Improvement for Lunch Order Module
Software Development Plan
Version 1.0

Revision History

Date	Version	Description	Author
19/09/2017	1.0	Create the document	Thu Nguyen, Jirakit Paitoonnaramit
25/09/2017	1.1	Update the plan	Thu Nguyen
02/11/2017	1.1	Update the plan	Thu Nguyen

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Software Development Plan

1. Introduction

1.1 Purpose

The purpose of the *Software Development Plan* is to gather all information necessary to control the project. It describes the approach to the development of the software and is the top-level plan generated and used by managers to direct the development effort.

The following people use the *Software Development Plan*:

- The **project manager** uses it to plan the project schedule and resource needs, and to track progress against the schedule.
- **Project team members** use it to understand what they need to do, when they need to do it, and what other activities they are dependent upon.

1.2 Scope

This *Software Development Plan* describes the overall plan to be used by the "Lunch Order" project. The plans as outlined in this document are based upon the product requirements as defined in the Software Requirements Specification.

1.3 What not in scope

This project will not develop the feature "Acknowledgement" which allows vendors to acknowledge receiving emails from customers. The feature "Acknowledgement" will be developed in the next version of Lunch Order module.

In this project, in other words in this version of Lunch Order, the feature "Send emails to vendors" will not support to send collective emails including orders by vendors. This feature will be developed in the next version of Lunch Order module.

1.4 Definitions, Acronyms, and Abbreviations

No.	Term	Definition
1	SRS	Software Requirement Specification

1.5 Overview

This *Software Development Plan* contains the following information:

Project Overview — provides a description of the project's purpose, scope, and objectives. It also defines the deliverables that the project is expected to deliver.

Project Organization — describes the organizational structure of the project team.

Management Process — explains the estimated cost and schedule, defines the major phases and milestones for the project, and describes how the project will be monitored.

Applicable Plans and Guidelines — provides an overview of the software development process, including methods, tools and techniques to be followed.

2. Project Overview

2.1 Project Overview, Scope, and Objectives

Many companies order sandwiches, pizzas and other, from usual suppliers, for their employees to offer them more facilities. However lunches management within the company requires proper administration especially when the number of employees or suppliers is important.
The "Lunch Order" module has been developed to not only make this management easier but also offer employees more tools and usability. However, the existing verion of this module doesn't support to send emails to vendors and the feature Favorite Order.

This project is to extend the "Lunch Order" module, providing the feature "Sending email to vendors" and the feature Favorite Order. Therefore, it will provide a more perfect tool for organizations, companies and their employees.

The project goals are to extend the "Lunch Order" module based on Odoo with following improvements:

- Send email to vendors when users make orders.
- Create favorite orders.

2.2 Project Deliverables

Deliverables for each project phase are identified in the Development Case. Deliverables are delivered towards the end of the iteration, as specified in section *5.3.3 Deliverables.*

3. Feasibility Study Report

3.1 Operational Feasibility

The improvement for module makes it easier for users to make orders. The feature "Sending email to a vendor" will be performed when a user clicks to send an order.

The improvement for ""Preference of users" lets users to select their favorite orders in the history conveniently.

3.2 Technical Feasibility

Odoo supports well to send emails. Therefore, it is feasible to develop the feature "Sending email to a vendor".

The algorithm to create a list of favorite orders is not difficult to perform. The numbers of orders in history will be counted and orders with the biggest numbers will be in the list of favorite orders.

3.3 Economic Feasibility

The complexity of the improvement is medium. Therefore, it is possible to finish this project in some months, following the plan exactly.

4. Project Organization

4.1 Roles and Responsibilities

No.	Person	Role
1	Thu Nguyen	Project Manager Software Analyst Developer Code Reviewer and Tester
2	Jirakit Paitoonnaramit	Developer Architecture Designer Code Reviewer and Tester

5. Management Process

5.1 Development Model

This project applies the WaterFall Model because:

- The requirements are very stable and change is very rare.
- Phases are done sequentially and separately
- Waterfall is simple and easy to manage the project

5.2 Project Estimates

No	Phase	% of total time	Days
1	Initiate, Analyze	15.5%	11
2	Design	15.5%	11

3	Implement and unit testing	50%	36
4	Integrate and system testing	15.5%	11
5	Release, Operate, Maintain	3.5%	3

5.3 Project Plan

5.3.1 Project Schedule

Task Name	Duration	Start	Finish	Predecessors
Make Project plan	1d	15/09/17	15/09/17	
Review a plan	1d	16/09/17	16/09/17	1
Study feasibility	2d	17/09/17	18/09/17	2
Analyze, write SRS	6d	19/09/17	24/09/17	3
Review SRS and Requirement Validation	1d	25/09/17	25/09/17	4
Design system	10d	26/09/17	05/10/17	5
Review System Design	1d	06/10/17	06/10/17	6
Implement and unit testing	36d	07/10/17	11/11/17	7
Functional, Integrate and system testing	11d	01/12/17	11/12/17	8
Release, Operate, maintain	3d	12/12/17	14/12/17	9

5.3.2 Project's Milestone

No.	Tasks/Activities	Deliverables	Timeline
1	Make Project plan	Project plan	15/09- 16/09
2	Write Software Requirement Specification	SRS	16/09 – 25/09
3	Design system	SRA	26/09-06/10
4	Implement and unit testing	Source code and working features	07/10-11/11
5	Functional, Integrate and system test	The system with complete functionality	01/12-11/12
6	Operate, Release	All documents of the project	12/12-14/12

5.3.3 Deliverables

No.	Timeline	Deliverables
1	The 1st presentation, 22/09/2017	Project plan, First version of SRS
2	The 2nd presentation, 20/10/2017	Complete version of SRS, SRA
3	The 3rd presentation, 24/11/2017	Complete working feature, source code
4	The final presentation, 15/12/2017	The complete system running on Odoo

5.4 Project Monitoring and Control

5.4.1 Requirements Management

The requirements for this system are captured in the Software Requirement Specification.

5.4.2 Schedule and Budget Control

Expenses are monitored by the project manager, and reported and assessed monthly.

The project manager maintains a schedule showing the expected date of each milestone. The line items in the schedule include work packages assigned to individuals. Each individual who is assigned a work package provides %completion information to the project manager on a weekly basis. Changes in the schedule will be escalated to the project sponsors, who will then decide whether to alter scope in order to preserve target completion dates.

5.4.3 Quality Control

Defects will be recorded and tracked as Change Requests, and defect metrics will be gathered (see Reporting and Measurement below).

All deliverables are required to go through the appropriate review process. The review is required to ensure that each deliverable is of acceptable quality.

Any defects found during review must be corrected prior to releasing for integration.

5.4.4 Reporting and Measurement

Updated schedule estimates, and metrics summary reports, will be generated at the end of each milestone. These reports will be sent out among team members and customers.

Team members communicate with each other and customers via email and in person.

Earned value for completed tasks. This is used to re-estimate the schedule and budget for the remainder of the project, and/or to identify need for scope changes.

Total defects open and closed – shown as a trend graph. This is used to help estimate the effort remaining to correct defects.

Acceptance test cases passing – shown as a trend graph. This is used to demonstrate progress to stakeholders.

In addition, overall costs will be monitored against the project budget.

5.4.5 Risk Management

Project risk is evaluated at least once per milestone and documented in this table. The risks of the greatest magnitude are listed first in the table.

Risk Ranking (High, Medium, Low)	**Risk Description**	**Impact**	**Mitigation Strategy and/or Contingency Plan**
High	Poor Productivity Given long project timelines, the sense of urgency to work in earnest is often absent resulting to time lost in early project stages that can never be regained.	Tasks may not be completed on time	Team members often communicate to each other and monitor the progress of the project
High	Wrong project planning can make redundancy work and take a long time	Tasks may not be completed on time and cannot follow with project	Make non redundancy in project planning. Discuss about the way to develop in

	to develop.	planning.	each role.
High	Platform Incompatibility	Cause high cost and long time to correct error.	Collect information from users, analyze to make an effective system requirement.

5.4.6 Configuration Management

Appropriate tools will be selected which provide a controlled versioned repository of project artifacts.

All source code, test scripts, and data files are included in baselines. Documentation related to the source code is also included in the baseline, such as design documentation. All customer deliverable artifacts are included in the final baseline, including executables.

Full backups are performed biweekly.

6. Annexes

Waterfall model's guideline: https://www.tutorialspoint.com/sdlc/sdlc_waterfall_model.htm