# ABC’s Inventory Management System

## Project Plan

## Introduction

ABC is a retail company selling men’s clothing in New South Wales. The company has been growing rapidly, hence requires their warehouse system to be upgraded. The purpose of this project is to provide a digitized inventory management system for ABC. The aim of this document is to provide an introduction to all the team members and define their roles throughout this project. The document also aims to provide details of the technical work packages to be assigned to each team members. This document will also be introducing the management and technical practices and measurements that will be used in the project. Moreover, the document will be introducing the software deployment and update strategy into the production environment. Finally, the document will describe all the milestones of the project and the objectives of each milestone.

## Project Organization

The team assigned for this project is known as ‘Fellowship of the’. The following is a brief introduction of each team members and their roles in the project:

|  |  |
| --- | --- |
| Team Member | Role |
| Shirish Maharjan (the wiz kid) | Project Manager |
| Heiu Hanh Tran (the tech guru) | Head of Programming |
| Arik Maharjan (the humble genius) | Head of Documentation and Marketing |

(Note: The role of each team member is subject to change every month so that each team member gets full experience out of the project.)

The following is the detailed description of each role in the project (some of the tasks like programming and documentation needs to be done by each team member. However, the division of these tasks will be done by the project manager.):

|  |  |
| --- | --- |
| Role | Description |
| Project Manager | * Actively Planning * Making Schedules and dividing task * Making sure everyone is working in accordance with the schedule * Conducting Meetings * Making sure the overall work of the team is of high standard * Leading the team * Reviewing final version of products and posting it to the submission document * Documentation * Programming (includes debugging and testing) |
| Head of Programming | * Making sure codes are of appropriate standard * Making sure each team member is on schedule with their coding task * Reviewing code * Make sure there is proper collaboration of codes * Make sure the product is of high standard * Documentation * Programming (includes debugging and testing) |
| Head of Documentation and Marketing | * Making sure all the documentations are of appropriate standard * Preparing reports for each iteration * Preparing reports for meetings with the Sponsor * Making sure team members are on schedule with their documentation tasks * Reviewing documentations if required * Documentation * Programming (includes debugging and testing) |

Communication is a very important factor for a successful project. Therefore, the following are the communication channels that team members will be using in the project:

1. Face to Face meeting: For detailed discussion about ideas, schedules, tasks and presenting each team member’s work.
2. Telegram: For instant messaging and immediate information sharing.
3. Email: For sending and receiving documents to each other. Emails can also be used to communicate all non-immediate information.
4. Prexip/ CSU Video Conferencing tool: This tool will be used to conduct online meetings and emergency meetings (if necessary). This is a free tool provided by the university which can be used for presentations. It can also be used to help each other out with issues if required.

The details about the communication plan, version control document and the project proposal can be found in the link to the group repository below:

<https://1drv.ms/f/s!AmybkY7r6VWhr0-8rK5CLzhdp2A2>

## Project Practices and Measurements

In this project, software development process and project management will be conducted using the Unified Process (UP) Framework. UP is a use-case driven, architecture centric, risk prioritized, iterative, incremental’ process. There are four phases of UP which are The Inception Phase, The Elaboration Phase, The Construction Phase and The Transition Phase. This project will be conducted in two steps between two semesters. In the first step (semester 201830) the first two phases of the Unified Process will be conducted. While the final two phases will be conducted in the second step of the project i.e. semester 201860. Following the UP framework, this project will be iterative and incremental after each iteration. Therefore, a detailed iteration plan will be made for each iteration and each team member will be expected to conduct their tasks in accordance with the iteration plan and integrate their completed tasks. This way team members can keep track of what task was done when and when it was approved. Changes to the project and the iteration plan can also be made if required. Documentation changes can also be made as required. Finally, the final iteration will be conducted which will produce the final product of the project.

Similarly, after each iteration is completed, a team member will conduct an iteration assessment and write down an iteration burndown report. This will help clarify which task was completed and which task needs completion from the previous iteration. A check list will also be created for each task in the iteration to track the progress of the iteration which will help in the preparation of the iteration assessment report. Gantt charts will be used to plan and schedule the project. This will help team members assess time and resource needs and dependencies of the project. It will also provide a timeline of the entire project.

When all the iterations are completed, a final report will be prepared assessing the entire project to check if any changes need to be made.

## Deployment

This section clarifies the deployment strategy of the software into the production environment. When the alpha version of the software is available, it will be tested by the team members. Since beta testing is unsuitable for this project because of the timeframe and the nature of the project, when the software is alpha tested, it will be deployed in the production environment straight away. This is the version of the software which will be analyzed by the sponsor in the production environment. If any more features need to be added or changes needs to be made, a new version of the software will be created and will be tested. This process will continue until the software is accepted and signed by the sponsor.

## Project Milestones and Objectives

The following is the high-level objectives for the iterations and the milestones:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | | **Phase** | | **Iteration** | | **Dates** | | **Primary objectives** (risks and use case scenarios) |
| ITC303 – Software Development Project 1 | | Inception Phase | | I-1 | | 12/03 – 25/03 | | * Create Iteration Plan * Establish the Project Vision * Start work on the initial Use Case Model * Analyze functional and non-functional requirement * Start work on the initial Domain Model * Review and update Iteration Plan * Create detailed use case description * Analyze and identify the core use cases * Establish Development Environments * Establish Version Control * Produce iteration assessment and report document |
| I-2 | | 26/03 – 08/04 | | * Create Iteration Plan * Evaluate and identify the candidate architecture/ technology platform * Finalize Architecture/ Technology Platform * Document the finalized architecture * Review and update Iteration Plan * Produce and document initial design to support critical core Use Case using the finalized architecture * Create the technology competency demonstrator * Create the initial master test plan * Deliver Life Cycle Objectives Milestone (LCOM) * Complete Inception Phase Project Assessment and report document |
| Elaboration Phase | | E-1 | | 09/04 – 22/04  (Session Break) | | * Create Iteration Plan * Address and Mitigate the Highest Priority Risky Architectural Element * Review and update Iteration Plan * Implement Highest Priority Architectural Element to Support CCRD Use Case * Complete Development Testing for Highest Priority Architectural Element * Produce iteration assessment and report document |
| E-2 | | 23/4 – 06/05 | | * Create Iteration Plan * Address and Mitigate 2nd Highest Priority Risky Architectural Element * Review and update Iteration Plan * Implement 2nd Highest Priority Architectural Element to Support CCRD Use Case * Complete Development Testing for the 2nd Highest Priority Architectural Element * Produce iteration assessment and report document |
| E-3 | | 7/05 – 20/05 | | * Create Iteration Plan * Address and Mitigate 3rd Highest Priority Risky Architectural Element * Implement 3rd Highest Priority Architectural Element to Support CCRD Use Case * Review and update Iteration Plan * Complete Development Testing for the 3rd Highest Priority Architectural Element * Produce iteration assessment and report document |
| E-4 | | 21/05 – 1/06 | | * Create Iteration Plan * Deploy Executable Architecture in Trial Environment * Implement Highest Priority Use Case * Complete Development and Integration Testing for Highest Priority Use Case * Conduct User Acceptance Tests for Critical Core Use Case * Review and update Iteration Plan * Contingency * Review the Project Plan * Review the architecture and design documentations * Deliver Life Cycle Architecture Milestone (LCAM) * Complete Elaboration Phase Project Assessment and report document |
| Mid-year Semester Break | | | | | | | | |
| Mid-year Semester Break | | | | | | | | |
| ITC309 – Development Project 2 | Construction Phase | | C-1 | | 11/07 – 24/07 | | * Create Iteration Plan * Implement 2nd Highest Priority Use Case(s) * Complete Development and Integration Testing for 2nd Highest Priority Use Case(s) * Complete Internal User Acceptance Testing for 2nd Highest Priority Use Case(s) * Produce Iteration assessment and report document | |
| C-2 | | 25/07 – 7/08 | | * Create Iteration Plan * Implement 3rd Highest Priority Use Case(s) * Complete Development and Integration Testing for 3rd Highest Priority Use Case(s) * Complete Internal User Acceptance Testing for 3rd Highest Priority Use Case(s) * Produce Iteration assessment and report document | |
| C-3 | | 8/0 – 21/08 | | * Create Iteration Plan * Implement 4th Highest Priority Use Case(s) * Complete Development and Integration Testing for 4th Highest Priority Use Case(s) * Complete Internal User Acceptance Testing for 4th Highest Priority Use Case(s) * Produce Iteration assessment and report document | |
| C-4 | | 22/08 – 4/09  (Session Break) | | * Create Iteration Plan * Contingency * Deliver Initial Operation Capability Milestone (IOCM) * Complete Construction Phase Project Assessment and report | |
| Transition Phase | | T-1 | | 5/09 – 18/09 | | * Create Iteration Plan * Deploy Application in Trial Environment * Complete 1st Round External User Acceptance Testing * Resolve Any Identified Issues * Review and update iteration plan and produce iteration report | |
| T-2 | | 19/09 – 2/10 | | * Create Iteration Plan * Complete 2nd Round External User Acceptance Testing * Resolve Any Identified Issues * Review and update iteration plan and produce iteration report | |
| T-3 | | 3/10 – 14/10 | | * Create Iteration Plan * Contingency * Deliver Product Release Milestone (PRM) * Complete Final Project Assessment * Produce Final Report and Project Review | |