Team 29
Ada (2772705), Maria (2722238), Niklas (2689237), Minh (2738329)
TA: Anna Kosycarz

Group Implement High Fidelity Prototype as Web Frontend

Question 2a

A description of the prototype that includes changes you made with respect to the prototype design in Week 3 and on which basis you made these.

1. **Registration:** The HiFi prototype runs the user through two different experiences of creating a new account for our app. It first asks the user if the user wants to log in or register. As we are trying to test the speed and ease of creating an account and not logging in we tell the user that he must create an account first if he attempts to log in. The following page asks the user for their registration details (name, birthday, username, email, password) here we made some improvements from the feedback we got namely; we added a separate input field for username as this was highly requested, furthermore we added. We also changed the D.O.B (Date Of Birth) field to represent dd/mm/yyyy to make it more understandable and lastly we added a BACK button which was missing in the lofi prototype.

2. **Habit Adding:** We've made some significant improvements to our Hi-Fi prototype based on the valuable feedback we received from our recent survey. In response to users' requests for greater flexibility and ease of use, we have incorporated a choice of two habit types during habit creation: a "yes or no" option and a measurable option. This new feature means that users won't need to input as much data and can select an option that suits their specific habit. We also added a frequency dropdown box, which includes options such as daily, weekly, monthly, and custom, to streamline the habit creation process. These changes were in response to feedback that stated “It was a bit more difficult than expected, because there are a lot of fields to fill in.” and “Takes time.” when asked about the habit creation prototype. Additionally, we included examples in the habit creation form, such as "e.g. Run" under "Name" and "e.g. kilometres" under "Unit," to provide users with clear examples of how to fill out the form. This modification was in response to user feedback stating that “I would prefer examples given to pick.” and “I would prefer to have some options to choose from instead of typing everything myself. The UI is easy to use, but it might make the habit creation faster.” We've also added a new "go back" button for users who may wish to exit the habit creation page without completing the process. Now with the changes, when you click on the "+" button, you'll be prompted to choose between a “yes or no habit” or a measurable habit, and once you've made your selection, you'll be directed to a page where you can

input the relevant information about the habit you wish to track. After completing the habit creation form, simply hit the save button and you'll be taken back to the updated main page.

3. **Habit Stats and Calendar:** In this hi-fi prototype, we added a new feature where users can click on one habit and see some statistics about that habit. The first feature on this screen is the Calendar, where users can see the days when they finished their habit. The next feature is a “Best streak” section, where users can see their best streak of that habit. Finally, the last feature is a “Points earned” section, where users can see all the points they earned by finishing this habit. Although the point system has not been developed in our prototype, we planned to give more points for a longer streak. We believe that these features should make their habits manageable and motivate users to keep the longest streak possible.

4. **Habit and Delete Editing:** On the Habit Stats screen, there should also be two buttons for users to Edit or Delete the current habit. When the user clicks on the Pen icon in the top right corner of the screen, the app should go to the Edit habit screen. This screen is almost identical to the Create habit screen, but all the fields are now filled with the current values of the habit. This should give the user a better view of what values should be changed. Meanwhile, when the user clicks on the Trash icon in the top right corner of the screen, a modal pops up to confirm the user's decision. This modal is necessary as we wanted the user to keep their habit as long as possible.

5. **Shop:** Last week, we gathered that overall the usage of a virtual pet with a points shop is generally attractive, clear, and engaging for most users. Thus, we built our Hi-Fi prototype on the basis of such. However, we removed the scrolling functionality and sections into a simple items section where the user is able to purchase items their pet can wear or eat. This was due to the fact that the scrolling functionality was a bit challenging to create while keeping the same UI and as a team, we felt it was not needed for now. For our prototype we did not build the page dynamically, thus for now we are checking if the user, no matter if they are an expert or not, is able to go through the sequence of actions with no hesitation and low cognitive processing.

6. **Pet viewing:** One of the most common complaints in the results of the experiment last week was about making the pet more central and larger in the design. However, on the home screen, we wanted the main focus of the users to be on their habits, while still keeping the pet visible. Therefore, we kept the design of the home screen from the lo-fi prototype. And instead of making the pet larger and more central, we now developed a feature where users can click on the pet avatar to see its animation, as well as the items obtained. On this screen, users can have all the attention on their pet and freely customise it with the items obtained. However, the pet on this screen is animated and it would

take us more time to apply the items on animated pets, so the item-applying feature has not been finished in this prototype.

Question 2b

A short description of how you will evaluate the prototype in Week 6 (method, setup, variables etc)

Part 1: Registration Experiment

This experiment is meant to test the speed at which users can register between two different designs. As the registration phase is one of the key onboarding phases for any application we want to aim at creating an experience that is quick so the user doesn't lose interest and also that is easy to comprehend.

Method & Setup:

The method used for this experiment is a user performance evaluation which will measure the time the user spends on the task of registering a new account. A group of 20 participants will be asked to perform the task for both designs and will be timed on how quickly they can complete the task for both. To ensure fairness the design that is shown first will alternate which should reduce the effect of learning from the first seen design. After the experiment has been conducted the task completion times can be compared to evaluate if one design is easier and quicker to complete.

Variables

Independent Variable: Registration Form Design1 and Design2
Dependent Variable: Task Completion time for Design1 and Design2
H0: There is no significant difference in task completion speed between the two registration designs
Ha: Task completion for Registration Design1 is significantly faster than registration Design2

Part 2: Application Sections Experiment

This experiment is meant to test the speed at which users are able to make use of each specialised section of our application. The 20 sample participants will consist of randomly selected participants and the same users from the last experiment. This will be beneficial to build up on the original users' previous feedback and gain a better understanding of user needs and preferences throughout our application's design process. However, we are also gaining fresh perspectives to identify any new usability issues and different insights possibly not identified with the original users. By keeping track of how long it takes users to complete specific tasks, we are able to understand if a task is difficult or confusing while also gain an understanding of the length of time

needed for them to process and interpret information presented to them to judge whether there is high or low cognitive load.

Method & Setup:

The method used for this experiment is a user performance evaluation which will measure the time the user spends each specific task. A group of 20 participants will be asked to perform the tasks as they would using any app and will be timed on how quickly they can complete the task per section. After the experiment has been conducted, the task completion times can be compared to evaluate how long users spend doing certain tasks on average.

Variables

Independent Variable: Specialised Sections of the Application
Dependent Variable: Task Completion Time in each section

H0: There is no significant difference in the time taken by users to complete specific tasks in each section of the application.
Ha: There is a significant difference (whether faster or slower) in the time taken by users to complete specific tasks in each section of the application.