

Table 1: Revision History

Date	Developer(s)	Change
Jan 26, 2020	Alexander Samaha	Set-up document, initial changes
Jan 28, 2020	Daniel Noorduyn	POC and Roles Rough Draft
Jan 29, 2020	Daniel Noorduyn	POC and Roles Touched Up
Jan 29, 2020	David Jandric	TMP, GWP, CS Rough Draft

SE 3XA3: Development Plan

Title of Project

Team 203, Abstract Connoisseurs
Daniel Noorduynd, noorduyd
David Jandric, jandricd
Alexander Samaha, samahaa

This document lays out the plan for developing, testing and reviewing our project.

1 Team Meeting Plan

Meetings will take place every Tuesday and Wednesday in ITB 236 from 2:30PM to 4:30PM. Informal meetings will be held on Thursdays at 6:00PM, if required. Alex will log, Dan will be chair, David will act as technology expert.

Rules for agendas:

1. Items must be pertinent to next deliverable.
2. All team members should have some input into the direction of the meetings.
3. Items in agenda should be posed as questions.
4. Give times for each item.
5. Agenda should be shared with each member a day before the meetings.

2 Team Communication Plan

By: Alex

How we communicate as a team. Git issues (through merge requests and wiki posts?), email, group chats, phones. What contact information is exchanged and what is used for what information (issues through git, updates on groupchats, phone for meetings?)

Rubric: 3 marks.

3 Team Member Roles

A project with this level of coordination required amidst developers and designers results in the need for a chair (or team leader). The chair's responsibility is making sure each team meeting runs smoothly within the allotted time frame and makes sure each team member is communicated with each other during the designing and building phases. The team has democratically voted in Daniel Noorduyn to fulfill this position. During the team meetings, a scribe will be required to jot minutes down. These minutes will be referred to by individual team members to recall all team decisions during individual work. The team has democratically voted in Alexander Samaha. During the design phase, a technology lead is required to determine if certain project aspects are feasible. The team has voted that David Jandric fulfill this position.

Each member of the team has unique expertise that will benefit the overall project. The breakdown is in the following table:

Team Member	Expertise
David Jandric	Documentation
Alexander Samaha	Git
Daniel Noorduyn	LaTeX
David Jandric	Technology
Alexander Samaha	Design

Table 2: Team Member Expertise

These roles and expertise fields are subject to change as different challenge arise during the project. Each team member will be filling in multiple roles from the start, and therefore understand how fluid the assigned roles are.

4 Git Workflow Plan

Our repository is centralized around the master branch, and new branches are created for different features and modules. These branches are destroyed once merged with master.

5 Proof of Concept Demonstration Plan

The ambitious goal of creating a Super Mario Bros game that is accessible on every platform results in some possible hurdles that will need to be overcome if the project is seen as feasible. We the team want to create a game that blends elements from the original Super Mario Bros with features from the newer versions. However, considering the popularity of the game, both past and present, users will have strong opinions as to what features the game should possess and how they should be implemented. Therefore, a minimum viable product (MVP) will be created that users can interact with and critique. This

feedback will help us continue creation of the game in a way that results in a wanted final product.

There are also some strictly technological issues that will have to be addressed. Our game will be created using pygame, a Python library. This library is difficult to install and run properly on an Apple Computer. Therefore, even though Python is compatible with most operating systems, portability with respect to Apple computers will be an issue due to the incompatible library. A possible solution is creating an exe file for the users to run, which bypasses the need for users to download libraries. The implementation of our game is quite straightforward and feasible, but difficulties may arise when many different methods must work together in real time to create a seamless gameplay for the user.

There will be difficulties in testing our product as it relies heavily on human input. Therefore, multiple individuals are needed to play the game and report any bugs. It is important to note that not all testing will be done by external players, as different methods and algorithms can be tested individually. This logical testing will be performed using PyTest. However, for testing overall interaction of the program attributes, we will have to look outside ourselves.

To present proof that the afore-mentioned risks can be overcome and the game can be developed, we will have a demonstration. To underline that the library issue was overcome, this demonstration will be run on a MacBook. The demonstration will consist of a 2D plane where in a character can be controlled to move left and right as well as jump up and fall down. If this can be achieved the overall project should be able to be completed.

6 Technology

By: Alex Talk about the Programming languages, are we using an IDE? Testing framework, how are we testing (maybe something to do with pytest). Document generation, how are we making documentation in Python?

Rubric: 4 marks, we need to write a bit to really bring this one out.

7 Coding Style

By: David

Since we our project will be coded in Python, we will be following the PEP8 standard for Python, which is a style standard from the creators of Python. A coding style like this can be helpful by keeping the structure and look of our code consistent, which helps with maintaining the code base.

8 Project Schedule

By: All Provide a pointer to your Gantt Chart.

Rubric: 5 marks. Needs to be detailed and accurate (realistic).

9 Project Review

By: All Looks like this is necessary for our revisions.

Rubric: 1 mark