

Summary of Accomplishments

During sprint 3, the primary goal was to implement habit notifications and create an interactive calendar to help users track their progress in a more visual way. We were able to successfully achieve this goal and also delivered some additional improvements to improve the overall user experience of our habit tracker, such as responsive design updates.

Our major user stories completed were: "As a user, I want to get notifications for incomplete habits." and "As a user, I want to visualize my habits in a calendar format."

We implemented automatic daily email notifications that remind users of incomplete habits as well as a feature to manually request that email at any time. The emails use Gmail's SMTP service and securely sends a formatted message with all of that user's incomplete daily, weekly, and monthly habits.

We added an interactive calendar using FullCalendar which is a JavaScript event calendar that displays habits based on frequency. Habit entries are color coded based on completion status, and helps users to quickly visualize their schedule, streaks, and any missed goals.

Additional changes include a cleaner, tabled based habit list with aligned data and color coded buttons, reusable components for progress tracking, updating the general theme and aesthetics to a space theme, and adding daily progress and motivational quotes for daily encouragement and more habit engagement.

Challenges and Roadblocks

Setting up secure email notifications via Gmail's SMTP service took time but was resolved using Google App Passwords within Django. Our initial plan to use a Python based calendar library didn't work due to compatibility issues. This led us to use FullCalendar which required learning new JavaScript Libraries and importing via CDN. Calculating missed habits also required some more careful logic to avoid false positives and negatives, especially with new or inactive habits. Also, most of our team agreed that more up front research and design would have reduced work.

Client/Stakeholder Feedback

From the sprint 4 meeting, we generally received good feedback with our progress. She appreciated the email notifications which was one major feature of our project. The calendar tool is also a major feature and was great for visualization. Also the new user interface improvements were very well received.

She suggested further to implement customized reminders on habits for a time specified by the user, as well as focusing on gamification features to make habit tracking more engaging, as well as long term tracking with deeper analytics. This is reflected in our sprint 4 goals, which include adding time specific reminders, an experience system with levels, achievements, rewards, themes, minigames, and more analytics.