

Brock University

Computer Science Department  
COSC 4P02 – Software Engineering 2

Sprint Meeting Notes

## HabitForge



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**Note: Each sprint we have two calls on discord for 1-3 hours on the weekend, where we discuss our progress. The meetings notes below are based off each sprint's discussions.**

### **Sprint 1 Meeting Notes – Saturday January 27<sup>th</sup>**

- Every single group member attended both meetings in this sprint.
- Each ticket on the Trello board has been assigned to an individual team member.
  - Each ticket is a user story that needs to be implemented and in this first sprint, we are going to each individually research how we will implement the feature.
- GitHub has been completely & properly set-up and is development ready for sprint two. Each group member has created their own branches.
- Firebase is setup with all group members, each group member now has an authentication token and can access the database.

### **Sprint 2 Meeting Notes – Monday February 5<sup>th</sup> – February 16<sup>th</sup>**

- Every single group member attended both meetings in this sprint.
- Each member presented their research from sprint one and went over how they will implement their feature.
  - Topics presented include:
    - Landing page design
    - Habitforge user interface
    - Cooldown Habit Tracking
    - Speech-to-Text and Text-to-Speech
    - Integrating sound elements
    - Notifications
- Discussed any conflicts that we found in our research and came up with an alternative solution. Also discussed the type of data to store in Firebase.
- Assigned sprint two tickets from the Trello board to each individual member.
- We also discussed the potential of hosting HabitForge online, as we have found a fair price to host for 3 years.

### **Sprint 3 Meeting Notes – Monday February 19<sup>th</sup> – March 1<sup>st</sup>**

- Every single group member attended both meetings in this sprint.
- Each member took a turn sharing their screen on discord and showing the progress they've made from the previous sprint. This includes:
  - Completing and working on Progress Report 1
  - Landing page demonstration was shown.
  - UI Designs
  - Speech-to-text API setup and a demo of it was shown.

- Other sign in methods such as sign in through GitHub & Google was implemented.
- Every group member completed their assigned ticket from the previous sprint.
- We then spent some time talking about the next upcoming sprint and the tasks each person wanted to take on.
- Additionally, HabitForge is now hosted online at [www.habitforge.ca](http://www.habitforge.ca).
- We are expecting to complete most, if not all tickets, however, we do have the 4P02 progress report to work on and a Calculus 2 midterm coming up, so if we are unable to finish any tickets it is fine, we will carry it over to the next sprint.

## **Sprint 4 Meeting Notes – March 4<sup>th</sup> – March 15<sup>th</sup>**

- Every single group member attended both meetings in this sprint.
- From the previous sprints we've implemented several small features and components that individually worked, so this sprint focuses on integrating the components to work well with one another. In the previous sprint, we accomplished the following:
  - Frontend of the dashboard was completed.
  - The feature of enabling users to start creating habits.
  - The feature of enabling users to tick off habits when they complete it.
  - The feature of enabling users to edit habits once they are creating, so they can delete it or skip the habit.
  - Research was done on how coins will be earned and stored for each user. We plan to focus on this in later sprints, but we have a general idea for now.
- For this sprint, we've planned to accomplish the following:
  - Finish speech-to-text implementation and connect it with the front-end.
  - Connect the frontend dashboard to the backend.
  - Implement audio features for when a user completes a habit. So, we discussed that it will make a particular noise if you click completed habit. If you click skip habit, a neutral noise will play, and if you delete the habit another unique noise will play.
  - Every group member will research how the leveling, ranking, and coin system will work. We will do some research online to see how common techniques of calculating these types of features.
  - Ensure the system tracks consecutive days of habit completion properly, currently this is not working. So, we will aim to fix this.
  - Create the frontend leaderboard design.
  - Add more icons when creating habits, currently we are limited to only 6 different types of icons, we plan to triple the icons offered.
  - Create motivational notifications that are sent out to users at an interval (we are still discussing this, so we are not completely certain yet)
  - Begin researching how test cases will be implemented for HabitForge.

- Overall, this sprint was successful. We completed every single ticket in the sprint and accomplished research for the leveling, ranking, and coin system as well as for test cases.

## **Sprint 5 Meeting Notes – March 18<sup>th</sup> – March 29<sup>th</sup>**

- Meeting was rescheduled to March 19<sup>th</sup> instead of 18<sup>th</sup>, due to assignment deadlines and tests.
- Every single group member attended both meetings in this sprint.
- In the previous sprint, we completed a lot of core functionality of HabitForge that will now allow us to focus on refining some of our current features and implementing additional features. In the previous sprint we accomplished the following:
  - Connecting the frontend of HabitForge to the Backend (Firebase)
  - Audio features implemented; noises now occur depending on what buttons are clicked.
  - We have a good idea of the ranking system will work, as well as the coin system and leveling system.
  - Consecutive days of habit completion now works.
  - Frontend for leaderboards is completed.
  - Added way more icons for the user to pick in HabitForge for when they create their habit.
  - Notification system is working.
  - Test case research has been completed, we decided to use Jest as the framework for testing components.
- In this sprint, we discussed implementing and finalizing a couple more features, which are:
  - Creating an analytics section for the front-end
  - Enabling users to invite other users and create group habits.
  - Audio finalizing functionality.
  - Motivational notifications are stored in firebase.
  - Implementing the level up and rank functions.
  - Component testing for every major component using Jest.
- We are going to implement all these features which will leave our last sprint to mainly just testing the overall websites functionality. Everyone on the team is confident they can get their set of assigned tasks completed.

## **Sprint 6 Meeting Notes – April 1<sup>st</sup> - April 12<sup>th</sup>**

- In the previous sprint, we managed to implement the remaining critical features to complete the website. HabitForge now is the product we envisioned it to be at the very start of the semester. Last sprint we implemented the following:
  - Component testing for every major component is now implemented using Jest.
  - Audio functionality works (e.g, muting audio, audio sound effects when clicking certain buttons).
  - Motivational notifications are stored in firebase.
  - An analytics section is now also created, which can be seen in the user's homepage in HabitForge, where it will show the percentage of habits completed with some images.
  - Enabling users to invite other users and create group habits also works.
- This sprint we've decided that since exams are also happening during the duration of this sprint, we are mainly just testing our features from a user perspective to see if anything goes wrong. We discussed implementing the reward shop but still haven't made an absolute decision on it. The consensus we came to is once we finish our exams, we have a couple days before our presentation, and we may decide to either implement the shop or put our efforts towards preparing for the presentation. We are leaning towards preparing for the presentation as we believe that is more important.
- We've also spent time discussion how we are going to present HabitForge in our final presentation, which is on Tuesday April 23<sup>rd</sup>.
  - For the presentation, we decided to make presentation slides along with a video demonstration that covers the core features of HabitForge. This way, we can spend more time in the presentation discussing how our code works, the way its implemented, each of our individual roles in the group and what each member has contributed, etc.