Criterion A - Planning

371 Words

The Problem

My customer is a housewife who cooks meals, and stores all her recipes in a paper book. To add more recipes, she needs to write the recipe, index it, and update the table of contents - all by hand.

Upon consultation (see Appendix), she realized that this system was inefficient, and knew that as the size of the book grew larger with more additions of recipes, the time taken to manually search for individual recipes increases. Thus, she requested a solution that was both faster and more convenient than her current method.

In her solution, she would be able to "search through recipes" both by name and by type of food through a speedy process. Additionally, if portions ever need to be changed "depending on number of servings", the solution would also dynamically calculate portions of ingredients without the need for any calculation. Adding recipes would also be easy - log in to an administrative account, and then add an extra recipe with a simple form.

The Proposed Solution

In our conversation, we agreed that the recipe database would need to be easily accessible with every device, so a web-based solution would allow for the greatest flexibility in terms of types of devices able to access the website as well as greatest ease without sacrificing flexibility (like would be needed with a mobile application)

I decided that I would use GitHub Pages to host the website, as it has very high uptime and reliability, allowing all end users to focus on the recipes without any extra distractions. However, GitHub pages only hosts a static website, meaning that it does not support any server-side processing such as PHP or SQL, but Google's Firebase system is a very strong alternative with fast loading times, so I will be able to provide a snappy experience for end users with GitHub Pages.

Additionally, the Bootstrap framework will be used in order to make the website UI consistent with other websites, providing an intuitive user experience. Bootstrap was used over manually creating a CSS stylesheet because of the widespread usage of it over many websites, giving users more familiarity with the user interface.

The solution will coded in HTML, CSS, and JavaScript as these are languages natively supported with GitHub pages.

Success Criteria

1	Users will be able to view recipes.
2	Users will be able to change the number of servings, and the website will adjust all ingredient portions accordingly.
3	Users will be able to change the portions of one ingredient and have all other ingredients change in the same ratio
4	The end user will be able to search for recipe names.
5	Given that the user has a superuser account, they will be able to add recipes to the database.
6	The layout of the website will be dynamically resized depending on the device used.
7	The user will be able to see a list of recipes and navigate to a specific recipe through that.
8	The user will be able to edit recipes as long as they are logged into a superuser account
9	The user will be able to delete recipes as long as they are logged into a superuser account