

1. Present the problem statement. For example, an average homeowner designing a new house wants to play with options for installing solar panels.

A person with a unique bowel disorder needs to determine what food they are able to eat.

2. Explain who the intended user is.

A person with an irritable bowel syndrome who is looking for something to eat

3. Describe why the user has this problem.

There are no resources yet dedicated specifically to helping those with bowel syndrome in determining what foods they can eat without upsetting their stomach

4. Describe how a solution would benefit the user.

A solution would allow the user to have suggestions for what they can and cannot eat; it could be a quick reference guide as well, for example if they are in a restaurant

5. Describe the general flow for addressing the problem.

The user is curious if they are able to eat a particular food. They would open the application. They would type in the food in consideration, the app would give a ranking from 1-5 whether they should eat it, 5 meaning it is okay and 1 meaning it is a no go. They would proceed to act accordingly.

6. What is the general nature of the solution?

An application would be the most useful due to its ease of use and its accessibility

7. List the general software components you envision playing a role.

There would be a server-side database that would store all of the food and its information. A web server would allow access to the database. The front end of the application would allow for a user interface and interactivity.

8. List the general hardware components you envision playing a role.

Mobile devices which the app would run on. A sim card which would allow the device to have access to the internet. The physical web server which would store the data about the food.

9. Describe similar solutions, if any, and justify (or make up a justification) for why they are inadequate.

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A similar solution is an app called “FODMAP A to Z” which gives food recommendations based on the FODMAP diet. However, this is inadequate because this diet is not suitable for all irritable bowel syndromes and other similar conditions.