Spotifood

Project Manager Plan

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Chapter 1 | Introduction

1.1 Identification

This Project Management Plan is the document for planning, scheduling activities and evaluating overall of the project so that it could complete successfully despite all the risks. It provides detailed scheduled, assigned task and identified risks of the project.

1.2 Project Overview

The Spotifood application will guide people find their new dish and help people who are interested in cooking and people who have cooking skill by suggesting the dishes from a word that people search. The AI system will suggest a dish from the personality of people. For example, The people regularly search steamed fish with herbs dish. The AI system will analyze the ingredient tag of dish that is related to the healthy tag. Then, the AI will suggest the people in the type of healthy dishes.

The suggest dish of AI will help those people found new dishes and challenging in cooking every day that makes people not disconnected and bored to cooking. Moreover, we will be a middleman that brings trader of ingredient to people who can't find the ingredients in any food. The Spotifood help people to buy an ingredient. And the Spotifood will suggest a dish that is similar to personality or suggests from the behavior of people.

1.2.1 Purpose

The main purpose of developing the Spotifood is to help the people who are interested in cooking and who already have skills not bored with cooking or disconnected to prepare the food.

1.2.2 Scope

There are six major parts in Spotifood.

Feature #1: Authentication

Feature #2: Content CRUD

Feature #3: User management

Feature #4: Similar dishes identification

Feature #5: Personalization

Feature #6: ADS ingredient

1.3 Acronyms and Definitions

1.3.1 Acronyms

SRS	Software Requirement Specification
SDD	Software Design Document
OS	Operating System
VSE	Very Small Entity
PM	Project Management
SI	Software Implementation
IID	Iterative and Incremental Development
SCI	Software Configuration Item

1.3.2 Definitions

Name	Definition
Acceptance test	Test activities for sample checks to verify that the system (or product, solution) has the right quality for deployment or usage. Often acceptance test is done by the customer.
Feature	Transformation of input parameters to output parameters based on a specified algorithm. It describes the functionality of the product in the language of the product. Used for requirements analysis, design, coding, testing or maintenance.
IEEE	Institute for Electrical and Electronics Engineers. Biggest global interest group for engineers of different branches and computer scientists.
Plan	A documented series of tasks requires meeting an objective, typically including the associated schedule, budget, resources, organizational description and work breakdown structure.
Project Management	The application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project
Project Plan	A formal, approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and decisions, to

	facilitate communication among stakeholders, and document approved scope, cost, and schedule baseline.
Risk	An uncertain event or condition that, if it occurs, has a positiveornegativeeffectontheproject'sobjectives.Itisa functionoftheprobabilityofoccurrenceofagiventhreat's occurrence
Risk Management	The systematic application of management policies, procedures and practices to the tasks of identifying, analyzing, evaluating, treating and monitoring risk.

Name	Definition
Traceability	The ability to trace the history, application or location of an item or activity, or work products or activities, by means of recorded identification. The establishment and maintenance of relationships between such items. Horizontal traceability describes the relationship between work products of the same type (e.g., customer requirements). Vertical traceability describes the relationship between work products which build upon each other or are derived from each other (e.g., from customer requirements to qualification test cases). Bidirectional traceability allows to directly following relationships in both directions
Unit test	A test of individual programs or modules in order to remove design or programming errors.

Chapter 2 | Infrastructure

2.1 Development Tools

- Visual code studio
- Postman
- MongoDB Server

2.2 Hardware and Material Resources

- Computer
  - ➢ Acer Aspire vx15
    - Processor: Intel(R) Core(™) i7-7700 HQ @2.80GHz
    - Memory: 16GB RAM
    - OS: Window 10 Pro x64
  - ➢ Acer Notebook NITRO AN515-52
    - Processor: Intel(R) Core i5-8300H 2.3 GHz up to 4.0 GHz
    - Memory: 8GB RAM
    - OS: Window 10 Home

Chapter 3 | Management Procedures

3.1 Project Team Structures

Particaipants	Activities
Kittinut Saengsri Sirisak Wongwal	Feasibility Study
	Project Proposal
	Project Requirement
	Project Plan
	Project Design
	Implementation
	Testing

3.2 Monitoring and Controlling Mechanisms

3.2.1 Project Meeting

Participants	Roles
Mr. Kittinut Saengsri	Development team member
Mr. Sirisak Wongwal	Development team member
Dr. Passakorn Phannachitta	Project advisor

Chapter 4 | Quality Standard

4.1 ISO 29110 for Very Small Entity (VSE)

ISO 29110 is the Software Life Cycle Profiles and Guidelines for Very Small Entities (VSEs) standards and technical reports are targeted at Very Small Entities (VSEs). A Very Small Entity (VSE) is an enterprise, organization, department or project having up to 25 people. ISO 29110 concerns on the project management process and software implementation process.

4.1.1 Project Management (PM) Process

- **Purpose**

  ISO 29110 is the Software Life Cycle Profiles and Guidelines for Very Small Entities (VSEs) standards and technical reports are targeted at Very Small Entities (VSEs). A Very Small Entity (VSE) is an enterprise, organization, department or project having up to 25 people. ISO 29110 concerns on the project management process and software implementation process.

- **Objective**

  PM.O1. The Project Plan for the execution of the project is developed according to the Statement of Work and validated with the Customer. The tasks and resources necessary to complete the work sized and estimated.

  PM.O2. Progress of the project is monitored against the Project Plan and recorded in the Progress Status Record. Corrections to remediate problems and deviations from the plan are taken when project targets are not achieved. Appropriate treatment is taken to correct or avoid the impact of risk. Closure of the project is performed to get the Customer acceptance documented in the Acceptance Record.

  PM.O3. The Change Requests are addressed through their reception and analysis. Changes to software requirements are evaluated for cost, schedule, and technical impact.

  PM.O4. Review meetings with the Work Team and the Customer are held. Agreements are registered and tracked.

  PM.O5. Risks are identified as they develop and during the conduct of the project.

  PM.O6. A software Version Control Strategy is developed. Items of Software Configuration are identified, defined and baseline. Modifications and releases of the items are controlled and made available to the Customer and Work Team including the storage, handling, and delivery of the items.

  PM.O7. Software Quality Assurance is performed to provide assurance that work products and processes comply with the Project Plan and Requirements Specification.

- **Activities**

  PM.1 Project Planning

  PM.2 Project Plan Execution

  PM.3 Project Assessment and Control

  PM.4 Project Closure

4.1.2 Software Implementation (SI) Process

- Purpose

  The purpose of the Software Implementation process is the systematic performance of the analysis, design, construction, integration and tests activities for new or modified software products according to the specified requirements.

- Objectives

  SI.O1. Tasks of the activities are performed through the accomplishment of the current Project Plan.

  SI.O2. Software requirements are defined, analyzed for correctness and testability, approved by the Customer, baseline and communicated.

  SI.O3. Software architectural and detailed design is developed and baseline. It describes the software items and internal and external interfaces of them. Consistency and traceability to software requirements are established.

  SI.O4. Software components defined by the design are produced. Unit tests are defined and performed to verify the consistency with requirements and the design. Traceability to the requirements and design are established.

  SI.O5. Software is produced performing integration of software components and verified using Test Cases and Test Procedures. Results are recorded at the Test Report. Defects are corrected and consistency and traceability to Software Design are established.

  SI.O6. A Software Configuration that meets the Requirements Specification as agreed to with the Customer, which includes user, operation and maintenance documentation is integrated, baseline and stored at the Project Repository. Needs for changes to the Software Configuration are detected and related Change Requests are initiated.

  SI.O7. Verification and Validation tasks of all required work products are performed using the defined criteria to achieve consistency among output and input products in each activity. Defects are identified, and corrected; records are stored in the Verification/Validation Results.

- Activities

  SI.1 Software Implementation Initiation

  SI.2 Software Requirements Analysis

  SI.3 Software Architectural and Detailed Design

  SI.4 Software Construction

  SI.5 Software Integration and Tests

  SI.6 Product Delivery

Chapter 5 | Quality Planning

5.1 Review/Responsibility

Stage Exit Review			
No.	Stage	Review Item	Responsibility
1	Project Planning	Project Plan	Sirisak, Kittinut
2	Requirement Specification	Software Requirement Specification	Sirisak, Kittinut
3	Architecture and Detailed Design	Software Design Document	Sirisak, Kittinut
4	Implementation	Code	Sirisak, Kittinut
5	Software Testing	Test Plan	Sirisak, Kittinut
6	Software Testing	Test Record	Sirisak, Kittinut
7	Project Monitoring and Control	Traceability	Sirisak, Kittinut

5.2 Testing

Stage Exit Review		
No.	Test	Responsibility
1	Unit Testing	Sirisak, Kittinut
2	System Testing	Sirisak, Kittinut

Chapter 6 | Estimated Duration of Tasks

6.1 Schedule & Milestone

Milestone	Task	Milestone Criteria	Planned date
1	Proposal	-Topic defined	21 May, 2019
2	Proposal	-Proposal reviewed -Proposal submitted -Proposal presentation	18 June, 2019
3	Progress 1	-Software requirement specification -Feature#1 (Authentication) -Feature#2 (Post dish) -Feature#3 (View dish) -Feature#4 (Search) -Feature Design -Test plan -Feature implement -Feature test -Progress report submit -Progress report presentation	12 July, 2019
4	Progress 2	-Software requirement specification -Feature#5 (Suggest dish) -Feature#7 (Link to shop) -Feature Design -Test plan -Feature implement -Feature test -Progress report submit -Progress report presentation	22 August, 2019
5	Show pro	Review -Feature#1 (Authentication) -Feature#2 (Post dish) -Feature#3 (View dish) -Feature#4 (Search)	Sep, 2019

		-Feature#5 (Suggest dish) -Feature#7 (Link to shop)	

Task and Estimated Duration		
No.	Phase	Estimated Duration (Days)
1.	Proposal	28
2.	Progress1	25
3.	Progress2	60
4.	Progress3	41
Total		154

Chapter 7 | Software Configuration Management

7.1 Naming Convention

For the filename format that we use for all documents is:

Spotifood-[File Name]_v[Version].[File Type]

- File Name - This part will depend on the substance of that file.
- Version - This part is the version of the file. The version number will be in this format“[Mainversion].[Subversion]”
- File Type - This part is a type of file.

(I.E. Spotifood--ProjectPlan_v1.0.docx)

7.2 Change Management

Change management manages all of the changes in the project during the development process. All of the change requests will be recorded into the change record document.

The procedures for managing changes are:

1. Discuss with an advisor about the change.
2. Record the change information to change the document.
3. Send the change request to an advisor.
    3.1 Request accepted: change document and software follow the change information.
    3.2 Request rejected: continue on and find an alternative solution

7.3 Project Repository

This project uses“GitHub” to manage the version of documents and software. It can be used to store and share code or binary files for software development projects.

The repository's directories will be created as following;

Chapter 8 | Risk Management

8.1 Risk Identification and Solutions

No.	Risk statement	Solution
1	The developer \lacks necessary skills for project development	- Study from textbook or online resources
2	The requirements might change.	- Make change request and discuss with an advisor to reprioritize the changed requirements
3	The process flow might not keep up with the project schedule.	- Start tasks execution before their schedule. - Prioritize tasks and to do more important tasks first