



University
of Regina

Go far, *Together.*

ENSE 374 – Software Engineering Management

Cookify

Hashir Owais - 200483044

Nathan Okoh 200492890

Simranjit Gahra - 20048440

Table of Contents

| | | |
|---|--------------------|---|
| 1 | Introduction | 5 |
|---|--------------------|---|

| | | |
|-------|--|----|
| 1.1.1 | Background and Need..... | 5 |
| 1.1.2 | Project Requirements and Stakeholder Context | 5 |
| 1.1.3 | Overview of the Next Sections..... | 5 |
| 2 | Design Problem | 6 |
| 2.1 | Problem Definition..... | 6 |
| 2.2 | Project Charter..... | 6 |
| 3 | Solution | 7 |
| 3.1 | Solution 1 | 7 |
| 3.2 | Solution 2 | 7 |
| 3.3 | Final Solution..... | 7 |
| 3.3.1 | Components..... | 7 |
| 3.3.2 | Features | 7 |
| 3.3.3 | Environmental, Societal, Safety, and Economic Considerations | 7 |
| 3.3.4 | Limitations..... | 7 |
| 4 | Team Work..... | 7 |
| 4.1 | Meeting 1..... | 8 |
| 4.2 | Meeting 2..... | 8 |
| 4.3 | Meeting 3..... | 8 |
| 4.4 | Meeting n..... | 8 |
| 5 | Project Management | 9 |
| 6 | Conclusion and Future Work | 10 |
| 7 | References | 11 |
| 8 | Appendix | 12 |

List of Figures

List of Tables

1 Introduction

The proposed project, "Cookify," aims to create a web-based application that allows users to input a list of ingredients they have and receive personalized recipe suggestions. This application is tailored towards young adults, university students, and single professionals looking for meal inspiration, improving cooking skills, and reducing food waste. The goal is to make cooking more accessible, save money, and cater to dietary restrictions.

1.1.1 Background and Need

Busy lifestyles often result in challenges to cook at home, and food waste is a significant problem globally. Around 30% of all food produced is wasted, with a notable contribution from households. The lack of easy access to recipes based on available ingredients also contributes to this issue. Cookify seeks to fill this gap by providing users with tailored recipes, promoting home cooking, reducing food waste, and offering cost-saving benefits.

1.1.2 Project Requirements and Stakeholder Context

The project will develop a platform that uses both an external API for dynamic recipe data and a local database for user preferences, saved recipes, and dietary restrictions. The decision to create a web-based app leveraging both these elements balances real-time access to recipe data and user personalization needs. Stakeholders have recommended focusing on scalability, user-friendliness, cost-effectiveness, and the ability to expand features over time, such as integrating additional APIs.

For a detailed breakdown of requirements, please refer to the "Project Requirements Document."

1.1.3 Overview of the Next Sections

The upcoming sections will outline the design considerations, technical architecture, development process, and an analysis of options evaluated before recommending the final approach. This will provide insight into how the hybrid solution with an external API and local database offers a balance of efficiency, personalization, and future scalability without detailing specific results or implementation details here.

2 Design Problem

This section has the following two subsections:

2.1 Problem Definition

link to the [Business Case](#).

2.2 Project Charter

Provide link to 'Project Charter' document.

3 Solution

In this section, you will provide an account of some solutions your team brainstormed to implement the project. Some solutions might not have all the desired features, some might not satisfy the constraints, or both. These solutions come up in your mind while you brainstorm ways of implementing all the features while meeting the constraints. Towards the end you select a solution that you think has all the features and satisfies all the constraints. Remember that an engineering design is iterative in nature!

3.1 Solution 1

Write a brief description of your first solution and provide the reasons for not selecting this one.

3.2 Solution 2

This is an improved solution but might not be the final solution that you select. Give a brief description of this solution here.

3.3 Final Solution

This is the final solution. **Explain why it is better than other solutions.** You may use a table for comparison purposes. After providing the reason for selecting this solution, detail it below.

3.3.1 Components

What components you used in the solution? What is the main purpose of using individual component? Provide a block diagram (with a numbered caption, such as Fig. 1) representing the connectivity and interaction between all the components.

3.3.2 Features

Give an account of all the features your solution has. These features may be tabulated (with a title) for improved comprehension.

3.3.3 Environmental, Societal, Safety, and Economic Considerations

Explain how your engineering design took into account environmental, societal, economic and other constraints into consideration. It may include how your design has positive contributions to the environment and society? What type of economic decisions you made? How did you make sure that the design is reliable and safe to use?

3.3.4 Limitations

Every product has some limitations, and so is the case with your design product. Highlight some of the limitations of your solution here.

4 Team Work

Since this is a group project, you must have a fair distribution of tasks among yourselves. To this end, you must hold meetings to discuss the distribution of tasks and to keep a track of the project progress.

4.1 Meeting 1

Provide Links to 'Meeting Agenda, Meeting Minutes, Change Request, Project Status Report, Issue Log' documents.

4.2 Meeting 2

Provide Links to 'Meeting Agenda, Meeting Minutes, Change Request, Project Status Report, Issue Log' documents.

4.3 Meeting 3

Provide a similar description here.

4.4 Meeting n

Provide a similar description here.

5 Project Management

Provide the link to 'Milestone-based Schedule' document. Use Gantt chart as well to show the progress of your work here. Mention all the tasks along with their predecessors. Provide the slack time of each task and identify the critical path.

6 Conclusion and Future Work

- A summary of what you achieved.
- Provide Link to 'Lessons Learned Report' document.
- While keeping the limitations of your solution, provide recommendations for future design improvements.

7 References

- Use the IEEE reference style.
- Do not put any reference if it is not cited in the text.

8 Appendix

If you want to provide an additional information, use this appendix.