DitShev

GoaTalks
Software Development Plan (Small Project)
Version 2.0

Revision History

Date	Version	Description	Author
28/10/2023	1.0	First Version of Project Plan	DitShev
16/11/2023	2.0	Second Version of Project Plan	DitShev

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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 GoaTalks 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

- The purpose of GoaTalks is to create a user-friendly and feature-rich blogging platform that enables individuals and organizations to publish and manage their written content online. Where people from many cultures around the world can share their personal opinions and perspectives on controversial topics and in-depth topics.
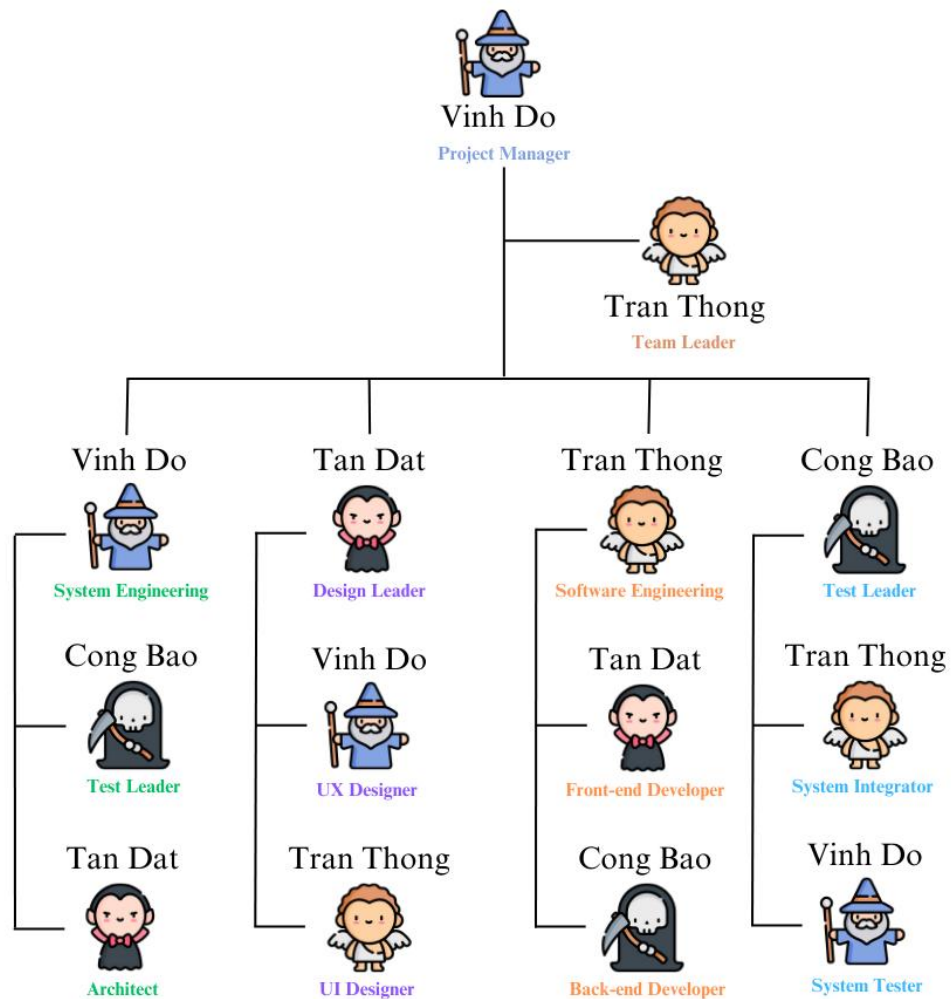
2.2 Assumptions and Constraints

- Budget: $5000.

- Staff: Project Manager (PM), Team Leader, Architect, Designer, Developer (Dev), Tester.

- Device: Laptop, Smartphone.

- Schedule: 12 weeks.

2.3 Project Deliverable

3. Project Organization

3.1 Organizational Structure

3.2 Roles and Responsibilities

21127571 – Huynh Vinh Do *Project Manager, Designer, Tester*

21127695 – Hoang Tran Thong *Team Leader, Architect, Developer*

21127594 – Pham Huynh Tan Dat *Designer, Developer, Tester*

21127737 – Tran Cong Bao *Architect, Developer, Tester*

4. Management Process

4.1 Project Estimates

WEEK	PROJECT ASSIGNMENT	DESCRIPTION
01 (16/10 – 21/10)	PA0	Project Proposal Tools Setup (Jira, React Framework, Visual Code,…)
02 (23/10 – 27/10)	PA1	Vision Document Project Plan
03 (30/10 – 03/11)	PA1	Weekly Report Finish UI/ UX Design
04 (06/11 – 10/11)	PA2	Revised Project Plan Detailed Vision Document
05 (13/11 – 17/11)	PA2	Weekly Report Use-case Model & Specification
06 (20/11 – 24/11)	PA3	Revised Use-case Specification Define Software Architecture & Class Diagrams
07 (27/11 – 01/12)	PA3	Weekly Report Code Training
08 (04/12 – 08/12)	PA4	Revised Software Architecture & Prototype Interface
09 (11/12 – 15/12)	PA4	Weekly Report Feature Implementation
10 (18/12 – 22/12)	PA5	Test Plan Test Cases
11 (25/12 – 29/12)	PA5	Project Presentation Final Submission

4.2 Project Plan

4.2.1 Phase & Iteration Plan

SPRINT \ PHASE	PHASE AND ITERATION PLAN										
	INCEPTION				ELABORATION		CONSTRUCTION				
	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

❖ Sprint 1:

SPRINT	TASK	OUTPUT	Week 02					Week 03				
			23	24	25	26	27	30	31	1	2	3
			Mon	Tues	Wed	Thurs	Fri	Mon	Tues	Wed	Thurs	Fri
PA1	Project Plan	Project Plan			Do, Dat							
	Vision Document	Vision Document			Thong, Bao							
	Weekly Report	Report						All				
	UI Completion	UI Completion									Do, Dat	

❖ Sprint 2:

SPRINT	TASK	OUTPUT	Week 04					Week 05				
			6	7	8	9	10	13	14	15	16	17
			Mon	Tues	Wed	Thurs	Fri	Mon	Tues	Wed	Thurs	Fri
PA2	Revised Project Plan	Revised Project Plan		All								
	Detailed Vision Documen	Detailed Vision Documen		All								
	Use-case Model	Use-case Model						Bao, Thong				
	Use-case Specification	Use-case Specification								Bao, Thong		
	Weekly Report	Report										All

❖ Sprint 3:

SPRINT	TASK	OUTPUT	Week 06					Week 07				
			20	21	22	23	24	27	28	29	30	1
			Mon	Tues	Wed	Thurs	Fri	Mon	Tues	Wed	Thurs	Fri
PA3	Revised Use-case Model	Revised Use-case Model		All								
	Define Software Archit	Software Architecure De				Do, Dat						
	Design Class Diagrams	Class Diagrams							Do, Dat			
	Weekly Report	Report										All

❖ Sprint 4:

SPRINT	TASK	OUTPUT	Week 08					Week 09				
			4	5	6	7	8	11	12	13	14	15
			Mon	Tues	Wed	Thurs	Fri	Mon	Tues	Wed	Thurs	Fri
PA4	Revised SAD	Revised SAD		All								
	UI Prototype	UI Prototype				Do, Thong						
	Design Database Model	Database Model							Dat, Bao			
	Weekly Report	Report										All

❖ Sprint 5:

SPRINT	TASK	OUTPUT	Week 10					Week 11				
			18	19	20	21	22	25	26	27	28	29
			Mon	Tues	Wed	Thurs	Fri	Mon	Tues	Wed	Thurs	Fri
PA5	Design Test Plan & Test	Test Plan & Test Cases	Dat, Thong									
	Execute Test Cases	Execute Test Cases			Do, Bao							
	Debug & Fix	Debug & Fix						All				
	Report Test Cases	Report								Thong, Do		
	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 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	It's crucial to maintain clear initial requirements and engage with stakeholders regularly. Keep the project plan flexible and be open to change. When requirement changes arise, quickly assess their impact on the project timeline and resources, and make necessary adjustments informally. Consider building in some flexibility from the start, maintain transparent communication, and ensure thorough testing of changes. This approach allows for adaptability without excessive bureaucracy in small project management.
Medium	Team Member Illness	When a team member becomes ill during a project, immediate communication is essential. Assess the severity and expected duration of the illness. Reassign tasks among team members, adjust the project plan, and consider temporary replacements if needed. Prioritize the team member's well-being and document all changes. Implement long-term contingency plans to handle future absences more effectively.
Low	School's Exam	Team members re-arrange personal schedule

Medium	New Technology	When introducing new technology into a project, start with a comprehensive assessment and pilot testing to evaluate its suitability. Provide training for team members and ensure seamless integration with existing systems. Develop contingency plans for potential issues, continuously monitor performance, and maintain open communication with stakeholders. Address data backup, security, compliance, and document the entire process, and evaluate the technology's impact on project goals. This systematic approach helps manage the transition effectively while maximizing the technology's benefits.

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 executable.