

Web-based Ordering & Ingredient Estimating for Bakery Manufacturer

Project Management Plan

By

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Document History

Document Name	Version	Status	Date	Viewable	Reviewer	Responsible
Documents						
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***NM = Nontra Mahachanont**

***PP = Parinya Panyanak**

***PS = Phudinan Singkhamfu**

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Chapter One | Introduction

Project Name: Web-based Ordering & Ingredient Estimating for Bakery Manufacturer

As a result of quantity demand, the Phungnoi bakery manufacturer becomes an important source among wholesalers. Some bakery manufacturer has many wholesalers and orders, for example, many branches ordered bakery products more than ten thousand baths. These leads to the problems that the bakery manufacturer cannot manage or handle the information easily because of many factors such as time, communication and system. So we have an idea to create a new system that able to manage information easily and provide convenient order process on the wholesale side. Then also helps the manufacturer control their ingredient usage in each manufacturing. These will make the managing process more reliable and convenient because the system provides managing system function such as order management, bakery product management, member management, recipe management, ingredient estimation and report system.

1.1 Identification

This document is the software project management plan, which described the process of the Web-based Ordering & Ingredient Estimating for Bakery Manufacturer. This document included planning, scheduling, activities, evaluating overall of the project and the risk that may possible for managing the software process activities.

1.2 Scope

Web-based Ordering & Ingredient Estimating for Bakery Manufacturer is a management system that helps the admin to manage ordering information and estimate ingredient usage. Then the system also helps the wholesaler to manage order and record ordered history. The project focuses on implementation of general order management system. The objective of this project is to develop management system that used with the Phungnoi bakery manufacturer for controlling their ingredient usage. Another objective is to develop a system that support web-based ordering for the Phungnoi bakery's wholesalers.

1.3 Document Overview

The purpose of the Web-based Ordering & Ingredient Estimating for Bakery Manufacturer development plan is to guide the developer while develop the system. This project has developed in the process of making the project and all documents according to the software quality assurance. In this project will use the ISO29110 standard that suit with very small entity.

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1.4 Objective

Firstly, the implement a software management system which would be include many management features, such as member management, product management, order management, ingredient estimation, report management, etc.

Second objective is to develop web-based online ordering for the wholesalers. This objective is to provide order management system and other service support wholesale side.

Third objective is to develop ingredient estimating function for control budget and standard of the Phungnoi bakery manufacturer.

Where the last objective is to study the iterative development process and adapt the software engineering methodologies and knowledge that we have learned from the previous courses for the senior project.

1.5 Work Products to be Develop

1.5.1 Deliverables and Delivery Instruction

No.	Deliverable	Media	No. of Copies	Date
1	The Project Proposal	Document	3	26 March 2014
2	The Progress Report I <ul style="list-style-type: none"> Project Plan V.1.0 Web-based Ordering & Ingredient Estimating for Bakery Manufacturer Web Application V.1.0 <p>Progress I: Web-based Ordering & Ingredient Estimating for Bakery Manufacturer web application provides member management system and product management system functions</p> <p>Features</p> <ul style="list-style-type: none"> Login to web application Logout from web application Add members information; <ul style="list-style-type: none"> - user id - username - user password - first name - last name - phone number - address - profile picture 	Document Software	3 1	31 July 2014

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	<ul style="list-style-type: none"> - user type • View members information; <ul style="list-style-type: none"> - user id - username - user password - first name - last name - phone number - address - profile picture - user type - last sign in - create date • Edit members information; <ul style="list-style-type: none"> - user id - username - user password - first name - last name - phone number - address - profile picture - user type • Remove existing members • Search members information; <ul style="list-style-type: none"> - user id - username - user password - first name - last name - phone number - address - profile picture - user type - last sign in - create date • Add bakery product information; <ul style="list-style-type: none"> - bakery product ID - name - information - price - category - bakery product picture • Edit existing bakery product information; <ul style="list-style-type: none"> - bakery product ID - name - information - price - category - bakery product picture • View existing bakery product information; 			31 July 2014
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	<ul style="list-style-type: none"> - bakery product ID - name - information - price - category - bakery product picture • Remove existing bakery product • Search bakery product information; <ul style="list-style-type: none"> - bakery product ID - name - price - category <p><u>Documentation</u></p> <ul style="list-style-type: none"> - Software Requirement Specification Document V.1.0 - Software Design Document V.1.0 - Software Test Plan Document V.1.0 - Software Test Record V.1.0 - Traceability Record V.1.0 	Document	3	31 July 2014
3	<p>The Progress Report II</p> <ul style="list-style-type: none"> • Project Management Plan V.2.0 • Web-based Ordering & Ingredient Estimating for Bakery Manufacturer Web Application V.2.0 <p>Progress II: Web-based Ordering & Ingredient Estimating for Bakery Manufacturer web application provides order management system and ingredient management system functions</p> <p><u>Features</u></p> <ul style="list-style-type: none"> • Select existing bakery product to product list • Edit bakery product in current order's information • Remove bakery product from current order's information • Select repeat previous order information • Save unfinished product list of order and return to continue later • View all bakery product list in each order • View total price of each order • Send finished order form • View successful order notification • Search order information; <ul style="list-style-type: none"> - wholesaler ID - wholesaler name - delivery date 	Document	3	22 October 2014
		Software	1	

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	<ul style="list-style-type: none"> - bakery product ID - bakery product name - category • View order information <ul style="list-style-type: none"> - wholesaler ID - wholesaler name - delivery date - bakery product list - bakery product quantity - total price of the order - discount of order • Mark progressive of order status while the order in the preparation stage • View progress order status while the order in the preparation stage • Add ingredient information; <ul style="list-style-type: none"> - ingredient id - ingredient name - ingredient description - category - ingredient picture • View ingredient information; <ul style="list-style-type: none"> - ingredient id - ingredient name - ingredient description - category - ingredient picture • Edit ingredient information; <ul style="list-style-type: none"> - ingredient id - ingredient name - ingredient description - category - ingredient picture • Remove existing ingredient • Search ingredient information; <ul style="list-style-type: none"> - ingredient id - ingredient name - category <p><u>Documentation</u></p> <ul style="list-style-type: none"> - Software Requirement Specification Document V.2.0 - Software Design Document V.2.0 - Software Test Plan Document V.2.0 - Software Test Record V.2.0 - Traceability Record V.2.0 - Project Status Report V.2.0 - Executive Summary V.2.0 			22 October 2014
		Document	3	
		Document	3	
		Document	3	
		Document	3	
		Document	3	
		Document	3	
		Document	3	

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4	The Final Progress Report <ul style="list-style-type: none"> Project Management Plan V.3.0 Web-based Ordering & Ingredient Estimating for Bakery Manufacturer Web Application V.3.0 <p>Final Progress: Web-based Ordering & Ingredient Estimating for Bakery Manufacturer web application provides ingredient estimation system and report management system functions</p> <p><u>Features</u></p> <ul style="list-style-type: none"> Add menu recipe information; <ul style="list-style-type: none"> - bakery product name - bakery product ID - bakery product picture - ingredient id - ingredient name - ingredient quantity - category View menu recipe list View menu recipe information; <ul style="list-style-type: none"> - bakery product name - bakery product ID - bakery product picture - ingredient id - ingredient name - ingredient quantity - category Edit menu recipe information; <ul style="list-style-type: none"> - bakery product name - bakery product ID - bakery product picture - ingredient id - ingredient name - ingredient quantity - category Remove existing menu recipe Search menu recipe information; <ul style="list-style-type: none"> - bakery product name - bakery product ID - bakery product picture - ingredient id - ingredient name - category Choose a period to estimating ingredient Calculate ingredient usage Calculate real number of bakery product 	Document	3	11 December 2014
		Software	1	

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	<ul style="list-style-type: none"> • Search filter keywords of calculation; <ul style="list-style-type: none"> - wholesaler name - wholesaler ID - bakery product name - bakery product ID - ingredient quantity - ingredient name list • Select keyword type for different estimation • View all ingredient usage; <ul style="list-style-type: none"> - wholesaler name - wholesaler ID - bakery product name - bakery product ID - delivery date - ingredient quantity - ingredient name list • Update order status while the order in the manufacturing stage • Note the addition message to the order status • View updated order status and note while the order in the manufacturing stage • Search ingredient estimation history; <ul style="list-style-type: none"> - bakery product name - bakery product ID - ingredient name - ingredient ID - wholesaler name - wholesaler ID - order ID - delivery date • View ingredient estimation history list; <ul style="list-style-type: none"> - bakery product ID - bakery product name - delivery date • View estimation history information; <ul style="list-style-type: none"> - wholesaler ID - wholesaler name - order ID - delivery date - bakery product ID list - bakery product name list - ingredient ID list - ingredient name list - ingredient quantity • Search ordered history; <ul style="list-style-type: none"> - bakery product name 			11 December 2014
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	<ul style="list-style-type: none"> - bakery product ID - wholesaler name - wholesaler ID - order ID - delivery date • View ordered history list; <ul style="list-style-type: none"> - wholesaler ID - wholesaler name - delivery date • View ordered history information; <ul style="list-style-type: none"> - wholesaler ID - wholesaler name - order ID - delivery date - bakery product ID list - bakery product name list - the total price of ordered - the discount of ordered - status and note • Select report type for a different results • Choose a period to make a report • View all report results • Save all report results • Select graph type for different graph result • View all statistic graph data; <ul style="list-style-type: none"> - graph picture - statistic portion • Save converted a graph as an image file <p><u>Documentation</u></p> <ul style="list-style-type: none"> • Software Requirement Specification Document V.3.0 • Software Design Document V.3.0 • Software Test Plan Document V.3.0 • Software Test Record V.3.0 • Traceability Record V.3.0 • Project Status Report V.3.0 			11 December 2014
		Document	3	
		Document	3	
		Document	3	
		Document	3	
		Document	3	
		Document	3	

1.5.2 Non-Deliverables

No.	Non-Deliverable	Media	No. of Copies	Date
1	30 Seconds Video Presentation	File	1	17 September 2014
2	Abstract 150 words	File	1	17 September 2014
3	Poster Presentation	Poster	1	18 September 2014

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1.6 Acronyms and Definitions

1.6.1 Acronyms

SRS	Software Requirement Specification
URS	User Requirement Specification
SDD	Software Design Document
OS	Operation System
VSE	Very Small Entity
PMP	Project Management Plan
SI	Software Implementation
IDP	Iterative Development Process
SCI	Software Configuration Item
SCM	Software Configuration Management
SQA	Software Quality Assurance
AD	Activity Diagram
UC	Use Case
IEEE	Institute of Electrical and Electronics Engineers
RTM	Requirement Traceability Matrix
UI	User Interface
UTR	Unit Testing Record
STR	System Testing Record

1.6.2 Definitions

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. ^[8] [IEEE90]
IEEE	Institute of Electrical and Electronics Engineers. Biggest global interest group for engineers of different branches and computer scientists. ^[8] [IEEE90]

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Plan	A documented series of tasks requires meeting and objective, typically including the associated schedule, budget, resources, organizational description and work breakdown structure. [IEEE90]
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. [8] [IEEE90]
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 the decision, to facilitate communication among stakeholders, and to document approved scope, cost, and schedule baseline. [8] [IEEE90]
Risk Management	The systematic application of management policies, procedures and practices to the tasks of identifying, analyzing, evaluating treating and monitoring risk. [8] [IEEE90]
Validation	Confirmation by examination and provision of objective evidence that the particular requirements for a specified intended use fulfilled. Part of quality control. [9] [IEEE90]
Verification	Confirmation at the end of the process by examination and provision of objective evidence that specified requirements to the process has fulfilled. Part of quality control. [8] [IEEE90]
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 reliability allows to directly following relationship in both directions. [8] [IEEE90]

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Configuration Management	A was discipline applying technical and administrative direction and surveillance to: identify and document the functional and physical characteristics of a configuration item, control change processing implementation status, and verify compliance with specified requirements. ^[10] [IEEE90]
Design	The period the software life cycle during which the design for architecture, software components, interfaces, and design are created, documented, and verified to satisfy the requirement. [IEEE90]
Implementation	The period the software life cycle during which a software product is create a documentation and debugged. [IEEE90]
Work Product	Any tangible item that results from a project function, activity, or task. Examples of work products include customer requirement, project plan, design documents, source and object code, user's manuals.
Software	Computer programs, procedures, and associated documentation and data pertaining to the operation of a computer system. ^[11] [IEEE90]
Software Engineering	The application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software; that is, the application of engineering to software. ^[8] [IEEE90]
Quality Assurance	<p>(1) A planned and systematic pattern of all actions necessary to provide adequate confidence that an item or product conforms to established technical requirement. ^[12] [IEEE90]</p> <p>(2) A set of activities designed to evaluate the process by which producers developed or manufactured. ^[12] [IEEE90]</p>

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Chapter Two | Infrastructure

2.1 Software Development Life Cycle

The Iterative process model is iterating on steps as the project development with requirements. Iterative model iterates Requirement, Design, Development (Implement), Test phases and Deployment (Evaluate, Feedback) for each requirement and builds up quality until complete. The advantage of iterative model is building and improving the product step by step. Thus, developer can track the defects at early stages and avoid flow of defects.

Web-based Ordering & Ingredient Estimating for Bakery Manufacturer project using iterative development process, because it does not attempt to start with a full specification of requirements. We needed to develop the iterative way to review and improve the software and its documents for each development progress until it has finished. ^[7]

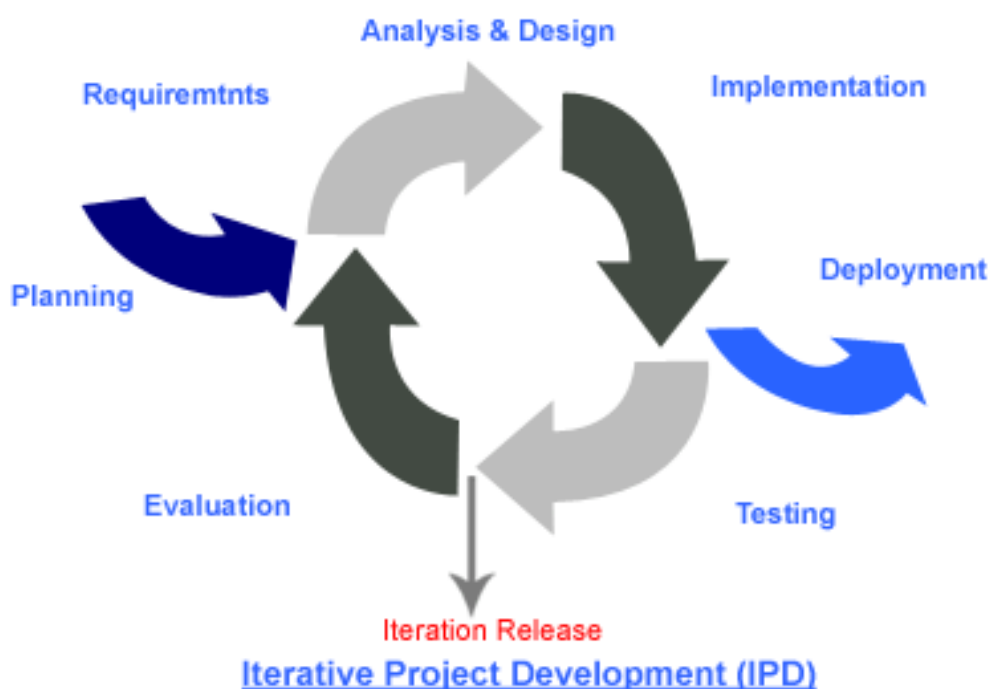


Figure 1: Iterative Development Model ^[1]

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2.3 Software Acquisition Plans

2.2.1 Design Tools

- Smart Draw 2013
- Visual Paradigm for UML 10.2
- Adobe Photoshop Elements 7.0
- Paint

2.2.2 Development Tools

- Microsoft SQL Server Management Studio
- Microsoft Visual Studio Ultimate
- Tortoise SVN

2.2.3 Configuration Management Tools

- Github
- Google Chrome
- Firefox

2.2.4 Document Tools

- Microsoft Office Word
- Microsoft Office PowerPoint
- Notepad ++
- Adobe Reader 9

2.2.5 Operating System

- Windows 7, Window 8

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2.3 Hardware and Material Resources

- Computers
 - **Name:** Sony VAIO-VAIO

Processor: Intel® Pentium® Processor T4300 (2.10 GHz)

Memory: 2.00 GB

Graphics: Intel® Graphics Media Accelerator HD

Operating System: Window® 7 Home Basic (64-bit)
 - **Name:** Sony VAIO

Processor: Intel® Core (TM) I3-3120M (2.5 GHz)

Memory: 4.00 GB

Graphics: Radeon Graphics System

Operating System: Window® 8 Based Processor (64-bit)

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Chapter Three | Management Procedures

3.1 Project Team Structure

No.	Participants	Roles
1	Miss. Nontra Mahachanont	Development Team Member
2	Mr. Parinya Panyanak	Development Team Member
3	Aj. Phudinan Singkhamfu	Project Advisor

3.2 Project Responsibility

No.	Participants	Responsibility
1	Miss. Nontra Mahachanont	Feasibility Study
	All members	Project Proposal
	Miss. Nontra Mahachanont	Project Requirements Specification
	Miss. Nontra Mahachanont	Project Management Plan
	Mr. Parinya Panyanak	Project Software Design Document
	Mr. Parinya Panyanak	Implementation
	Mr. Parinya Panyanak	Software Test Report Document
2	Aj. Phudinan Singkhamfu	Review Document
		Approve The Document
		Approve Change Document

3.3 Change Management

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

We have a strategy for managing the changes by following these rules:

- Create requirement traceability to trace change document.
- Specify version of each document.
- Determine baseline document version.
- Approving the change request by project advisor.

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Chapter Four | Quality Standard

4.1 ISO29110 for Very Small Entity (VSE)

ISO29110 is a guide applies to a Very Small Entity (VSE), enterprise, organisation, department or project up to 25 people, dedicated to software development. The Guide provides Project Management and Software Implementation processes which integrate practices based on the selection of ISO/IEC 12207 - *Systems and Software Engineering — Software Life Cycle Processes* and ISO/IEC 15289 *Software Engineering – Software Life Cycle Process – guidelines for the content of software life cycle process information products (documentation)* standards elements. ^[4]

4.1.1 Project Management Process

The purpose of the Project Management Process is to improve the success rate of projects in all areas of knowledge, which allows complying with the project's objectives in the expected quality, time and cost. ^[3]

Activities

- Project Planning Process
- Project Plan Execution Process
- Project Assessment and Control Process
- Project Closer Process

4.1.2 Software Implementation Process

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. ^[4]

Activities

- Software Implementation Initiation Process
- Software Requirements Analysis Process
- Software Architectural Design Process
- Software Construction Process
- Software Integration and Test Process
- Software Delivery Process

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Chapter Five | Quality Planning

5.1 Reviews/Responsibility

Stage Exit Review				
No.	Stage	Review Item	Responsibility	Reviewer
1	Project Planning	Project Management Plan	NM	All members Advisor
2	Requirements Specification	Project Proposal	All members	All members Advisor
		Software Requirement Specification	NM	All members Advisor
3	Architecture and Detailed Design	Software Design Document	PP	All members Advisor
4	Development	Implementation	PP	All members Advisor
		Unit Test Report	PP	All members Advisor
5	Software Testing	System Test Report	PP	All members Advisor
6	Project Monitoring and Control	Traceability Record	NM	All members Advisor
		Project Status Report	NM	All members Advisor
		Change Request	NM	All members Advisor

5.3 Testing

Test Process			
No.	Test	Verification	Responsibility
1	Unit Testing	All members Advisor	Parinya Panyanak
2	System Testing	All members Advisor	Parinya Panyanak

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Chapter Six | Schedule and Milestones

6.1 Project Schedule

According from Figure 2 to Figure 5 was show the schedule and milestones of Web-based Ordering & Ingredient Estimating for Bakery Manufacturer. During period of time, there are work terminologies. And the description is shown below that:

➤ **Feature#1: Member Management System**

- Admin can activate member.
- Admin can manage member information.
- Admin can specify user's type within the system.
- Admin can display member list.
- Admin can view member information.
- Admin can search member by username, name, phone member, address, email, user type, register date and last sign in date.
- User can login to the system.
- User can view verification notification.
- User can log out from the system.
- User can edit own profile.
- User can display personal information.
- User can view personal information.
- An application provides member management system.
- An application provides member information such as first name, last name, phone number, address, user type and email.

➤ **Feature#2: Product Management System**

- Admin can manage bakery product details.
- Admin can display bakery product list.
- Admin can display bakery product information.
- User can search bakery product by bakery product ID, category and price.
- User can view bakery product list.
- User can view bakery product information.
- An application provides product management system.
- An application provides product information such as product ID, product name, price, category and amount.

➤ **Feature#3: Order Management System**

- Wholesaler can order bakery product and manage them after the order has been sent. An order can select by adding, editing and removing bakery product name and bakery product quantity in their product list.

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- Wholesaler can save unfinished bakery product list while they input numerous information (bakery product name and quantity) incomplete. Then wholesaler can return to continue their order later.
- Wholesaler can repeat previous order information from order history information.
- Wholesaler can view a summary of current bakery product list at the end of order information.
- Wholesaler can view the total price and discount of all bakery product list which has been ordered.
- Wholesaler can send finished order to the system.
- Wholesaler can receive confirmation notification by alert message on the screen.
- Admin can search order information by keywords of wholesaler ID, wholesaler name, delivery date, ingredient ID, ingredient name and category.
- Admin can view all order information of the wholesaler.
- Admin can mark progressive of order status while the order in the preparation stage.
- Wholesaler can view own order status in the preparation stage.
- An application provides order management system.
- An application provides order information such as bakery product ID, bakery product name, price, category and bakery product quantity.

➤ **Feature#4: Ingredient Management System**

- Admin can manage details of ingredient by provide the ingredient ID, ingredient name, ingredient description, category and ingredient picture.
- Admin can search ingredient information by keywords of ingredient ID, ingredient name and category.
- Admin can view ingredient information.
- An application provides ingredient management system.
- An application provides ingredient information such as bakery product ID, bakery product name, category and bakery product picture.

➤ **Feature#5: Ingredient Estimation**

- Admin can manage menu recipe information by provides the bakery product ID, bakery product name, ingredient ID, ingredient name, ingredient quantity, category and bakery product picture.
- Admin can search menu recipe information by filter keywords of bakery product ID, bakery product name, ingredient ID, ingredient name and category.
- Admin can view menu recipe list such as bakery product name.
- Admin can view menu recipe information such as ingredient quantity.

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- An application provides menu recipe information such as bakery product ID, bakery product name, ingredient ID, ingredient name, category and bakery product picture.
- An application provides ingredient estimation function.
- Admin can search ingredient estimation by filter keywords of wholesaler name, wholesaler ID, bakery product ID, bakery product name, ingredient ID, ingredient name, delivery date and category.
- Admin can select different estimation keywords to calculation.
- Admin can choose a period at start to end for calculation the ingredient usage.
- Admin can know the actual number of bakery product after manufacturing.
- Admin can view ingredient usage results such as wholesaler name, wholesaler ID, bakery product ID, bakery product name, ingredient ID, ingredient name, delivery date and category.
- An application provides a real number in bakery product manufacturing stage.
- Admin can update order status while the order in the manufacturing stage.
- Wholesaler can view own order status at the manufacturing stage.
- User can note the addition message to the order status.
- Admin can search ingredient estimation history by filter keywords of wholesaler name, wholesaler ID, bakery product ID, bakery product name, ingredient ID, ingredient name, delivery date and category.
- Admin can view ingredient estimation history list such as wholesaler name, wholesaler ID and delivery date.
- Admin can view ingredient estimation history information such as wholesaler name, wholesaler ID, bakery product ID, bakery product name, ingredient ID, ingredient name, delivery date and category.

Feature#6: Report Management System

- User can search report type by filter keywords of order history information and ingredient estimation information.
- User can select different report types to processing.
- User can choose a period to calculation the result of any report.
- User can view all report results information such as statistic data.
- User can save all report results as a PDF file format.
- An application provides report management system.
- An application provides report information consist of the report ID, report name, status, note, users types and report results.
- User can select different graph types such as a pie chart, bar chart, column chart, stock chart and area chart.
- User can view all graph data such as graph image and statistic data.
- User can save the graph image file.

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- An application provides convert function from statistic data to be a graph.
- User can search order history by filter keywords of wholesaler name, wholesaler ID, bakery product ID, bakery product name, ingredient ID, ingredient name, delivery date and category.
- User can view order history list such as wholesaler name, wholesaler ID and delivery date.
- User can view order history information such as wholesaler name, wholesaler ID, bakery product ID, bakery product name, ingredient ID, ingredient name, delivery date and category.



Figure 2: Proposal Milestone

As shown in figure 2, There are the details of each task that our have done with the documentation which represent by form of start date, end date and duration.

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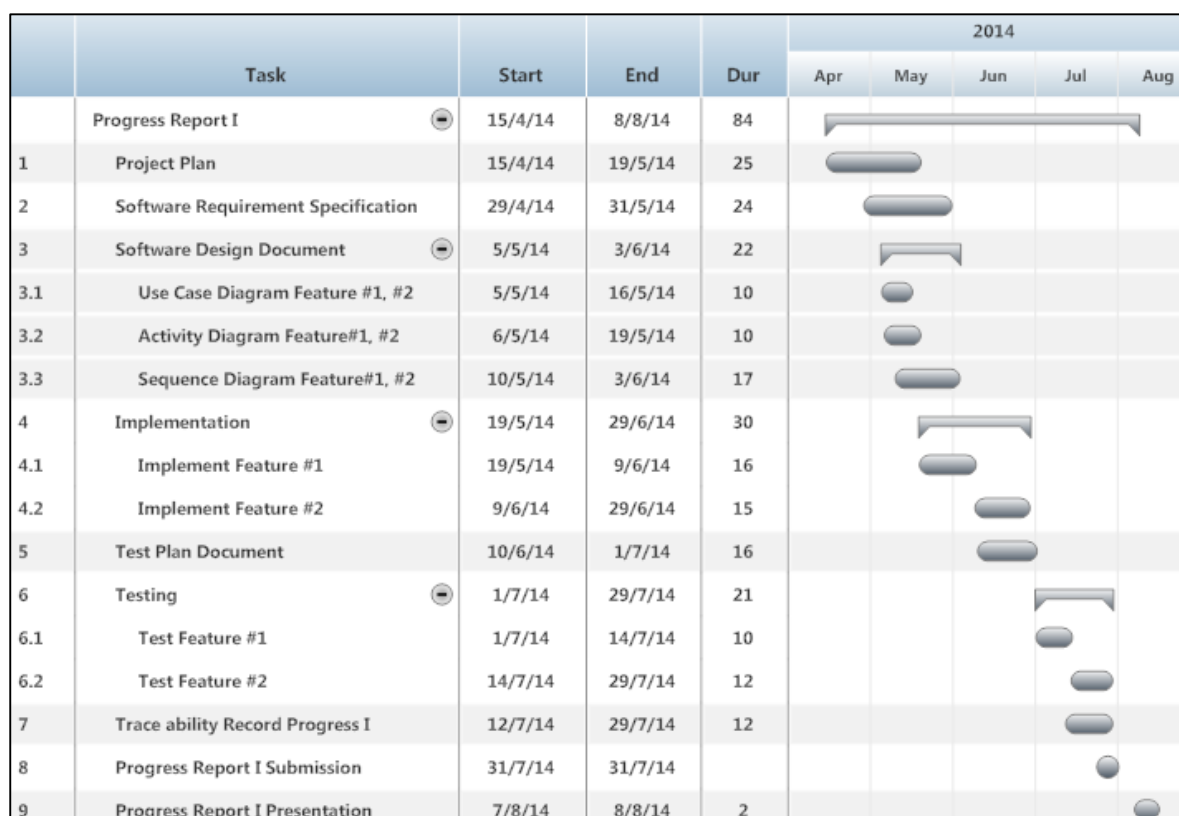


Figure 3: Progress Report I Milestone

As shown in figure 3, We will start develop the feature#1 and #2. In addition we will also start to do the development plan, quality plan, software requirement specification, software design, test plan and traceability record which represent by form of start date, end date and duration.

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Figure 4: Progress Report II Milestone

As shown in figure 4, We will start develop the feature#3 and #4. In addition we will also start to do the development plan, quality plan, software requirement specification, software design, test plan and traceability record which represent by form of start date, end date and duration.

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Figure 5: Final Progress Report Milestone

As shown in figure 5, We will start develop the feature#5 and #6. In addition we will also start to do the development plan, quality plan, software requirement specification, software design, test plan and traceability record which represent by form of start date, end date and duration.

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Chapter Seven | Software Configuration Management

7.1 Software Configuration Management

Software Configuration Management is a set of activities designed to control change by identifying the work products that are likely to change, establishing relationships among them, defining mechanisms for managing different versions of these work products, controlling the changes imposed, and adding and reporting on the changes made. In other words, SCM is a methodology to control and manage software development project. ^[6]

7.2 Filename Format

For the filename format that we using for all project document is:
[Project name]-[Document name]_[Version].file type

7.3 Project Repository

C:\Users\VAiO\Desktop\Senior Project

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7.4 Software Configuration Item Table

No.	Item name	File name	File Type	Owner (Role)	Repository (Path)	Baseline Version
1	Project Proposal	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – Project Proposal_V.1.4	.docx	PP, NM	C:\Users\VAiO\Desktop\Senior Project\Project Plan	1.4
2	Project Management Plan	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – PMP_V.3.0	.docx	PP, NM	C:\Users\VAiO\Desktop\Senior Project\PMP	3.0
3	Software Requirement Specification	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – SRS_V.3.0	.docx	PP, NM	C:\Users\VAiO\Desktop\Senior Project\SRS	3.0
4	Software Design Document	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – SDD_V.3.0	.docx	PP, NM	C:\Users\VAiO\Desktop\Senior Project\SDD	3.0
5	Software Test Plan Document	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – Test Plan_V.3.0	.docx	PP, NM	C:\Users\VAiO\Desktop\Senior Project\Test Plan	3.0
6	Traceability Record	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – TR_V.3.0	.docx	PP, NM	C:\Users\VAiO\Desktop\Senior Project\TR	3.0
7	Software Source Code	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – Code_V.3.0	.zip	PP, NM	C:\Users\VAiO\Desktop\Senior Project\Code	3.0
8	30 Seconds Video Presentation	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – VDO_V.1.0	.mp4	PP, NM	C:\Users\VAiO\Desktop\Senior Project\VDO	1.0
9	Poster Size A1	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – Poster_V.1.0	.png	PP, NM	C:\Users\VAiO\Desktop\Senior Project\Poster	1.0
10	Software Product	Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – Software_V.3.0	.zip	PP, NM	C:\Users\VAiO\Desktop\Senior Project\Software	3.0

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Chapter Eight | Risk Management

Risk management is concerned with identifying risks and drawing up plans to minimize their effect on the project. ^[5]

A risk is probability that some adverse circumstance will occur. ^[13]

- Project risks affect schedule or resources.
- Product risks affect the quality or performance of the software being developed.
- Business risks affect the project team during developing or procuring the software.

Identified risks at the start of the project and the start of the development phase. All identified risks are documented and assessed in the Risk Management Process by the Project Development Team. In the Risk Management Process defines the possible risks and solution of them, and who is responsible for. ^[14]

8.1 Risk Management Process

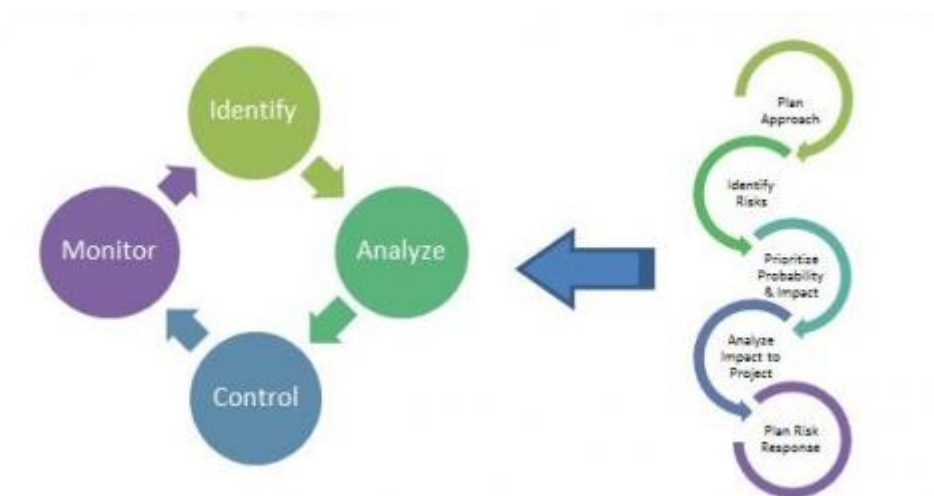


Figure 3: Risk Management Process Model ^[2]

1. Risk identify: identify the project, product and business risks.
2. Risk analyze: Assess the likelihood and consequences of the risks.
3. Risk controlling: Draw up plans to avoid or minimize the effects of the risks.
4. Risk monitoring: Monitor the risks throughout the project.

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8.2 Risk Identification and Solutions

No.	Risk Statement	Risk Solution	Priority
1	The requirements might be change.	<ul style="list-style-type: none"> • Meeting and discuss the impact of the changed requirements with the team member and project advisor. • Design system which changed requirements and related with the other requirements. • Use software configuration management and follow change management step. 	High
2	During the implementing, the internet maybe out of order or slow.	<ul style="list-style-type: none"> • Change the working place. 	Medium
3	The deliverables maybe delay.	<ul style="list-style-type: none"> • Try to study more hard than previous work. • Ask a professional to make faster understand. • Try to follow the schedule and milestone. 	High
4	Team member maybe get engaged and can't develop the project.	<ul style="list-style-type: none"> • Assign work to left team member who doesn't get involved. 	Low
5	Budget of developing may not enough.	<ul style="list-style-type: none"> • Ask for more budgets from project advisor. 	Low
6	Work products are not submitted on time.	<ul style="list-style-type: none"> • Establish the project plan. • Develop project follow the project plan. 	High
7	Work products are not traceable.	<ul style="list-style-type: none"> • Create the traceability record. 	Medium
8	Team member lack skill and knowledge.	<ul style="list-style-type: none"> • Team member is tutoring implementation. • Ask for assistance and support from textbooks, websites, experienced developer and advisor. 	High
9	Ambiguous responsibility.	<ul style="list-style-type: none"> • Always discuss the work together. 	Medium
10	Team member misunderstand system work.	<ul style="list-style-type: none"> • The member's review system before development phase and use diagram to explain system working. 	High
11	Human resource not enough.	<ul style="list-style-type: none"> • Planning schedule and hard working. 	Medium
12	Unfamiliar with testing process.	<ul style="list-style-type: none"> • Study testing technique during the test design. 	Medium
13	The computer crash.	<ul style="list-style-type: none"> • Always save all file in Github repository. 	Medium
14	Bad communication between team members	<ul style="list-style-type: none"> • Try to understand each other and exchange more information together. 	Medium

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