

## Criterion A - Planning

Total Word Count: 480

### **Description of Scenario**

My client, Mrs. Jankovic, is a housewife who cooks for her family<sup>1</sup>. She currently needs to keep track of all the food items she has in the house in order to plan for what to cook on a daily basis<sup>2</sup>. However, with bad memory<sup>3</sup>, multiple fridges and freezers<sup>4</sup>, and a lack of any organizational system<sup>5</sup>, it's easy for her to forget what's in the house, when it expires, and where it's kept<sup>6</sup>. This not only causes frustration, but can also result in multiple rounds of grocery shopping and last-minute complications if she doesn't have the necessary ingredients for a meal<sup>7</sup>. After consulting her, we agreed she could benefit from a program that will help her stay organized when cooking and buying ingredients.

Word Count: 122

### **Rationale for the Proposed Product**

From the interview, it's obvious that some method of tracking the available ingredients will greatly help the client. A great solution would be an interactive GUI database that would enable the client to enter, remove, and update food items with ease. But more importantly, she'll have the ability to make use of the stored information in ways that are impossible on a basic spreadsheet or piece of paper. For example, she could search for, order, and filter specific pieces of information almost instantaneously, something that's much harder to do manually. Moreover, the program could even suggest meals based on the available ingredients, simplifying the process of coming up with what to cook.

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<sup>1</sup> Client, interview by author, December 10, 2021. Transcript of interview #1, client answer #1.

<sup>2</sup> Client, interview by author, December 10, 2021. Transcript of interview #1, client answer #8.

<sup>3</sup> Client, interview by author, December 10, 2021. Transcript of interview #1, client answer #12.

<sup>4</sup> Client, interview by author, December 10, 2021. Transcript of interview #1, client answer #8.

<sup>5</sup> Client, interview by author, December 10, 2021. Transcript of interview #1, client answer #8.

<sup>6</sup> Client, interview by author, December 10, 2021. Transcript of interview #1, client answer #12.

<sup>7</sup> Client, interview by author, December 10, 2021. Transcript of interview #1, client answer #13.

I considered whether such a program would work best as a website, mobile app, or desktop app. Each of these had their advantages and disadvantages, but since the client didn't indicate a preference for one over another, I decided to choose the format I'm most comfortable creating: a computer app. Because I already have some basic knowledge of how to build this type of program, I can save time I would've spent learning to code the app and instead use it to actually make the software as useful as possible for the client.

Building off of the previous point, the program will run on the Netbeans and be coded in Java, as these are the IDE and language we learned in class. Another benefit of Netbeans is that it also allows for the smooth integration of a graphical user interface, which will enable the client to visually see and interact with all the data.

Finally, to store the data permanently, I'll use a MySQL database hosted locally on my laptop. SQL's built-in operations allow for quick and easy data manipulation and retrieval, removing the need for manually-coded data sorting, searching, and updating functions. Furthermore, an SQL database suits my needs better than a NoSQL database, which doesn't represent data tabularly, or a NewSQL database, whose increased scalability is unnecessary for my small program. Finally, SQL is a very simple language, so although I have never used it before, I should be able to learn it quickly.

Word Count: 358

### **Success Criteria**

- The program allows the user to add stored foods and specify, for each food, the name, quantity, expiration date, and location it's stored in.
- The user will be able to update all of these values, as well as remove food items entirely.
- The program presents, in a single scrollable text table, a complete list of all food items available in the house, along with all other relevant information.
- The program also presents all items in individual fridges/freezers as separate tables.
- The user is able to order and filter these tables by a chosen parameter.
- The user is able to find specific items by searching for their name.
- The user is able to see all food items that expire in a given time period, such as foods expiring within the next 3 days. This list could be routinely emailed to the user as a reminder.

- The user is able to see a list of suggested meals that can be cooked with the currently available ingredients.
- All data is permanently stored such that the user can close and reopen the program and see the same things

Word Count: 0 (all bulleted list)