Criterion A: Planning

Defining the problem

The client, Ms. Ekin Balcı is a student at Inanc High School and the head of the school's Gastronomy Club. Every week, the client and her students cook in the school's kitchen. Ms. Balcı is responsible for managing the list of ingredient supply present in the kitchen.

One day, we were talking about our CAS activities, and she told me that she is in trouble with managing kitchen's ingredient supply list in Gastronomy Club and wanted me to create a new system to solve her problems. After my CS teacher, Ms. Sak had approved my idea; I interviewed with the client to have a deeper understanding of the problem. During the interview, she stated, that two more groups use the same kitchen. Since they all use the same ingredient supply and there is no proper system to report used ingredients, many problems occur (see Appendix A). Also, Ms. Balcı is having trouble with following the expiration dates of ingredients in the kitchen. Some weeks they even cancel the activity due to missing or expired ingredients.

Currently, the client determines specific ingredients for dishes that they will cook a week later. Then, she checks the kitchen's storage and takes notes on her notebook if the required ingredients are present or not.

The current system isn't working as desired because it is slow and doesn't meet demands. After the interview, I figured out the basics of the new system and decided to create an online website for the client. The client wants a system that can be easily accessed and used collaboratively within the groups. The new system will cover the communication gap in the current system and will also contain features desired by the client.

Word Count: 284

Rationale for Proposed Solution

After the interview with the client, I decided that an online website would be an effective solution to the problem. I decided to create a website because the client wanted to use the system collaboratively with other groups. Thus, the internet will enable this collaboration by being accessible from anywhere in the world.

The client told me that she wants to use the new system on both her smartphone and her computer. Other group members will also use the system. So, an online website would be the best solution because it can be run on almost every platform and device that have the capability to connect to the internet. Besides creating an online website, there are many other options like Google spreadsheets or Microsoft Office 360. They can be used online and collaboratively, too. However, they do not meet the client's need as she stated in the interview.

I am going to use a MySQL database to store data; HTML and CSS to present data from the database; PHP to handle sessions and data transactions. I decided to use MySQL, HTML, CSS, and PHP because those are the programming languages that I feel comfortable to program with.

Word Count: 197

Stating success criteria

➜ Development of a user-friendly interface
- ◆ Buttons are big enough to both click on smartphones by using fingers and on computers by using mouse
- ◆ Texts are big enough to be easily read by users

➜ Development of a consistent and responsive layout for the website
- ◆ Users can use the system on different browser, different operating systems, and different devices with different screen resolution

➜ Development of a database to store the site content
- ◆ MySQL database can be altered easily by the system

➜ Development of an emailing functionality
- ◆ System automatically emails when the expiration dates of the ingredients approach
- ◆ System automatically emails when kitchen run out of an ingredient

➜ Managing ingredient supply list
- ◆ System show the remaining amounts of ingredients accurately on the homepage
- ◆ System makes required changes on the database when the users add/edit ingredients in the system

➜ Logging in with a username and password
- ◆ Users can easily login to the system and they can easily change their password when needed

➜ Different authorization levels for different users:
- ◆ Master users (admins) can make changes to the system such as adding/editing ingredients to the list, changing e-mailing settings, changing their password when needed, and managing users registered on the system
- ◆ Users without registration can only view the content on the homepage

➜ Development of dynamic sections that allows user interaction:
- ◆ Page for changing password
- ◆ Page for adding/editing items
- ◆ Page for e-mail settings
- ◆ Page for managing users