Generic eBook Management Application - GEMA

Software Development Plan

Version 1.0

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 22/10/2021 | 1.0 | Initial draft | Tran Kien Quoc |
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Software Development Plan

# 

# Introduction

The purpose of this document is to provide an overview of the structure of the development team, planning, schedule of the project, and other auxiliaries.

# Project Overview

## Project Purpose, Scope, and Objectives

The purpose of this project is to provide a convenient way to easily manage books, notes and documents on a personal computer.

## Assumptions and Constraints

* Schedule 16 weeks
* The project has zero-budget
* Project has 4 people, there will be no more added during the project
* Has to be available in time before the end of this semester

## Project Deliverables

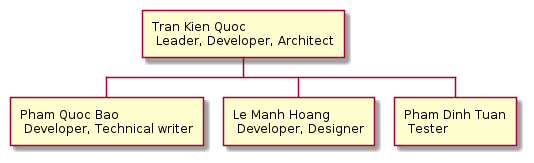
Deliverables following each sprints:

|  |  |
| --- | --- |
| **Sprint** | **Deliverables** |
| Sprint 01 | Vision document, software development plan |
| Sprint 02 | Use cases Document |
| Sprint 03 | Architecture document |
| Sprint 04 | Initial release |
| Sprint 05 | Final release |

A release consists of the source code, binary for Windows, binary for Linux.

# Project Organization

## Organizational Structure



## Roles and Responsibilities

|  |  |
| --- | --- |
| **Person** | **Role** |
| Tran Kien Quoc | Leader, Developer, Architect: Planning out the class diagram and architecture of the software. |
| Pham Quoc Bao | Developer: Writing code  Technical writer: helping the team leader with writing the reports. |
| Le Manh Hoang | Developer: Writing code  Designer: drawing assets for the program |
| Phan Dinh Tuan | Tester: Testing and reporting bugs |

# Management Process

## Project Estimates

The Inception phase of the project will take 3 weeks. Refer to the tables below for more details.

## Project Plan

### Phase and Iteration Plan

|  |  |  |  |
| --- | --- | --- | --- |
| **Phase** | **No. of Iterations** | **Start** | **End** |
| Inception Phase | 1 | 18/10/2021 | 1/11/2021 |
| Elaboration Phase | 2 | 2/11/201 | 24/11/2021 |
| Construction Phase | 3 | 25/11/2021 | 14/12/2021 |
| Transition Phase | 1 | 15/12/2021 | 25/12/2021 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Phase** | **Iteration** | **Description** | **Associated Milestones** | **Risks Addressed** |
| Inception | 2 | Preliminary Iteration |  |  |
| Elaboration | 1 |  | Class diagrams |  |
|  | 1 |  | Architecture prototypes |  |
| Construction | 1 | Develop initial | Key features |  |
|  | 2 | Develop final release | Additional features |  |
| Transition | 1 | Release | Software release |  |

### Releases

|  |  |
| --- | --- |
| **Plan** | **Date** |
| Test build 1 | 11/23/2021 |
| Test build 2 | 30/11/2021 |
| Test build 3 | 7/12/2021 |
| Demo | 11/12/2021 |
| Test build 4 | 9/12/2021 |
| Release | 25/12/2021 |

### Project Schedule

The colors specify the team responsible for the taks:

|  |  |
| --- | --- |
| **Teams** | **Members** |
| Architect | Tran Kien Quoc |
| Developers | Tran Kien Quoc, Pham Quoc Bao, Le Manh Hoang |
| Designers | Le Manh Hoang |
| Testers | Phan Dinh Tuan |
| Entire group | All members of the group |

|  |  |  |
| --- | --- | --- |
| **Task** | **Start** | **End** |
| **INCEPTION** | **18/10/2021** | **30/10/2021** |
| vision document, software development plan | 18/10/2021 | 30/10/2021 |
| **ELABORATION** | **1/11/2021** | **13/11/2021** |
| Class diagram | 1/11/2021 | 8/11/2021 |
| Use cases | 9/11/2021 | 13/11/2021 |
| **CONSTRUCTION** | **14/11/2021** | **25/12/2021** |
| Basic GUI scratch with QT | 14/11/2021 | 15/11/2021 |
| Assets (icons, ...) | 14/11/2021 | 15/11/2021 |
| High priority features | 16/11/2021 | 23/11/2021 |
| Implement SQLITE Database | 16/11/2021 | 16/11/2021 |
| Implement Qt books view GUI | 17/11/2021 | 18/11/2021 |
| Implement book adding and deletion | 19/11/2021 | 22/11/2021 |
| Testing 1 | 23/11/2021 | 23/11/2021 |
| Bug fixes and Medium priority features | 24/11/2021 | 29/11/2021 |
| Implement networking, book downloader \* | 24/11/2021 | 29/11/2021 |
| Cloud syncing, upload and download | 24/11/2021 | 29/11/2021 |
| Testing 2 | 30/11/2021 | 30/11/2021 |
| Bug fixes and low priority features | 1/12/2021 | 6/12/2021 |
| Suggestion | 1/12/2021 | 6/12/2021 |
| METADATA editor | 1/12/2021 | 6/12/2021 |
| News fetcher | 1/12/2021 | 6/12/2021 |
| Bug reporter | 1/12/2021 | 6/12/2021 |
| Testing 3 | 7/12/2021 | 7/12/2021 |
| Bug fixes and demo build | 8/12/2021 | 10/12/2021 |
| Testing 4 | 11/12/2021 | 11/12/2021 |
| Bug fixes and final build | 12/12/2021 | 18/12/2021 |
| Reserve | 19/12/2021 | 25/12/2021 |

\*: Tasks can happen concurrently.

## Project Monitoring and Control

### Reporting

* Weekly meeting reports
* Informat chats (Slack screenshots)
* Trello backlogs
* Software screenshots

### Risk Management

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Risk ID** | **Risk Description** | **Probability** | **Impact** | **Priority** | **Mitigation Strategy or Contingency Plan** |
| 1 | Incompetency in programming of the leader and group members | Medium | Very High | High | Organise training in meeting minutes |
| 2 | Group members not being familiar with source control. | High | High. | High | Testing group members in the use of Git and training. Or use an alternative method such as sending code to the leader to merge manually. |

### Configuration Management

* Google Drive - sharing and storing documents and files
* Git and Github - for managing source code