SHARK BREAD RECIPE REPOSITORY PROJECT MANAGEMENT PLAN

Version 1.0

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Revision History

Date	Version	Description	Author
09/12/2016	1.0	Initial Release	A. Howell

1 PURPOSE

1.1 Document Overview

This Project Management Plan (PMP) documents how the Project Team will plan, execute, monitor, control, and close the project. The PMP details the approach to manage the project and ensure optimal project performance. This PMP includes the following subsidiary plans:

- Scope Management Plan
- Schedule Management Plan
- Cost Management Plan
- Quality Management Plan
- Change Management Plan
- Staffing Management Plan
- Communication Management Plan
- Risk Management Plan
- Procurement Management Plan

1.2 Project Description

This Project is designed as a requirement for the fall 2016 CMSC 495 course at University of Maryland University College (UMUC). The project will be a Recipe Repository where one can create, contribute, share, and search recipes.

2 SCOPE MANAGEMENT PLAN

2.1 Requirements Definition

Requirements are to be defined from two (2) categories: Project and System. The project requirement format was defined by the Professor of UMUC CMSC 495.

2.1.1 Project Requirements

The project requirements are defined as features that the project must be able to perform.

Project Requirements	
ID	**Description**
SR01	The system shall permit a user to manually input recipes through text entry
SR02	The system shall provide suitable controls for recipe creation

Project Requirements	
ID	**Description**
SR03	The system shall provide a suitable interface for recipe deletion
SR04	The system shall provide a suitable interface for recipe editing
SR05	The system shall provide a suitable interface for recipe reading
SR06	The system shall persist its' store of recipes between application executions
SR07	The system shall provide the ability to browse recipes
SR08	The system shall provide the ability to search recipes by keywords
SR09	The system shall provide the ability to export recipes for sharing
SR10	The system shall permit the deletion of recipes with at least one or more confirmation
SR11	The system shall permit the editing of previously submitted recipes
SR12	The system shall permit the ability of obtaining incremental updates
SR13	The system shall distinguish recipes as discrete entities

2.1.2 System Requirements

The System requirements are the minimum system resources the executing machine must have installed and available.

System Requirements	
ID	**Description**
SYS01	Computer Capable of running Java Runtime Engine version 1.8.0_77 or higher
SYS02	At least 200MB of main memory available for the application's execution, with more being preferred. Larger recipe catalogs will benefit from additional memory
SYS03	Minimum disk space of 100MB to store the recipe database
SYS04	The system shall be usable with standard human input and output devices

2.2 Scope Verification

The requirements and deliverables will be formally accepted through electronic communications as defined in section 8, Communication Management Plan. The process to review the deliverables to ensure their quality will include a full team review against the test and design plan. The scope verification will include a team review of the work performed to ensure that it meets the specifications outlined in the project plan. The team review will include testing of the application, and appropriate sign-off of the deliverables.

2.3 Scope Control

The team will monitor the scope of the project through regular reviews of the scope outlined in this plan. Changes to the project scope must be approved by all team members and the project plan must be revised to include the changes.

3 SCHEDULE MANAGEMENT PLAN

3.1 Baseline Schedule

The baseline schedule of events for this PMP are defined based upon the course schedule defined in the UMUC fall 2016 CMSC 495 Syllabus; Which can be found at the below link in the **Class & Assignment Schedule** section. The team will confirm that the requirements clearly list the team items defined in the assignments column in the aforementioned section.

https://learn.umuc.edu/d2l/le/content/170388/viewContent/6835438/View

Milestone	Dates	
	Initial Submission	Final Submission
Week 2		
M01: Project Plan	August 31, 2016	September 04, 2016
Week 3		
M02: User's Guide	September 07, 2016	To Be Determined
M03: Test Plan	September 07, 2016	September 11, 2016
Week 4		
M04: Project Design	September 14, 2016	September 18, 2016
Week 5		
M05: Phase I	September 21, 2016	September 25, 2016
Week 6		
M06: Phase II	September 28, 2016	October 02, 2016
Week 7		
M07: Phase III	October 05, 2016	October 09, 2016
Week 8		
M08: Final	October 12, 2016	October 16, 2016

3.2 Tools to Manage the Project Schedule

The tools to be utilized in managing the Project Schedule will include a twice (2x) a week status meeting held on Wednesdays and Sundays, as well as communications defined in section 8.

3.3 Changes to the Project Schedule

Any changes to the Project Schedule requires a unanimous team decision to request permission from Professor of the CMSC 495 course.

3.4 Accountability

The project lead will be accountable for reporting and maintaining the schedule.

4 COST MANAGEMENT PLAN

This project is a school project, and thus all products to be utilized will be freeware.

5 QUALITY MANAGEMENT PLAN

5.1 Quality Management Method

The Quality Management Method will include a set of requirements that a Quality Assurance (QA) personnel must perform.

5.2 Quality Standards

This project will adhere to the following Coding Standards:

Google Java Coding Standard	https://google.github.io/styleguide/javaguide.html
SQL Code Standard by Simon Holywell	http://www.sqlstyle.guide

5.3 Quality Management Tools

No QA-specific tools will be used for this project.

5.4 Quality Management Roles and Responsibilities

The QA Lead provides verification of software processes and products being developed and tested for this project. The QA Lead is involved in reviewing and verifying processes and procedures; witnessing and monitoring the execution of test plans. The QA Lead will ensure any problem encountered is properly documented, reported, and resolved. Preference for this project is informal issue resolution; any QA concern resulting in potential dysfunction or missing of milestones will be reported to the Team Lead. Team members are responsible for funneling concerns to the QA lead if they encounter suspected lapses in quality throughout the project, whether in code or associated documentation.

5.5 Quality Control

Quality control occurs through the review of documents and deliverables for adherence to previously referenced standards for coding; as well as clarity and conciseness for technical documentation. It is the QA lead's job to validate that the deliverables are of sufficient quality for release to the customer.

5.6 Quality Assurance

Assurance of product quality is the result of spot-checks of code from all development teams by the QA lead, with the assistance of the Code Lead, as well as review of documentation. Minor corrections (i.e. spelling and grammar) may be made with notification to the author; major deficiencies require a discussion to determine how best to bring the product in line with expected quality standards. The QA lead is responsible for identifying potential issues, but responsibility for assuming risk or imposing a change in the event of a disagreement resides with the Project Lead.

6 CHANGE MANAGEMENT PLAN

6.1 Problem Reporting and Closure

When a Problem is found, a GitHub.com (see section 8.5) "Issue" will be opened. The Issue will contain at least: a description and a proposed solution, if available; Additional recommended information includes the information required to recreate the issue. The closure of the Issue will occur with the approval of the Test, Code, & QA Leads.

6.2 Action Item and Issue Resolution

The team will be notified through Slack.com (see section 8.2) of an issue. The team will pose a solution. A Lead will approve the solution. A project member will implement the solution and test it. Quality Assurance (QA) will verify the solution. See section 6.1 for closure requirements.

7 STAFFING MANAGEMENT PLAN

The human resources requirements for this course are defined as follows:

Roles	Responsibilities	Participant(s)
Project Lead	▪ Ultimate decision-maker and tie-breaker ▪ Provide project oversight and guidance ▪ Review/approve some project elements ▪ Milestone Status	Adam Howell
Design Lead	▪ Design documentation	Alex Macwilliams
Code Lead	▪ Upholding coding standards ▪ Reviewing code & approving code	Eliot Pearson
Quality Assurance Lead	▪ Reviewing & approval of documents ▪ Ensuring tests are conducted properly	Justin Helphenstine
Test Lead	▪ Testing Documentation ▪ User Guide Documentation	Claire Breer
Requirements Lead	▪ Determine Requirements ▪ Ensure requirements are met ▪ Update requirements as needed	Obinna Ojialor

8 COMMUNICATION MANAGEMENT PLAN

8.1 Introduction

The Communication Management Plan describes the planned methods of communication to ensure timely inter-communication of all project related information.

8.2 Slack.com

Slack.com is team messaging service that the project will utilize to correlate status updates and notifications.

8.3 Google Drive

Google Drive is a cloud storage service that the project will utilize to share information between members for reviewing and approving documents.

8.4 Google Hangouts

The project will utilize Google Hangouts for collaborative conferencing. These conference sessions be preceded by a Meeting Agenda document to be published at Slack.com prior to any meeting. After a meeting, a Meeting Minutes document will be published to the Slack.com and to the CMSC 495 discussion as prescribed by the course.

8.5 GitHub.com

The project will utilize GitHub.com for Software Control Management. The features to be utilized are:

- Version control
- Source code management
- Bug tracking

9 RISK MANAGEMENT PLAN

9.1 Schedule Slippage

In the event of a possible schedule slippage, the project team will reevaluate the goals and determine if a change to the schedule (section 3.3) or if a re-design to eliminate complexity.

9.2 Team Member Resignation

In the event a team member resigns, the project team will re-balance their workloads to absorb the unfilled role(s).

9.3 Team Member Negligence

In the event of team member negligence, the team will have a direct discussion regarding the issues. If the issues do not improve, the team will notify the professor as described in the Course Content for UMUC CMSC 495.

10 PROCUREMENT MANAGEMENT PLAN

This project will have no procurement activities as this is a school project and no funding is available.

11 ASSUMPTIONS

The following items are assumptions on the project and an associated risk

- Project members will be available to work on the project or the schedule will have to be re-adjusted according to section 3.3.
- Project members will communicate heavily upon the methods listed in section 8, or project milestones will not be met.

12 CONSTRAINTS

The following items have been identified as constraints to this project.

- All required software must be freeware
- Project members must be able to access the internet

13 SUPPORTING INFORMATION

13.1 Milestone List

Milestones			
ID	**Name**	**Description**	**Responsible Lead**
M01	Project Plan	Define & deliver the document to guide the control and execution of the project	Project Lead
M02	User's Guide	Define & deliver the manual to provide assistance for users that will be utilizing the project	Testing Lead
M03	Test Plan	Define & deliver the document detailing the tests for the project	Testing Lead
M04	Project Design	Define & deliver the document detailing the use analysis, evaluations, sustainment analysis, and implementation design	Design Lead

Milestones			
ID	**Name**	**Description**	**Responsible Lead**
M05	Phase I	Initial development of the project in accordance with the Project Design. Apply Test Plan as applicable	Coding/Testing Lead
M06	Phase II	Second development of the project in accordance with the Project Design. Apply Test Plan as applicable	Coding/Testing Lead
M07	Phase III	Third development of the project in accordance with the Project Design Apply Test Plan as applicable	Coding/Testing Lead
M08	Final	Final development of the project in accordance with the Project Design Apply Test Plan as applicable	Coding/Testing Lead