

Table 1: Revision History

<b>Date</b>	<b>Developer(s)</b>	<b>Change</b>
2020/01/22	Entire Team	Initial Document Creation
2020/01/22	Alexander Samaha	Added finishing touches to paragraph
2020/04/06	Daniel Noorduyn	Rev 1 Touch-ups

# SE 3XA3: Problem Statement

## super-refactored-mario-python

Team 203, Abstract Connoisseurs  
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The original Super Mario Bros. took the world by storm in the summer of 1983. Since then, it has been adored by fans around the world. Sadly, the game was only accessible on the Nintendo Entertainment System, or by using an emulator for that system. Furthermore, the game itself, was not modifiable without a deep understand of the gaming system, and low level assembly code. This is assuming you could even access the original code, considering it was never open-source.

As the years went on, people have tried, and failed, to port the game to various programming languages and platforms. The goal of this project is to refactor and finish developing the authentic game that the original owner had started and further add features to improve the gameplay. **The final game will be playable on any personal computer running python3 and the corresponding libraries pygame and scipy. The supported operating systems will be Linux based OS such as Ubuntu, MacOS and Windows.** The stakeholders for this project are those who would enjoy playing 2D platforming games and like to have the experience of playing Super Mario Bros. on a modern platform. The project is open source, and inherently affects other developers in this field.

This problem is important to our stakeholders due to the cultural significance of the game, having catapulted the concept into a series that still exists 35 years later. Super Mario Bros. and the franchise as a whole has inspired generations of 2D platform games and it is important to continue this tradition. The game is currently inaccessible to a wider audience that is not knowledgeable about console emulator programs or do not have the original Nintendo Entertainment Systems. By realizing this project, we are creating an easier method for people to play the game that so many cherished when it released. In doing so, a fresh twist of Super Mario Bros. can be enjoyed by anyone, anywhere, on any modern platform.