# Software Project Management Plan for “Online Purchasing System”

1. **Introduction**

In the TradeK project, a system has to be designed to support electronic shopping system. The software application to be made consists of at least three main functions, which must interact using the internet. The application may involve the basic e-commerce activities, such as members’ login, browsing, buy and sell activities. The entire system has to be developed (in JAVA) in a way that it is easy to maintain and extend.

* 1. **Project Overview**

This project is to create a prototype Online Purchasing System for TradeK Cake House. It is an online application like a virtual shop on the Internet where customers can browse the products catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e-mail notification is sent to the customer as soon as the order is placed.

* 1. **Project Deliverables**

1. Preliminary Project Plan 01.06.2016

2. Requirements Specification 10.06.2016

3. Analysis [Object model, Dynamic model, and User interface] 17.06.2016

4. Architecture Specification 26.06.2016

5. Component/Object Specification 09.07.2016

6. Source Code 18.07.2016 - 31.07.2016

7. Test Plan 01.08.2016 - 07.08.2016

8. Final Product Demo 08.08.2016 - 12.08.2016

* 1. **Evolution of this document**

This document will be updated as the project progresses. Updates should be expected in the following sections:

1. ***References*** - updated as necessary.
2. ***Definitions, acronyms, and abbreviations*** - updated as necessary.
3. ***Organizational Structure*** will be updated as the team leaders are assigned for each phase.
4. ***Technical Process -*** this section will be revised appropriately as the requirements and design decisions become clearer.
5. ***Schedule –*** as the project progresses, the schedule will be updated accordingly.

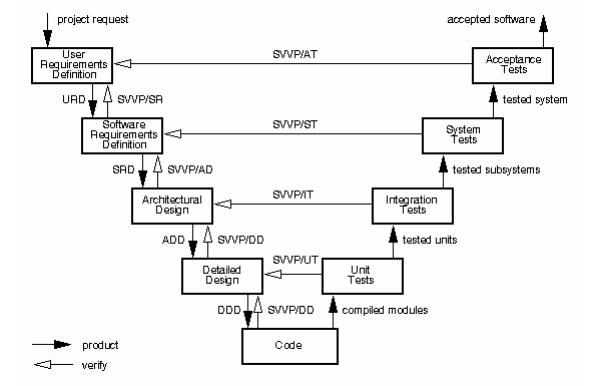
**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision** | **Date** | **Updated By** | **Update Comments** |
| 0.1 | 01.05.2016 | Sakinah Binti Mohd Azam | First Draft |
| 0.2 | 01.07.2016 | Tham Mei Yee | Second Draft/Final Draft |

* 1. **References**
     1. Team Website http://wwwis.win.tue.nl/2M390/projects/spingrid/spmp.pdf
     2. Project Scope http://wwwis.win.tue.nl/2M390/projects/spingrid/spmp.pdf
     3. Case Studies
* <http://allrecipes.com/recipe/10926/cake-mix-cookies-iv/>
* <http://www.costco.com/cakes-cookies.html>
* <http://www.cakescookiesandcraftsshop.co.uk/>
  1. **Definitions, Acronyms, and Abbreviations**
     1. UML - Unified Modeling Language
     2. AD - Architectural Design
     3. ADD - Architectural Design Document
     4. ATP - Acceptance Test Plan Client Monitor, Agent or Submitter
     5. CM - Configuration Management
     6. Customer - TradeK Cake House
     7. DD - Detailed Design
     8. DDD - Detailed Design Document
     9. ITP - Integration Test Plan Monitor Application that either monitors dispatchers
     10. PM - Project Manager
     11. QAM - Quality Assurance Manager
     12. SCMP - Software Configuration Management Plan
     13. SM - Senior Management SPMP Software Project Management Plan (this document)
     14. SQA - Software Quality Assurance
     15. SQAP - Software Quality Assurance Plan
     16. SR - Software Requirements
     17. SRD - Software Requirements Document
     18. STD - Software Transfer Document
     19. STP - Software Test Plan Submitter Application that submits jobs to dispatchers
     20. SUM - Software User Manual
     21. SVVP - Software Verification and Validation Plan
     22. TBD – To Be Decided
     23. TR - Transfer Phase
     24. UR - User Requirements
     25. URD - User Requirements Document
     26. UTP - Unit Test Plan
     27. VPM - Vice Project Manager
     28. VQAM - Vice Quality Assurance Manager

1. **Project Organization**
   1. **Process Model**

The process used for this project will be a V-model such that each stage of the model allows us to do testing after completing a phases. Referring to the diagram below, each phase is tested after completion.



* 1. **Organizational Structure**

Team Members –

* + 1. Fatin Izzyan Binti Nasaruddin
    2. Tham Mei Yee
    3. Sakinah Binti Mohd Azam
    4. Nur Hidayah Binti Mazni
    5. Rofithah Binti Omar

|  |  |  |
| --- | --- | --- |
| **Name** | **Organization/**  **Position** | **Contact Information** |
| Jordan Segundo | ITech Project Manager | [jrdnsegundo@gmail.com](mailto:jrdnsegundo@gmail.com)  09051001800 |
| Lovely Mae Ignacio | ITech Business Analyst | lovelymaeignacio@gmail.com  09468847142 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Days** | **Deliverable** | **Team Leader** | **Deliverable Description** |
| 9 | 1 | Fatin Izzyan Binti Nasaruddin | Project Plan |
| 7 | 2 | Tham Mei Yee | Requirements Specification |
| 9 | 3 | Sakinah Binti Mohd Azam | Analysis |
| 13 | 4 | Nur Hidayah Binti Mazni | Architecture Specification |
| 9 | 5 | Rofithah Binti Omar | Component/Object Specification |
| 14 | 6 |  | Source Code |
| 7 | 7 |  | Test Plan |
| 5 | 8 |  | Final Deliverable |

## Organizational Boundaries and Interfaces

Team leaders throughout each development of the phases will be responsible for coordinating team meetings, updates, communications, and team deliverables.

* 1. **Project Responsibilities**

For the most vital responsibilities per phase of each team members, please refer to segment 2.2. Ultimately the project team is responsible for the successful delivery of the product. The team member tasks per deliverable according to expertise and the phases are as given below:

1. Project Plan – Whole Team
2. Requirements Specification – TBD
3. Analysis – TBD
4. Architecture Specification – TBD
5. Component/Object Specification – TBD
6. Source Code – TBD
7. Test Plan – TBD
8. Final Deliverable – Entire Team

|  |  |  |
| --- | --- | --- |
| **Name** | **Organization/**  **Position** | **Role/Responsibilities** |
| Jordan Segundo | ITech Project Manager | * Managing and leading the project team. * Developing and maintaining a detailed project plan. * Monitoring project progress and performance. * Managing project evaluation and dissemination activities. * **Develop corrective actions when necessary.** |
| Lovely Mae Ignacio | ITech Business Analyst | * Prepare reports on project plans, status, progress, risks, deadlines and resource requirements. * Develop and perform work flow analysis to find out the difficulties in reaching goals. * Provide project cost estimates. |
| Angela Denise Fernandez | ITech Designer | * Propose effective design solutions to meet project goals. * Prepare design layouts and sketches according to company design standards. * Keeping of records and files. |
| Seiji Soliweg | ITech Staff | * Documentation of daily activities. * Making kick-off meeting reports. * In-charge of materials needed for team building activities. |

1. **Managerial Process**
   1. **Management Objectives and Priorities**

The management objective is to deliver the product in time and of high quality. The PM and QAM work together to achieve this by respectively checking that progress is made as planned and monitoring the quality of the product at various stages.

* 1. **Assumptions, Dependencies, and Constraints**

In this project plan, a number of factors are taken into account. The following list shows the way milestones on various project phases have been scheduled:

• The team budget of 5 persons x 365 hours = 1825 hours

• The project deadline of August 12th.

• The final presentation is on August 12th.

• The peer evaluation deadline is on August 8th.

• Other days the weekends holiday is closed (June 5th, June 12th, June 19th, June 26th, July 3rd, July 10th, July 17th, July 24th, July 31th, August 7th).

NOTE: Due to the deadline of 12th August 2016, running out of time will have its reflection on the product, and not on the duration of the project. By assigning a priority to every user requirement, a selection can be made of user requirements that may be dropped out if time runs out.

* 1. **Risk Management**

This section mentions any potential risks for the project. Also, schedules or methods are defined to prevent or to reduce the risks as below:

* + 1. Technology risk
    2. People risk
    3. Financial risk
    4. Market risk
    5. Structure/process risk

The following are the possible risks to be encountered during the development of the project and how they can be prevented.

1. Miscommunication

*Prevention*: Team members should not hesitate to ask and re‐ask questions if things are unclear. Team members should have a written copy of the tasks assigned to them every meeting.

*Correction*: When it becomes clear that miscommunication is causing problems, the team members should gather in a meeting to clear things up.

1. Time shortage

*Prevention*: Care is taken to plan enough spare time.   *Correction*: When tasks fail to be finished in time or when they are finished earlier than planned the project planning is adjusted

1. Illness or absence of team members

*Prevention*: Team members should warn their team leader or the PM timely before a planned period of absence.

*Correction*: Work can be taken over quickly by someone else or be distributed among the team members if a person gets ill.

Monitoring and Controlling Mechanisms:

The monitoring of progress is done by the PM using the following means:

Project Kick-off Meetings

The project group meetings take place within the class room or through chat. These meetings are meant to inform each other of the progress made on various tasks and to assign new tasks.

Progress Report

Progress report is done every Friday. This is meant to inform and show the progress in the development of the project and how things are going.

* 1. **Monitoring and Controlling Mechanisms**

The monitoring of progress is done by the PM using the following means:

* + 1. Weekly project status meetings
    2. Shared document repository
    3. Project tracking by MS project plan
    4. Tracking utilizing baselines in MS project

1. **Technical Process**
   1. **Methods, Tools, and Techniques**

The project will be implemented utilizing V-model methodology, and tools such as Dreamweaver, Microsoft Project, Star UML, Java, MySQL, QTP, and Load Runner will be utilized. The risks for each category are listed to complete the project successfully. For each risk, a description, a probability of occurrence, the associated action and the impact of the risk are given.

* 1. **Software Documentation**

Documentation such as Project Charter, Business Requirement Document, Functional Specification document, Cost Benefit Analysis, Technical Specification document, Detail Design Document, Test Plan, Implementation Plan, Detailed Project Report, and Benefit Realization document.

* 1. **Project Support Functions**

All project support documents will be completed in applicable phases.

1. **Work Elements, Schedule, and Budget**
   1. The project is accounted for project resources, technologies and tools required to whole analysis, implementation, and test of the application.
   2. The project lead will be rotated for each phase within 5 team members.
   3. The document for all phases will be revised in subsequent phases if applicable.

Budget and Resource Allocation

Salary 80,000.00

Office Operations/Supplies/Equipment/Consumables 40,000.00

Miscellaneous 10,000.00

**Total**  **Rs. 130,000.00**

Schedule

