River Kelly EGEN-310R Test Plan IPT 1 05/25/2021

## Test Plan

# Objectives:

One of the major design objectives for our project is to help make the user's life easier. What better way to achieve an effortless experience than to implement some form of automation. By integrating technology into our fridge design, the user will never need to worry about which contents may be reaching the end of their shelf life.

I plan to test/prototype this aspect of our design. The goal for my prototyping is to create a digital media which outlines the user interface by allowing a test subject to navigate the clickable UI wireframe. This will allow me to test the technological side of our design.

This approach of prototyping will allow me to learn how user-friendly our product is, what aspects are useful/not useful, and discover some "Smart Technology" that we have not yet considered.

The decisions that may result from feedback of the test may be:

- Adding functionality that has not been considered (Notifications or Integration with third-party products i.e. maybe an iPhone app).
- Removing functionality that may not be imperative.
- Changing how certain functionality works to make it more user-friendly.

### Set-up:

The user demographic which I plan to expose to my prototype will be my neighbors, roommates, and even other friends; pretty much anyone that is roughly my age and has roommates.

The program I plan to utilize will be Adobe XD. This application will allow me to export and send my design over the internet and allow them to examine it without having to be physically located with me. This will be nice because I believe that I will be able to get more feedback and more exposure from a greater number of test users.

#### Test parameters:

I plan to observe the interactive relationship that users will have with the Technology. I will examine the degree of difficulty to which the functionality impacts the user's ability to navigate the contents of the fridge and manage their food supply.

The variables I plan on controlling are:

- What the fridge can do as far as automation is concerned
- The user's ability to interact with the digital media

The *random* variables I cannot control:

- The user's prior knowledge on how to navigate the software design
- The limited ability to demonstrate all of the technological features in a wireframe

I feel as though there is only one possibility in which a negative result occurs. This would be a scenario in which it is determined that the design is completely impossible to incorporate. Otherwise, the two alternative options are; feedback that the product is great and we are headed in the right direction, or that there are areas in which the product needs to improve - which is also good because this gives us a direction.

#### Procedure:

- Brainstorm the various functionalities I wish to demonstrate.
- Select the items that are good and table the items that need more consideration.
- Describe, in words, the step-by-step process in which each function may be executed and completed.
- Begin designing how to implement these functions into a "work area" that will the user interface (or digital media)
- Begin to design the prototype in Adobe XD
- Ensure that each aspect is achieving its purpose
- Expose the desire to test users
- Get their feedback/ask questions
- Figure out what worked, what can be improved, and how to do so.

# Analysis:

To analyze the results, I plan to use Miro to organize the user feedback that was provided. By utilizing the diagram app, I will be able to get all of my ideas down and sort/group them as we did earlier in the design phase.

This will allow me to see what users had similar problems, what users liked, and figure out what the user is missing to make their experience better.