Vertical Prototype Description

For this financial application, InVision was utilized for vertical prototyping. The prototype focuses on specific features that have a high degree of complexity instead of app development as a whole. The primary task chosen for demonstration of the medium fidelity prototype is the ability to have users “edit” and “add custom” entries. This primary task requires it to host several sub features for it to properly function. These sub features include allowing users to remove existing entries, edit existing entries, add new entries, and make entries recurring or single entry. Recurring entries are able to be defined further as well, such as making the entry indefinitely occurring at a selected frequency or, only for a defined time period at a selected frequency. This primary task was chosen for the integral role it plays in the applications functionality. Ultimately, its loss would result in a non-functional application. The navigation decisions and aesthetic choices were implemented in a way to allow users to easily intuit their desired actions. Buttons and selections are highlighted and provide appropriate feedback, but allow the application to maintain a minimalist aesthetic. Please note that limitations with InVision force us to link to a new page on the mobile application where we would prefer to implement a single overlay or window over the initially viewed page. For example, we must link to a new calendar page instead of implementing a calendar overlay when a user selects a specific recurrence start and end point.

Plan for User Evaluation

Using a similar user demographic to that used in our previous user research and feedback (age 18+ with diverse professional backgrounds and experience managing money), we aim to evaluate 5 individuals' interactions of our application’s medium fidelity mockup via Co-Discovery and Conceptual Model Extraction usability test protocol. Our aim during the evaluations will be on our applications adherence to the principles of task-centered system design, with focus on the task specific actions of the user. The 5 individuals chosen will represent our targeted user population as our aim for the app is the majority of Canadians who want to improve their financial literacy and/or manage their finances. We believe this protocol employs the best strategy to ensure the application's design fluidity and usability as we, researchers, will come to understand the users thought process when navigating through specific tasks. We believe users will intuitively understand each feature, with each task being easily carried out and justified. If this is not the case, we hope to understand and diagnose the reasons for their lack of understanding.

To perform this evaluation, we will ask participants to carry out the specific following tasks on our medium fidelity mockup:

1. Add a recurring expense,
2. Edit an existing income stream

During these tasks, we will not provide any further instructions to the user, asking them to complete the task on their own. Ethnographic methodologies will be utilized here, including the observation and documentation of user approaches to each task. To remove the potential awkwardness of thinking aloud during each task, we will ask the user what their thought process is behind performing an action and the function of specific design elements utilized in their completion of the task. Should the users have any questions or be unable to complete the task without assistance, we will document the issue and intervene if necessary. Following the completion of each task, we'll request a user comment or criticize the implementation. Documented feedback and recommendations taken during the evaluations will be compared to previous heuristic evaluations conducted by the researchers.

A potential issue arises should the user not have InVision readily accessible on their local device. This would render our ability to provide the user with a copy of our medium fidelity mockup for testing and evaluation. To resolve this likely issue, we will allow the user to navigate the medium fidelity mockup through the researchers computer via Zooms remote access features. As mentioned previously, limitations with InVision require us to link to a new page over implementing an overlay or window over the initially viewed page. As this is a medium fidelity prototype, no functional aspects will have been implemented and values inputted by the user will not appear or be used in tasks. To our knowledge, there is no known strategy to resolve these issues other than letting users know of these limitations and lack of backend development prior to evaluation. While thoroughly tested by the researchers during development, if there are any technical errors in our medium fidelity prototype (for example buttons that have undesired outcomes), we will document these errors and apply appropriate fixes. We will also look into strategies that will reduce or eliminate these errors in the later development stages of the application.