GROUP 08 - SESlay

Museos
Software Development Plan (Small Project)
Version 1.0

Revision History

Date	Version	Description	Author
27/10/23	1.0	Initial documentation	SESlay

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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 Museos 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

- **Purpose:** Museos is a music streaming service for music enthusiasts and artists who seek to bring their art work to the world.
- **Scope:** This *Software Development Plan* describes the overall plan to be used by the Museos 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*.
- **Objective:** To make melodious songs accessible for everyone and help introduce great artists to the world, also reward them with extra income.

2.2 Assumptions and Constraints

- Project has a time limit of 12 weeks.
- Project team has a fixed number of 5 members.
- Each member should work around 2 hours per day.
- All the tools used by this project should be free for the limit of the project usage.

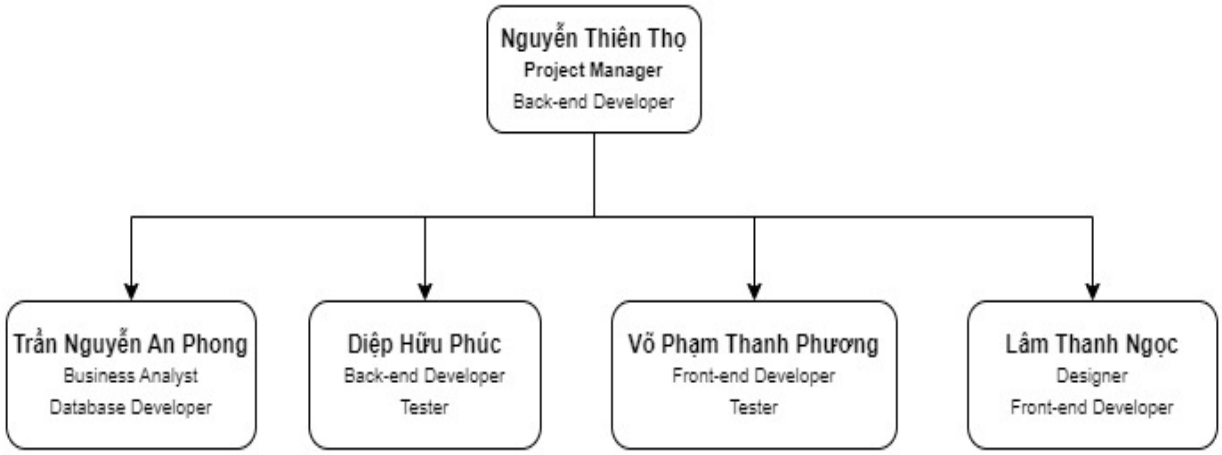
2.3 Project Deliverables

- Project deliverables are identified at the end of each project phase. Deliverables are delivered at the end of each iteration as the project schedule. The target delivery date for the final project deliverable is the end date of this project.

- Final project deliverable is a complete serviceable web application having all required functions.

3. Project Organization

3.1 Organizational Structure



Member	Role	Allocation
Nguyễn Thiên Thọ	Project Manager Back - End Developer	100% 20%
Trần Nguyễn An Phong	Business Analyst Database Developer	100% 100%
Diệp Hữu Phúc	Back - End Developer Tester	80% 50%

Member	Role	Allocation
Võ Phạm Thanh Phương	Front - End Developer Tester	80% 50%
Lâm Thanh Ngọc	Designer Front - End Developer	100% 20%

3.2 Roles and Responsibilities

Person	Responsibilities
Nguyễn Thiên Thọ	Monitoring and controlling, arrange planning, timeline, document and human resources of the project. Following and reporting to ensure everyone successfully completes project tasks.
Trần Nguyễn An Phong	Analyze requirements and brainstorm with ideas for development based on requirements. Collecting and storing data for the project
Diệp Hữu Phúc	Developing features and algorithms for the project. Testing and checking features for the project.
Võ Phạm Thanh Phương	Building the website's interface. Testing and checking features for the project.
Lâm Thanh Ngọc	Building the website's interface. Designing a prototype and illustrating the design idea.

4. Management Process

4.1 Project Plan

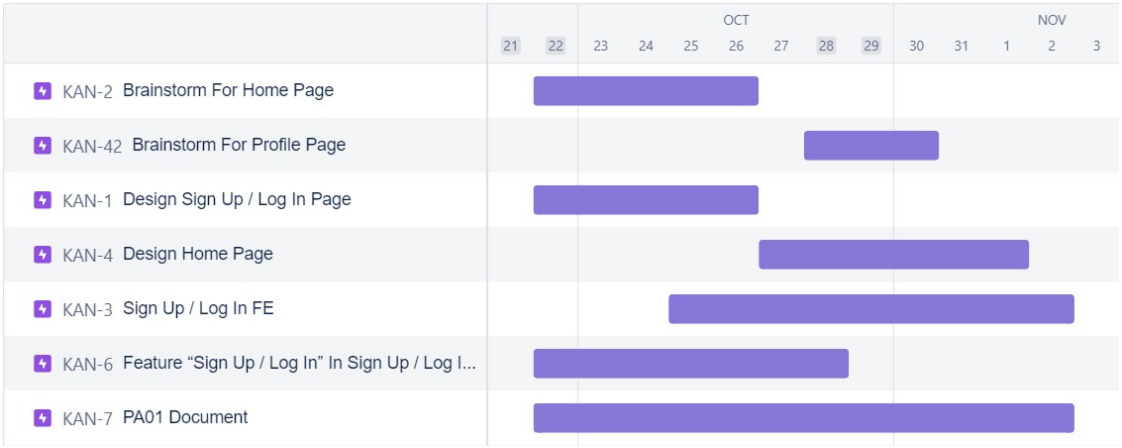
Sprint 1:

- Start: 21/10/2023

- End: 02/11/2023

- Task:

    + Brainstorm For Home Page
    + Brainstorm For Profile Page
    + Design Sign Up / Log In Page
    + Design Home Page
    + Sign Up / Log In Front-End
    + Feature “Sign Up / Log In” In Sign Up / Log In Page



Sprint 2:

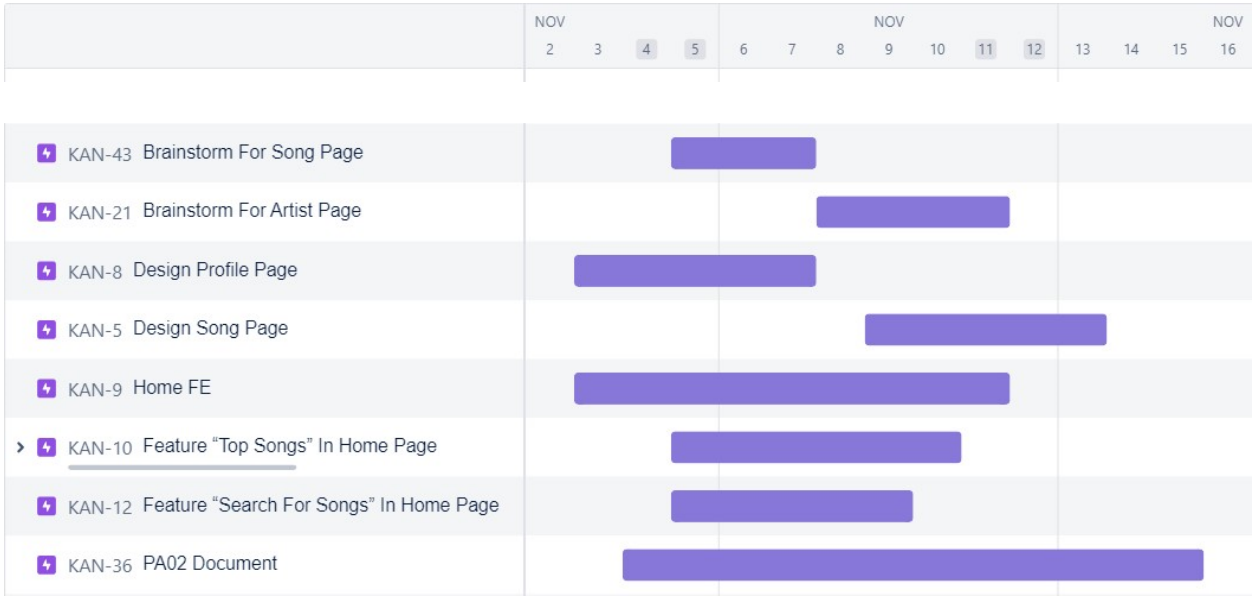
- Start: 03/11/2023

- End: 16/11/2023

- Task:

    + Brainstorm For Artist Page
    + Brainstorm For Song Page
    + Design Profile Page
    + Design Song Page
    + Home Front-End
    + Feature “Top Songs” In Home Page

+ Feature “Top Artists” In Home Page
+ Feature “Search For Songs” In Home Page



Sprint 3:

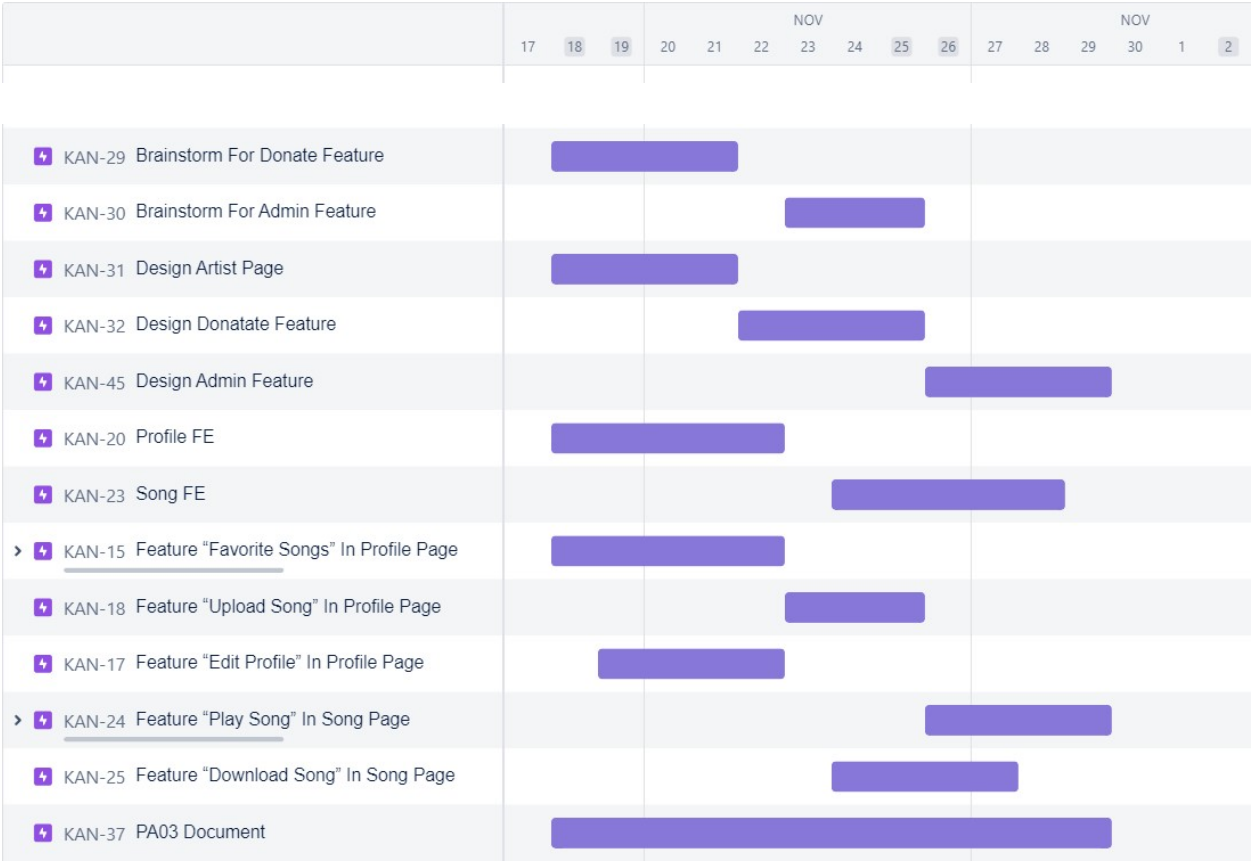
- Start: 17/11/2023

- End: 30/11/2023

- Task:

+ Brainstorm For Donate Feature
+ Brainstorm For Admin Feature
+ Design Artist Page
+ Design Donate Feature
+ Design Admin Feature
+ Profile Front-End
+ Song Front-End
+ Feature “Favorite Songs” In Profile Page
+ Feature “Favorite Artists” In Profile Page

+ Feature “Upload Song” In Profile Page
+ Feature “Edit Profile” In Profile Page
+ Feature “Play Song” In Song Page
+ Feature “Download Song” In Song Page



Sprint 4:

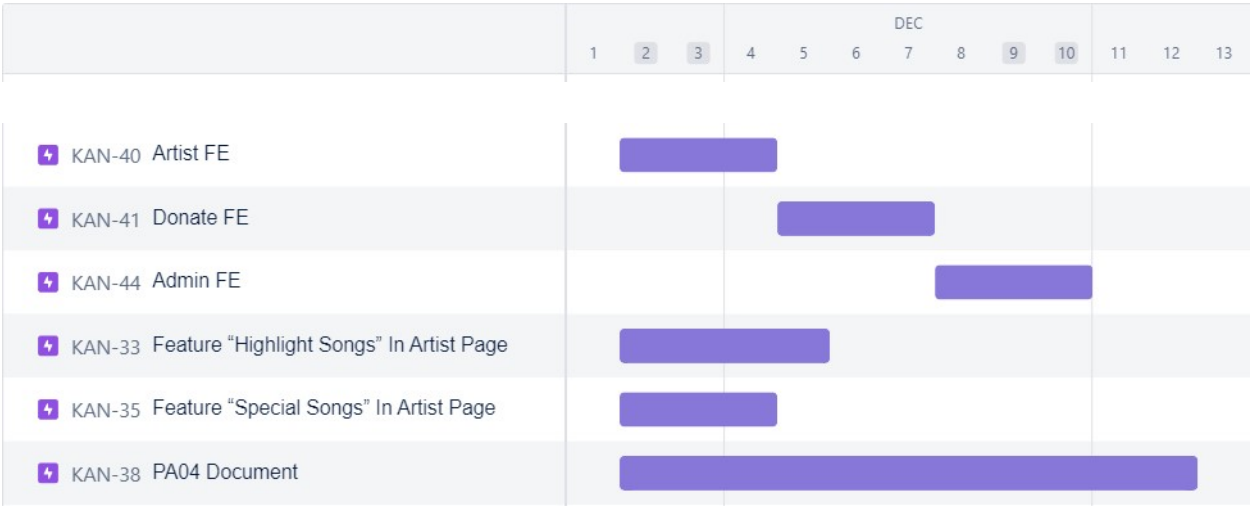
- Start: 01/12/2023

- End: 14/12/2023

- Task:

+ Artist Front-End
+ Donate Front-End
+ Admin Front-End

+ Feature “Special Songs” In Artist Page
+ Feature “Highlight Songs” In Artist Page
+ Feature “Donate” In Artist Page



4.2 Project Monitoring and Control

4.2.1 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.

4.2.2 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.

4.2.3 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
High	Lack of experience in group work and committing to a new software development process. Impact: Serious.	Mitigate. Do personal research and learn essential skills. Hold more discussions to attain clear knowledge of each member's abilities, the development process, and the project as a whole.
High	Members are late or unable to join meetings due to personal schedules. Impact: Serious.	Avoid. Arrange for more flexible schedules to accommodate all team members.
Medium	The time requirement for a feature is underestimated. Impact: Moderate.	Mitigate. Lower expectation and re-evaluate the feature to either fit what we have actually done, or meet more reasonable specifications.
Low	Failure or stagnation in completing tasks due to unforeseen circumstances (e.g., illnesses, miscalculations, etc). Impact: Serious.	Avoid. Communicate more frequently to spot such complications sooner. Routinely remind members of their responsibilities so they can resume working as soon as possible. In the worst case, we can assign members with less tasks, at that time, to support in pushing the work forward.

4.2.4 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.