CamCurrents Task 3: Implementing a Hi-Fi prototype

Usability Evaluation:

Use of Cognitive Walkthrough. Our users are rowers and based on our research, they have used other weather apps such as Apple Weather or BBC weather and hence have knowledge of similar systems. A sample task for evaluation could be searching next morning's weather during the night which is what 60% of our research respondents do. The action sequence for completing the task would be launching the app from the phone, clicking on the icon corresponding to the next day, then scrolling the weather table until the 6am "weathercard" to obtain temperature and precipitation information.

After launching the app, the user is greeted with the home page. At the bottom of the screen are five different calendar icons each displaying a specific day. An example of a user task would be to get weather information about Tuesday morning on Monday night. By default, the leftmost icon, which corresponds to the current day (Monday), is highlighted while the other four icons are not. From this, the user is assumed to understand that the weather currently displayed is for Monday. From there, intuitively, the user can click on the icon with the label "Tue" to get the weather for Tuesday. After clicking on the icon, the page changes and the "Tue" icon is now the only highlighted icon. Thus, the user has feedback that their actions are correct.

If the user is somehow not able to discover this functionality, in the centre of the app, a left and right arrow is displayed. On the home page, the left arrow is grey and static while the right arrow is light blue and moving, which attracts the user's attention. The user is assumed to understand from the arrows that there is more weather information that can be obtained and would swipe left to "move" to the next page. Given that our target audience are digital natives and such movements are conventional in app-based interfaces, we believe that such actions could credibly be performed by our target users.

After moving to the correct "page", the temperature value is displayed beside a thermometer drawing and the precipitation level is displayed beside a drawing of a rainy cloud. The user is assumed to know that the values correspond to the temperature and precipitation respectively due to their common association. If the user does not know what precipitation is, an animation of rain would be shown in the background drawing should the precipitation level be sufficiently high. Originally, the weather table defaults to displaying the weather at 12am. Users may not know how to navigate the weather table which requires scrolling along the horizontal axis. After the usability evaluation, we decided to change the default time shown to 6am (which is a common rowing session hour) to improve convenience. Moreover, the two "weathercards" (containing the 5am and 7am weather information respectively) are not displayed completely, which hints to the user that scrolling is required to navigate, thus making the action more obvious and improving usability.

Lo-Fi Deviations:

A main deviation from our initial lo-fi prototypes is the layout of the section at the bottom of the home screen. Instead of listing different weather statistics in a column, we chose to make small widget boxes that contained each piece of information - we did this with Gestalt

principles in mind where grouping and enclosure properties would mean that the information for each piece of data such as wind speed and water level are more easily digested.

We also chose to add small graphics alongside the data if appropriate such as a UV scale to help users visualise the data better.

Figure 1.1 Our initial Lo-Fi design vs our final Hi-Fi design

Similarly with the bottom navigation, we changed the days of the week to icons resembling calendars to allow recognition over recall over what the buttons supposedly do and used the anomaly principle that is a part of Gestalt theory to indicate the chosen day (e.g. Sunday) by highlighting that icon.

Apart from these deviations, our design almost perfectly replicates our initial Lo-Fi mockups that we produced in task 2.