DevJam

ConnectMe
Software Development Plan
Version 1.0

Revision History

Date	Version	Description	Author
08/07/2023	1.0	First Version of Project Planning	DevJam

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Software Development Plan (Small Project)

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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 **ConnectMe** 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.

2. Project Overview

2.1 Project Purpose, Scope, and Objectives

This project aims to build a website that enables users to either donate or receive donations from others. Specifically, our website allows donors to post **donating records** of their items whilst recipients will be able to post **receiving records** to specify their needs. The process of matching donors with appropriate recipients will be monitored and supported by collaborators. Overall, by trying to facilitate the process of donating and receiving donations, the project wishes to contribute to a more compassionate and caring society where people are more willing to help each other out in times of need.

2.2 Assumptions and Constraints

● Budget: 40 million VND
● Staff: Project Manager (PM), Team Leader, Architect, Designer, Developer (Dev), Tester
● Device: Laptop, Smartphone
● Schedule: 12 weeks as specified in section 4.2.3 Project Schedule
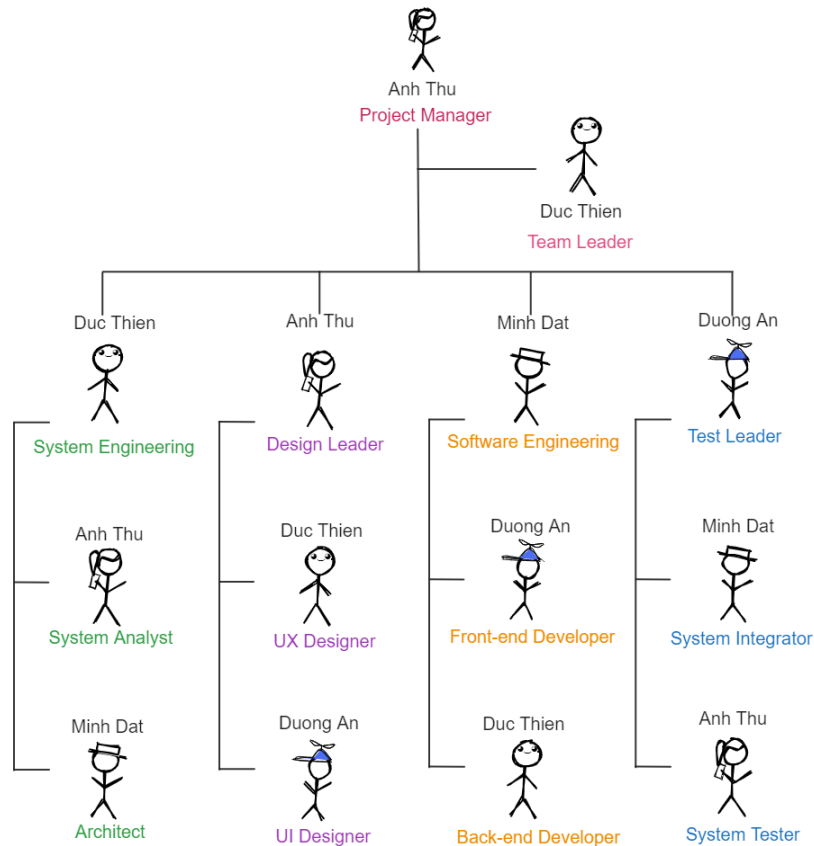
2.3 Project Deliverables

● Deliverables for each project phase are identified in the Development Case.
● Deliverables are delivered towards the end of the iteration, as specified in section 4.2.4 Project Schedule.

3. Project Organization

3.1 Organizational Structure

3.2 Roles and Responsibilities

21127175 - **Thu Le Anh** *Project Manager, Designer, Tester*

21127209 - **An Dang Dao Duong** *Developer, Tester, Designer*

21127592 - **Dat Nguyen Minh** *Architect, Developer, Tester*

21127693 - **Thien Huynh Duc** *Team Leader, Developer, Designer*

4. Management Process

4.1 Project Estimates

The project will take approximately two and a half months to complete (from June 5th, 2023 to August 28th, 2023).

- Week 01 (05/06-09/06): PA0 - Group registration and team bonding
- Week 02 (12/06-16/06): PA0 - Brainstorming, project proposal and tools setup
- Week 03 (19/06-23/06): PA1 - Project plan and vision document
- Week 04 (03/07-07/07): PA1 - Weekly report and early discussion on user interface design
- Week 05 (10/07-14/07): PA2 - Revised project plan and detailed vision document
- Week 06 (17/07-21/07): PA2 - Weekly report, use-case model and specification
- Week 07 (24/07-28/07): PA3 - Revised use-case specification, define software architecture and class diagrams
- Week 08 (31/07-04/08): PA3 - Weekly report, and code training

- Week 09 (07/08-11/08): PA4 - Revised software architecture and prototype user interface
- Week 10 (14/08-18/08): PA4 - Weekly report and features implementation
- Week 11 (21/08-25/08): PA5 - Test plan, test cases, report and presentation

Note: The project will re-estimate every time new features and requirements are added.

4.2 Project Plan

4.2.1 Phase and Iteration Plan

	PHASE AND ITERATION PLAN										
PHASE	INCEPTION					ELABORATION		CONSTRUCTION			
SPRINT	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
PA0 (Sprint 0)											
PA1 (Sprint 1)											
PA2 (Sprint 2)											
PA3 (Sprint 3)											
PA4 (Sprint 4)											
PA5 (Sprint 5)											

- Inception: PA0, PA1, PA2
- Elaboration: PA2, PA3
- Construction: PA3, PA4, PA5

4.2.2 Releases

- PA4: First release
- PA5: Final release after testing and debugging

4.2.3 Project Schedule & Resourcing

Overview: Google Sheet

Specific detail for each sprint:

★ Sprint 1:

Sprint 1:

SPRINT	TASK	OUTPUT	Week 03					Week 04				
			19 Mon	20 Tue	21 Wed	22 Thu	23 Fri	3 Mon	4 Tue	5 Wed	6 Thu	7 Fri
PA1	Project Plan	Project Plan	Thu, Dat									
	Vision Document	Vision Document	An, Thien									
	Report	Report					All					
	UI discussion	First UI sketch								All		

★   Sprint 2:

SPRINT	TASK	OUTPUT	Week 05					Week 06				
			10 Mon	11 Tue	12 Wed	13 Thu	14 Fri	17 Mon	18 Tue	19 Wed	20 Thu	21 Fri
PA2	Revise Project Plan	Revised Project Plan	Thu, Dat									
	Revise Vision Document	Detailed Vision Document	An, Thien									
	Design Use-case Model	Use-case Model					All					
	Use-case specification	Use-case Specification							All			
	Report	Report										All
	Figma training	UI sketch implementation										All

★   Sprint 3:

SPRINT	TASK	OUTPUT	Week 07					Week 08				
			24 Mon	25 Tue	26 Wed	27 Thu	28 Fri	31 Mon	1 Tue	2 Wed	3 Thu	4 Fri
PA3	Revise Use-case Model	Revised use-case model	All									
	Define software architecture	SAD			All							
	Design Class diagrams	Class diagrams						All				
	Report	Report								All		
	Web development training	Feature implementation practice								All		

★   Sprint 4:

SPRINT	TASK	OUTPUT	Week 09					Week 10				
			7 Mon	8 Tue	9 Wed	10 Thu	11 Fri	14 Mon	15 Tue	16 Wed	17 Thu	18 Fri
PA4	Revise software architecture	Revised SAD	All									
	UI implementation	UI prototype		Thu, An								
	Design database model	Database model		Duc Thien, Minh Dat								
	Feature implementation	Feature prototype			Duc Thien, Minh Dat							
	Software prototype	First release								All		
	Report	Report										All

★   Sprint 5:

SPRINT	TASK	OUTPUT	Week 11					Week 12				
			21 Mon	22 Tue	23 Wed	24 Thu	25 Fri	27 Mon	28 Tue	29 Wed	30 Thu	31 Fri
PA5	Design test-plan	Test-plan	An, Thien									
	Execute test-case	Test-case	Thu, Dat									
	Debug and fix	Complete version			All							
	Report test-case	Report					All	*FULL REPORT AND REPRESENTATION*				
	Report Full project	Report					All					

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

● Updated cost and schedule estimates, and metrics summary reports, will be generated at the end of each iteration.

● The Minimal Set of Metrics, as described in the RUP Guidelines: Metrics, will be gathered on a weekly basis. These include:

○ 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.

4.3.3 Risk Management

Risks will be identified in the 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
Requirement change	High	Frequent updates with team members and implement prototype for feedbacks before official launching
Team member illness	Medium	Flexibly assign tasks for team members and make sure that everyone understand the basic of all tasks
School's exam	Medium	Plan ahead and prioritize up-coming exams
New technology	Medium	Update and discuss regularly with team members, time reserved for training

4.3.4   Configuration Management

Appropriate tools will be selected which provide a database of Change Requests and 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 of the iteration, including executables.