Criterion A: Planning

Criterion A1: Planning Definition of the problem

The client is Dr. Mehnaz Rashid, a gynecology specialist and the mother of three. Aside from working her job shifts, she's also the individual who does the cooking at home.

Currently, whenever she wants to cook something, she searches all her cookbooks for its recipe. Often, the client comes across a dish she wants to cook and realizes that she does not have all the ingredients required for that dish. In such a situation, she again returns to the cookbooks and tries to find a recipe that can be made with the ingredients she currently has. This is extremely time consuming and inefficient, and being a working mother, the client usually does not have time to spare.

The client wants a solution that saves her the time spent on searching for a recipe, while at the same time gives her all the information she needs to make a chosen recipe. I volunteered to help her by making a digital cookbook in the form of a database that contains recipes she is likely to make and can quickly give her a list of recipes along with each recipe's details according to her needs.

Words: 192

Proposed Solution

After consulting with the client, I suggested a database to her in which she can input five main ingredients you want to make a dish out of, and it returns a list of dishes you can cook using those ingredients along with their recipes. You can also access the complete list of recipes which will be divided into four categories, 'breakfast', 'sweet', 'savoury' and 'snack'. You can also search for a dish according to its cuisine. The main cuisines in which recipe are divided into are 'Pakistani', 'French', 'Japanese', 'Italian' and 'American'. An option to access the complete list regardless of category or cuisine is also present.

The reason why I picked this solution is because it saves the client time spent on searching for a recipe one by one thus giving a filtered list of recipes that client can make according to what she wants or has. After careful consultation with the client, the database will contain all the recipes the client makes or is likely to make. I picked MS Access as the platform for the database because it is the most widely used platform and almost everyone has access to it. The database also does not need an internet connection to work.

Words: 204

Criterion A2: Criteria for success

This program would contain a list of recipes that would be prestored in the database. The ingredients in the recipes are the values that would be compared with the input. Therefore, when the user inputs up to five ingredients they want to use, the system should compare the inputs with the individual ingredients in each recipe, and when a complete match is made, the program should output the recipe information from the storage. Aside from this, the client should also be able to search for a recipe in three other ways. Firstly, she should be able to directly go to a list of recipe names that are already input in the database and select the one whose details she wants to look at. Secondly, she should be able to search for a recipe through its cuisine and thirdly she should be able to search for a recipe through its category, that is, whether she wants to see breakfast recipes, desserts etc. The database should be easy to use and understand.

1) The database should have these functionalities

- a) When the user clicks on the 'search through category' button, the homepage should close, and the category information report must open which contains information about each category and the recipes that correspond to each category
- b) When the user clicks on the 'search via cuisine' button, the homepage should close, and the cuisine information report must open which contains information about each cuisine and the recipes that correspond to each category
- c) When the user clicks on the 'search using recipe name' button, the homepage should close, and the complete list of recipes report should open.
- d) When the user clicks on the 'search using ingredient input' button, the homepage should close, and the complete list of ingredients report should open along with the respective IDs of each ingredient. Then, when the user clicks on 'Input ingredients for search', a message box will pop up which will ask for up to 5 ingredients that the user must input.
- e) When the user inputs the ingredients, the database should be able to compare which recipes has all those ingredients and open a report that contains the name of that recipe.
- f) At each report, there should be a button labeled 'Open complete recipe information'. When pressed, a message box should pop up requesting the user to input the name of the recipe. After the input has been provide, the database should close the previous report and open a new report that contains all the details of that recipe including method of cooking, ingredients, cuisine ID, category ID, cooking time, prep time etc.
- g) The database should be able to successfully print each report when prompted
- h) The database should be able to move to the previous form/report when prompted to go 'back'
- i) When prompted to 'exit program', the database should close.