Group 5

Sneaker Sales Website
Software Development Plan (Small Project)
Version 2.0

Revision History

Date	Version	Description	Author
05 - Nov - 19	1.0	First Project Plan	Group 5
17 – Nov - 19	2.0	Revised Project Plan	Group 5

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Software Development Plan (Small Project)

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 Sneaker Sales Website project, including deployment of the product. The details of the individual iterations will be described in the Iteration Plans. The plans as outlined in this document are based upon the product requirements as defined in the *Vision Document*.

1.3 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 — describes the plan, monitoring and control of this project to achieve organizational goals in an efficient and effective manner.

2. Project Overview

2.1 Project Purpose, Scope, and Objectives

This project will implement a customized for Sneaker Sales Website which can help customers to buy sneakers online with friendly UI and some basic features like seeing the list of sneakers, search tool, supporting consumers to contact with saler, adding a item into cart, buying (COD or online payment). Beside that, the system not only help consumer to buy sneakers but also help shop steward to manage goods and orders easily.

2.2 Assumptions and Constraints

The website must be available in time for "Black Friday" in the end of the year 2019 (One of the biggest shopping event in the period of the end of each year).

2.3 Project Deliverables

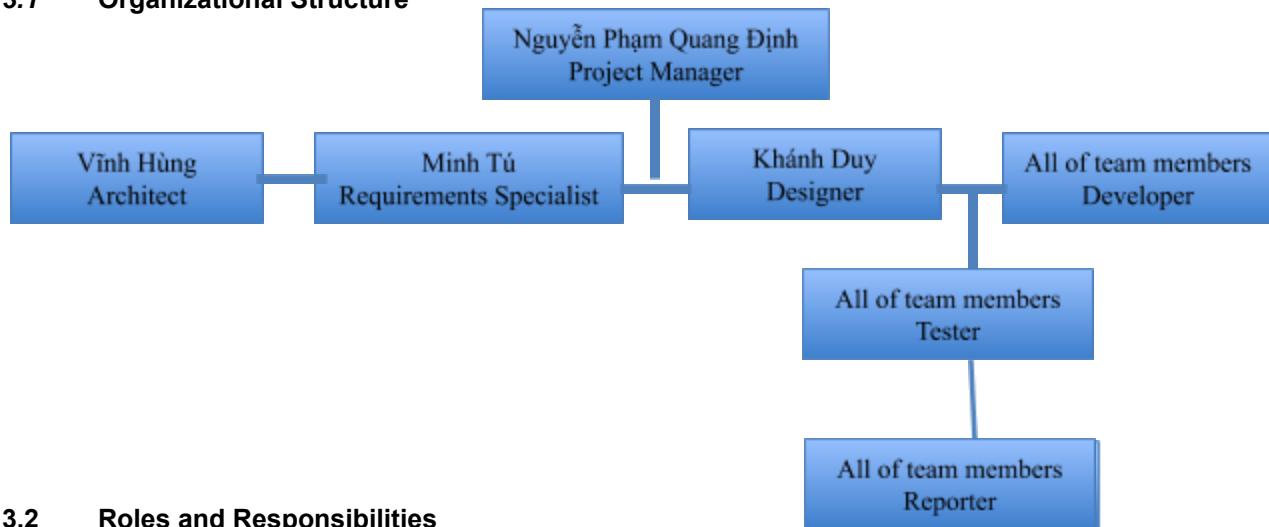The following deliverables will be produced during the project:

- Project plan
- Vision document
- Use-case specification
- Software architecture document
- Class-diagrams
- UI prototype
- Test plan

- Test cases
- Project presentation
- Final product
- Demo product
- Weekly report

3. Project Organization

3.1 Organizational Structure

3.2 Roles and Responsibilities

Person	Role
Project Manager	The Project Manager allocates resources, shapes priorities, coordinates interactions with the customers and users, and generally tries to keep the project team focused on the right goal. The Project Manager also establishes a set of practices that ensure the integrity and quality of project artifacts.The project manager also join in each roles for supervision and assistance.
Architect	The Architect leads and coordinates technical activities and artifacts throughout the project. The Architect determines, provides and explain key components and the organization of these components to form the architecture.They need to form an architecture following a certain styles like MVC, n-tier, and microservices. How components are connected, which languages are used for each component are two questions that need to be answered by the architect.
Requirements Specialist	The requirements specialist is the one that finds and analyzes requirements of the project. They also have to determine and draw use-case models and specificate them into the project's feature.

Designer	The designer leads and coordinates the prototyping and design of the Web interface, by capturing requirements on the Web interface, including usability requirements, building Web page prototypes, involving other stakeholders of the Web interface, such as end-users, in usability reviews and use testing sessions, and reviewing and providing the appropriate feedback on the final implementation of the Web interface (as created by other developers, i.e. designers and implementers).
Software Engineer (Developer)	Responsibilities for coding and transferring the design into a real Website and help tester find and fix bugs after coding. May also provide assistance to other roles as necessary. The developer also design the database for system and implement them for compatibility with system which has been created as said above.
Tester	Responsibilities for testing the program of the website (use test cases have been made), finding bugs. May also provide assistance to other roles as necessary.
Reporter	Reporter must record the work done in a general and complete manner. They then write these into weekly reports.

4.   Management Process

4.1   Project Estimates

This project will take 10 weeks.

4.2   Project Plan

4.2.1   Phase Plan

The development of the will be conducted using a phased approach where multiple iterations occur within a phase. The phases and the relative timeline is shown in the table below:

Phase	Start	End
Inception	Week 1	Week 3
Elaboration	Week 4	Week 6
Construction	Week 7	Week 9
Transition	Week 10	Week 10

Timeline:

Time		Task
Sprint 1	Week 1	- Choose topic for project - Division of roles

		- Write report: "The reason that why has chosen that topic" - Write report: "The feature of product, environment and users" - Setup necessary tools
	Week 2	- Planning for what to do in the future - Realizing the project vision - Training about web development skills
	Week 3	- Training about web development skills - Completing project plan and vision document
	Week 4	- Detailing vision document - Revising and fixing project plan base on TA's feedback - Training about web development skills - Drawing use-case diagrams and specificating them.
Sprint 3	Week 5	- Revising and fixing use-case specification base on TA's feedback - Defining software architecture - Drawing class diagrams
	Week 6	- Revising and fixing software architecture document base on TA's feedback - Sketching the user interface for the system
Sprint 4	Week 7	- Implementation (implement key features) - Creating test plan and test case for this project
	Week 8	- Completing demo version (ver1) - Tesing demo version
Sprint 5	Week 9	- Fix bugs and finish in terms of implementation - Testing and finishing the release version of this project
	Week 10	- Report - Presentation

The milestones that mark the end of each phase can be seen in the table below:

Description	Milestone
Inception	This phase will determine what to do and whether it is worth doing? Moreover, this phase have to determine the plan for future and the vision of this project. Each member in this phase have to know about website development skills.
Elaboration	The Elaboration Phase will analyze the requirements, draw use-case model and specificate them. In addition, this phase must also determine the architecture of system and which languages are chosen for building system.

	Sketch project's UI (Maybe wireframe or prototype)	
Construction	During the Construction Phase, test case will be analyzed and designed, test plan will be planned also.	
	The Beta version for Release version will be developed and distributed for evaluation. The implementation and test activities will be completed.	
	Complete release version of this project (Final product)	
Transition	The Transition Phase will prepare final product for submitting and presentation (Related document will be submitted as well)	

4.2.2   Iteration Objectives

Phase	Iteration	Description	Associated Milestones	Risks Addressed
Inception	Preliminary Iteration	Defines project's topic, product requirements, project plan, project vision.	Project Review	Clarifies user requirements up front. Develops realistic project plans and scope. Determines feasibility of project
Elaboration	Develop Architectural Prototype	Completes analysis & design for all use cases. Develops the system prototype.	Architectural Prototype	Architectural issues clarified. Technical risks mitigated. Early prototype for user review.(Ta preview)
Construction	C1 Iteration – Develop Demo Version	Implement and test use cases to provide the Demo version	Demo	All key features from a user and architectural perspective implemented in the Demo version. User feedback prior to release of software (Feedback from TA).
	C2 Iteration - Develop Initial Release	Implement and test remaining use cases, fix defects from Beta, and incorporate feedback from Beta. Develops the initial system.	Software	Software fully reviewed by user community. Product quality should be high. Defects minimized. Cost of quality reduced.
	C3 Iteration - Develop full release	Incorporate enhancements and defects from initial release. Develops the full system.	Software	Quick release addresses customer satisfaction. (TA's feedback) All key functionality provided in System by Final product

Transition	Software Release	Present and submit.	Final product, presentation slides	

4.2.3   Releases

We decide to release at least 1 demo during the making process in order to present to the custom for receiving idea and checking their requirements.

We decide to deploy 1 beta at the end of the process (the version of the project which is completed before testing), so we can find bugs and fix it before releasing the final product.

Finally, we will publish our final product to the customer.

4.2.4   Project Schedule

Version	Phase	Target date
2	Inception	10/11/2019
3	Elaboration	23/11/2019
4.1	Construction iteration 1	30/11/2019
4.2	Construction iteration 2	12/12/2019
4.3	Construction iteration 3	21/12/2019
5	Transition	28/12/2019

4.2.5   Project Resourcing

Training about web development skill and project management skill (Before week 4)

4.3   Project Monitoring and Control

4.3.1   Requirements Management

The requirements for this system are captured in the Vision document. Requested changes to requirements are captured in Change Requests, and are approved as part of the Configuration Management process.

4.3.2   Reporting and Measurement

4.3.3   Risk Management

Risks will be identified in Inception Phase using the steps identified in the RUP for Small Projects activity "Identify and Assess Risks". Project risk is evaluated at least once per iteration and documented in this table. The risks of the greatest magnitude are listed first in the table.

Risk Ranking (High, Medium, Low)	Risk Description and Impact	Mitigation Strategy and/or Contingency Plan
High	Requirement change, impact Scope, Time	choose the suitable method for the project
Medium	New technology, impact Time	Spend time on learning new technology
Low	Team member quit, impact Time	Give one job for more than one member

4.3.4 Configuration Management

Slack: Channel: ktpm-group05

Workspace: 17apcs-clc-intro2se.slack.com

Trello: https://trello.com/b/cG0aVBbL/ktpm-group05

Facebook group: https://www.facebook.com/groups/764035084010339/

Google drive: https://drive.google.com/open?id=1rv2K1HscLATAfAc-rFS7061SXxqIz5_q