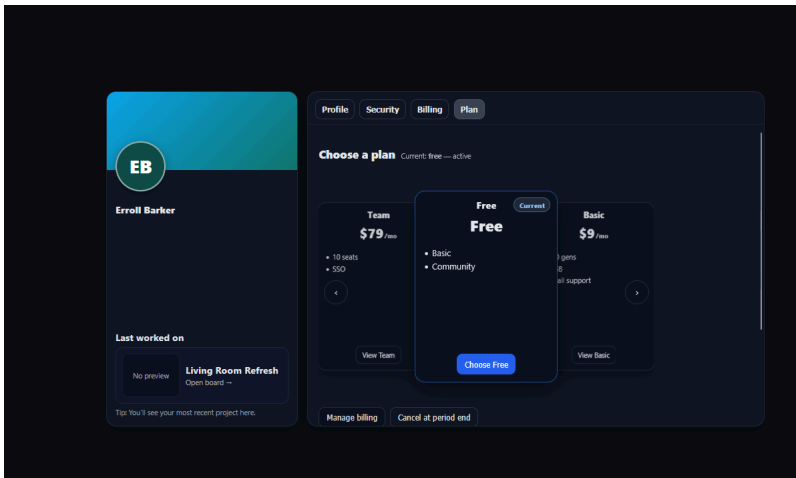
- **Prakeerth Regunath:** This past week, I've been working on identifying the root cause of why the access and refresh tokens were not functioning properly as intended when the user logs into Renova. I was able to learn more about how the authentication flow works when a user signs into the website, and I cleaned up code that can leave a positive impact on the project. I've resolved the pending issues that Erroll Identified for me to fix, such as the remodification of how GoogleSignIn is handled, as well as passing variants for "signin" and "signup".
- **Onur Onal:** This past week I was able to implement many new moodboard toolbar features, including deleting and duplicating with buttons or keys, moving items forward/backward, and mirroring items. I also created an AWS account for the team, set up S3 buckets and prefixes for image management of users and moodboard tables, and completed the backend setup for uploading images from requests to S3. I also did code review on Prakeerth's auth panel/protected route fixes, and met with him to offer insight on how the issues can be fixed. I also created an MD file for Kemal, laying out the backend tables, endpoints, and relations needed to implement the backend side of Erroll's account, settings, and payment work on the frontend.
- **Om Sanghvi:** Successfully deployed the system on the virtual machine (VM), allowing the team to access the website live. Worked on automating the CI/CD pipeline so that changes pushed to the main branch automatically deploy to the VM. Currently testing automation steps to replace the manual process of stopping Docker Compose, pulling the latest changes, and restarting services.
- **Erroll Barker:** I've finished the login animation that I had planned to complete earlier. I also started working on the account page and created a mock backend (using Mirage.js) so I can test it with endpoints. Once everything is confirmed to be working, I'll send those endpoints to the backend team so they can implement them properly. I've also been working with the Stripe servers and have run into a few issues with their API, as well as some trouble implementing it in their test environment. I'll continue looking into this throughout the week. For now, this summarizes what I have accomplished.
- **Kemal Yavuz:** This week, I started developing the backend features that the frontend team will use for the account and payment pages. I built controller endpoints and database tables to handle cards, invoices, and user tokens based on their subscription plans. I also began researching Stripe's API to understand what backend logic we'll need for payment processing and how it will connect to the frontend. These updates help prepare our backend for handling user plans and payment tracking once the frontend implementation is ready.
- **Bae Meh:** This past week, I started working on the Explore page on the front end by brainstorming layout ideas, setting up the initial page structure, and outlining how the components will fit together. I also finished up the backend testing and integration testing, cleaned up a few remaining issues, and verified that everything is working smoothly with the existing services.

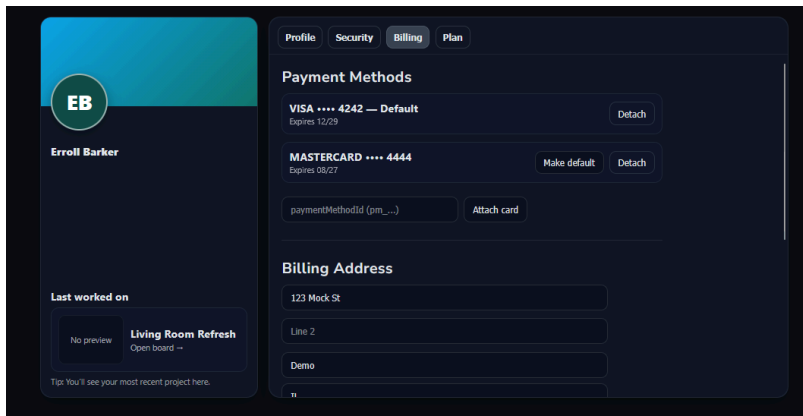
Rough Sketches/Drafts

- Final sketch for the account page

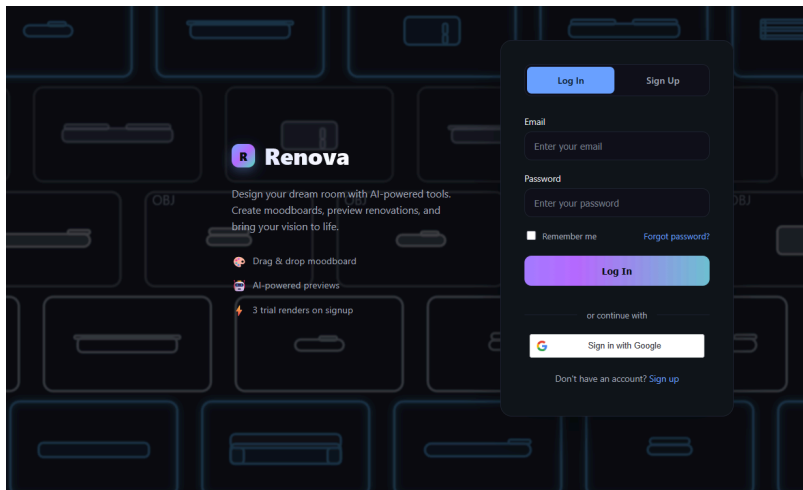


- Rough starting point for the account page in code





- Updated the login screen to have the background animation



Pending issues

- Found some issues with the auth files (**Last week, MOST FIXED**)
 - ~~we can delete app/auth/callback/route.js~~
 - ~~we should also remove handleGoogleSignIn from both forms~~
 - ~~pass variant="signin" and variant="signup" to <GoogleSignIn />~~
 - ~~we should add the dataset.bound guard in GoogleSignIn.jsx~~
 - ~~make authAPI.request() JSON parsing robust (in diff)~~
 - ~~also need to add <Suspense fallback> in AuthPage~~
 - need to verify NEXT_PUBLIC_GOOGLE_CLIENT_ID and Google console origins
 - get rid of all the include tokens/user in URLs
- Encountered potential security concerns with public port exposure on the VM. Since the deployment is managed through Iowa State's network, there are uncertainties about whether external access will be restricted or require additional configuration. (**Last week**)
- Running into a couple of issues with the Stripe servers (**NEW**)
 - It appears that their test environment differs from their production environment — they use different call functions, and there are two separate pages that manage these environments. I just need to go through the documentation more thoroughly to sort this out.

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	Attempted a fix on Access/Refresh Token Functionality. Made changes to the frontend to better handle GoogleSignIn and improved the Authentication Flow.	12	59
Om Sanghvi	Deployed system on VM, enabled live website access, and began automating CI/CD pipeline for backend deployment. We now have a live backend database.	6	36
Erroll Barker	Added the animation to the login page, created a mock backend server, and added the account page with its related functions (still needs some touch-ups and improvements).	~15	105
Onur Onal	Added new moodboard toolbar features, set up the team's AWS/S3 image pipeline, reviewed Prakeerth's auth fixes, and documented backend needs for account, settings, and payment work.	16	105
Kemal Yavuz	Created backend endpoints and database tables for cards, invoices, and user tokens; researched Stripe API for payments integration.	6	51
Bae Meh	Brainstormed layout ideas for the Explore page Built the initial front-end structure for the Explore page	6	48

Plans for the upcoming week

- **Prakeerth Regunath:** For the upcoming week, I plan to continue and finalize all the fixes to the auth files, and to understand how the AI functionality works onto the website. More specifically, I'll try to understand the API Documentation and see what modifications we would probably need in the frontend for the AI's API.
- **Onur Onal:** Over the next two weeks my goal is to finish the moodboard features, integrate the Seedream API, connect the pinterest sidebar view to the board, and basically finish the entire board view of the moodboard page. I'll also connect the page and also the moodboard dashboard page to the backend, allowing for boards to be saved and accessed, effectively completing the core flow of the app. At that point I will try and find potential candidates to test in-app features and UX.
- **Om Sanghvi:** Finalize full CI/CD automation so that updates deploy seamlessly to the VM without manual intervention. Work on improving container restart logic and verifying that all services remain stable after automated deployments.
- **Bae Meh:** Next week, I plan to start implementing the main functionality of the Explore page and setting up the logic for displaying content dynamically. I'll also work on refining the UI, adding basic interactions, and making sure the page structure is ready for any additional features we decide to introduce. If time allows, I'll begin testing the new functionality to ensure everything integrates smoothly.
- **Kemal Yavuz:** For next week, I plan to continue expanding the backend to fully support Stripe payments and user plan validation, ensuring smooth communication between the frontend and backend. Once that is completed, I'll begin preparing the list view feature

on the moodboard page.

- **Erroll Barker:** My plans for the upcoming week are to finish the account page (including the Stripe API integration) and create documentation for the mock backend so the backend team can implement it into the actual system. After that, I'll review the frontend code, fix any minor bugs, and create bug reports as needed. If time allows, I may also add a GUI test.

Summary of Weekly Advisor Meeting

Our bi-weekly meeting with Professor Maruf will be tomorrow. We will show him our progress with the developing moodboard canvas page, login/signup panel animations, and the early account page. We'll take turns speaking on each of our contributions.