Criterion A: Planning

Description of Scenario

My Client is Ms. xx who grows plants at her house to sell to her clients. She buys plants from local markets, grows them in several plots of land, waters them periodically, harvests each plant at different times, and then eats or sells each plant to her clients.

At the moment, my client cares for and carries out business transactions manually. She buys plants by going to her local grocer and purchases whatever plants they have on stock. She waters each plant an inconsistent amount of water at inconsistent times. She harvests plants whenever it is convenient for her to do so. And she sells to her clients manually.

After consultation I found that as her garden expands and diversifies, and her customer base increases, it is becoming increasingly difficult for my client to correctly allocate the needed space for each plant, cater to the watering needs of each plant, and to manage all transactions between herself and her customers. Such difficulties limit the size of her business lowering the potential profit that her business could generate.

I will be creating software with a GUI written in Java that will serve as the center of control for her business. It will handle the purchase of plants, allocate space for each plant, remind my client to water the plant, remind my client to harvest the plant, and will handle all sale transactions automatically. My advisor will be a CS teacher, Ms. xx who agreed to help.

Rationale for proposed product

I chose to use Object Oriented Java for two reasons. The first was that the scale of the project necessitated clean organization that OOJ would provide. The second reason is that Java, being a popular and old programming language, is highly developed and easy to use, reducing the complexity of the project.

Furthermore, I chose to store this program as a single app rather than making it publicly accessible by integrating inside a web application because my clients business is local and only she needs to access the information in the app. For this reason, in an effort to reduce complexity, the app and all its data will be locally stored.

Success Criteria

1. Several clickable pages that contain relevant information for the client
2. Tab 1: “Buy Crops” used for purchasing crops
    a. Pull down tab with a list of possible crops to buy. When selected, the page will reveal the price of the crop, quantity of crops to buy, amount of soil the crop will

need to be allocated, date range when the crop will be ready to harvest, and the watering schedule of the crop

   b. Custom Crop button used for entering crops that are not in the crop buying database already. Users must enter the price of crop, quantity of crops to buy, the amount of soil that is needed for the crop to grow, date range when the crop will be ready to be harvested, and the watering schedule of the crop. Once the information is submitted, this new crop will be added to the crop buying database

3. Tab 2: “Garden Space”
   a. Displays a top down view of the garden
   b. Displays square areas of certain crops and the space they will take up
   c. Displays empty spaces where crops can be planted
   d. Allows the user to select empty spaces, add crops in the inventory list, and then “plant” them
4. Tab 3: “Home/Calendar”
   a. Displays day by day calendar when to water each plant
   b. Displays monthly calendar with highlighted months signifying predicted harvesting times
5. Tab 4: “Sales”
   a. Displays List of Harvested plants and allows for users to set buying prices.
   b. When the “Sale” Button is clicked, the user adds all the harvested plants to the cart and a total sale price is displayed. If the sale takes place, the plants are removed from the Harvested Plants list