Bits to Bites Mobile Application Vision

Project Vision Document

Version 1.0

10/4/2020

Revision History

Revision	Date	Author	Reviewed By	Summary of Changes
1.0	10/4/2020	C. Dinatale, N. Vojinovic, N. Huboux, S. Grujic		Preliminary version of Bits to Bites Mobile Application

Document Approval List

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1   Introduction

This document describes the vision and requirements specifications for the Bits to Bites Mobile Application (BBMA). It outlines the problems that inspired the idea for this application and explores the business opportunity that these problems have created. It further contains a list of the stakeholders and users of the proposed solution and summarizes their needs and requirements. It also provides a brief description of the major features of the application as well as its constraints.

1.1   Purpose

The purpose of this document is to provide a detailed overview of the goals, parameters, and features of the Bits to Bites Mobile Application (BBMA). It provides insight into the problems that this application hopes to address, and defines the high-level needs and capabilities required by the stakeholders and target users to solve those problems.

1.2   Scope

This Vision Document applies to the Bits to Bites Mobile Application (BBMA), which will be developed by group T07. Group T07 will develop the (BBMA) to work on all android devices.

1.2.1   In Scope
The (BBMA) searches a database of recipes based on user-specified ingredients, cuisine type, dietary restrictions, cost, and difficulty level and returns recipes that match those parameters. The user will be able to upload recipes, save recipes and add notes to them. The application will include a unit-converter to convert a recipe's ingredient measurements to the user's desired unit. It will also include an ingredient multiplier feature which will multiply ingredient amounts based on user input. The app will provide the ability to keep track of calories consumed/nutritional information based on recipes chosen by the user. It will include a kitchen timer feature as well as an automatic screen lock feature. It will also provide the user with the ability to keep track of ingredients' expiry dates.

1.2.2   Out of Scope
The (BBMA) will not include a built-in shopping list feature, video guides, the ability to navigate through the app with voice commands nor the ability to scan a food using the device's camera.

1.3   Definitions, Acronyms, and Abbreviations

Term	Explanation
BBMA	Bits to Bites Mobile Application

1.4   References

Reference File Name	Version	Description
Project Summary	1.0	A brief precis of the project

Name	Link
7 Best Cooking Apps	https://primus.ca/index.php/ont_en/content-hub/cat/articles/post/7-best-cooking-apps
Best Recipe Apps: the 7 fines apps for cooking inspiration	https://www.techradar.com/news/best-recipe-apps-the-7-finest-apps-for-cooking-inspiration
Major benefits in tackling food waste	http://www.nzwc.ca/focus/food/Pages/default.aspx
Many more Canadians going hungry as coronavirus pinches economy: StatsCan	https://globalnews.ca/news/7101750/coronavirus-canada-hunger-food-insecurity/
More than 500 COVID-19 infections in Canada linked to exposures at public places, new data suggests	https://www.ctvnews.ca/health/coronavirus/more-than-500-covid-19-infections-in-canada-linked-to-exposures-at-public-places-new-data-suggests-1.5058227?cache=%3FclipId%3D104070
SuperCook	https://www.supercook.com/#/recipes

2   Positioning

2.1   Business Opportunity

Having an easily accessible and cost-effective source of quality recipes based on available ingredients in the home is key to reducing household waste and expenses. This involves being able to search a database of recipes based on user-specified parameters such as ingredients available, cuisine type, dietary restrictions, cost, and difficulty level. The (BBMA) will act as an all-in-one cooking helper that will provide the user with functionality such as unit conversion, ingredient multiplication, auto screen lock, a kitchen timer, calorie logging capabilities, the ability to upload and save recipes and an ingredient expiry-date reminder, to help with streamlining the process of making meals at home and avoid wasting food.

2.2   Problem Statement

The Problem of	Food waste
affects	Canadian households
the impact of which is	almost 2.2 million tonnes of edible food is wasted each year, costing Canadians in excess of $17 billion.
a successful solution would be	A free, easily accessible recipe search application that is user-friendly and easy to navigate. This involves being able to search a database of recipes based on user-specified parameters such as ingredients available, cuisine type, dietary restrictions, cost, and difficulty level. The application would act as an all-in-one cooking helper that would provide the user with functionality such as unit conversion, ingredient multiplication, auto screen lock, a kitchen timer, calorie logging capabilities, the ability to upload and save recipes and an ingredient expiry-date reminder. The user would be able to download and access the application on any Android device.

Table 1 Problem Statement

2.3   Product Position Statement

For	Home cook
Who	Wants to avoid food waste and save money by being able to search for quality, cost-effective recipes that include ingredients he/she already has at home.

The Bits to Bites Mobile Application (BBMA)	is a mobile android application
That	Provides the ability to search a database of recipes based on ingredients already in their homes, cuisine type, dietary restrictions, cost, and difficulty level to reduce food waste and household expenses, provides functionality to help with streamlining home cooking.
Unlike	Current available ingredient to recipe search mobile apps that do not provide additional functionality to streamline home cooking such as auto screen lock, unit converter, calorie intake calculation, kitchen timer, ingredient multiplier and expiry date tracker.
Our product	acts as an all-in-one home cooking helper that would provide the user with functionality such as unit conversion, ingredient multiplication, auto screen lock, a kitchen timer, calorie logging capabilities, the ability to upload and save recipes and an ingredient expiry-date reminder.

Table 2 Product Position Statement

2.4 SWOT Analysis

<Reference: https://www.businessballs.com/strategy-innovation/swot-analysis/)

Strengths	Weaknesses
Creative team of skilled student developers.	Lack of experience developing mobile apps.
No cost for labour	No current market presence or reputation.
Unique app idea that include features not available in other recipe apps.	Only available on Android.
Opportunities	**Threats**
Few competitors.	Emerging competitors could knock us out of the market.
Fear of going to grocery stores due to pandemic will make people want to maximize the use of their groceries.	Current competitors with an established user base might update their apps with new features.
The app will be very appealing to Eco-conscious people.	Negative user reviews.

3   Stakeholder and User Descriptions

3.1   Stakeholder Summary

Stakeholder Name	Represents	Role
Developer	This is a stakeholder that is primary for designing and developing the application.	Responsible for the design and implementation of the project.

Table 3 Stakeholder Summary

3.2   User Summary

User Name	Description	Responsibilities	Stakeholder
Client	Primary end user of the application	Create new account, edit profile, delete profile, search database of recipes, upload new recipes, save recipes, add notes to recipes, convert units, multiply ingredients, use auto screen lock, set kitchen timer, log calories and nutritional info, set ingredient expiry-date reminder, receive expiry-date reminder.	self
Administrator	End user of the application	Approve new recipe uploads, delete new recipe uploads, monitor user activity, support users, ban users	self

Table 4 User Summary

4   Stakeholder Requirements

ID	Requirement	Stakeholder
R1	Create a new account	Client
R2	Sign into account	Client
R3	Manage account	Client
R4	Search for recipes	Client
R5	Sort recipes	Client
R6	Save recipes	Client
R7	Upload new recipes	Client
R8	Manage Recipes	Client
R9	Add notes to recipes	Client
R10	Convert units	Client
R11	Multiply recipe ingredients	Client
R12	Use auto screen lock	Client
R13	Use kitchen timer	Client
R14	Keep track of nutritional info	Client
R15	Keep track of ingredient expiry dates	Client
R16	Approve recipe uploads	Administrator
R17	Delete inappropriate recipe uploads	Administrator
R18	Monitor user activity	Administrator
R19	Support users	Administrator
R20	Ban users	Administrator

Table 5 Stakeholder Requirements

5   System Features

ID	Feature	Stakeholder Requirement ID
F1	New account creation	R1
F2	Account sign in	R2
F3	Edit account information	R3
F4	Delete account	R3
F5	Search for recipes based on ingredients	R4
F6	Sort recipes based on difficulty level	R5
F7	Sort recipes based on type of cuisine	R5
F8	Sort recipes based on dietary restrictions	R5
F9	Sort recipes based on cost	R5
F10	Save a recipe	R6
F11	Upload recipe	R7
F12	Edit recipe	R8

ID	Feature	Stakeholder Requirement ID
F13	Delete recipe	R8
F14	Add note to recipe	R9
F15	Convert ingredients to grams	R10
F16	Convert ingredients to cups	R10
F17	Covert ingredients to ounces	R10
F18	Multiply recipe ingredients	R11
F18	Auto screen lock activation	R12
F19	Set kitchen timer	R13
F20	Stop kitchen timer	R13
F21	Log calories	R14
F22	Calculate calorie consumption	R14
F23	Set ingredient expiry date	R15
F24	Edit ingredient expiry date	R15
F25	Delete ingredient expiry date	R15
F26	Daily expiry date notification	R15
F27	Recipe upload approval	R16
F28	Delete recipe upload	R17
F29	Flag inappropriate content	R18
F30	Receive user message	R19
F31	Send user message	R19
F32	Ban user	R20

Table 6 System Features

6 Assumptions

The following is a list of preliminary assumptions that apply to the (BBMA). As project planning begins and more assumptions are identified, they will be added accordingly.

- Application design, testing and implementation can be done at no cost.
- Project team members will have the resources they need to complete their individual tasks on time.
- All equipment will be in working condition through the project cycle.
- Users will not need to download application on iOS devices.

7 Constraints

The following is a list of preliminary constraints that apply to the (BBMA). As project planning begins and more constraints are identified, they will be added accordingly.

- Application design, testing and implementation must be done at no cost.
- Application must be in working condition by April 1st, 2021.