Sprint 1

1) Summary data	
Team number	37
Sprint technical lead(s)	Nichlas Pihl
Sprint start date	09/02-2021
Sprint end date	15/02-2021

2) Individual key contributions	
Team member	**Key contribution(s)**
Nichlas Pihl	Creating the prototype so that work on the game can begin

3) User stories / task cards

Basic Prototype building. The client requires a functioning game, and there's certain things that need to be setup before we can begin making the actual game, which we've identified as being a functioning GUI and functioning input-handling. This can be done while working on the main menu of the game, which would necessarily contain both the GUI representation of the menu itself, as well as input handling for interacting with it. Therefore a main menu is the natural first step in setting these 2 things up.

4) Requirements analysis

Our programme will be able to do several key things at the end of the sprint:

1. Should be able to handle input through both keyboard and mice, and both through interacting with specific objects and interacting with the entire game
2. Should be able to render GUI elements such as buttons and sliders, and allow for interaction with them.
3. Should be able to switch resolution based on user input and/or size of user's monitor. This should not move things around on the screen, but instead reduce the quality of the game.
4. Should be able to edit other basic settings such as audio volume

5) Design

Each screen of the game should have its own class, responsible for handling rendering of that screen. The main menu will be the first such example. The main menu should at first have 3 buttons. A new game button, which will be functionless for now, an options button, which will open up the options menu, and an exit game button, which will exit the game.

The options menu should have a setting for resolution, fullscreen mode (fullscreen, borderless, windowed) as well as a volume slider, and a return to main menu button.

The game also requires an input-handling class, which should be a singleton accessed through the maincontroller. It should be responsible for all input handling, both interaction with individual objects and with the game as a whole.

Both of these classes should be accessible through the main menu's methods, but neither should interact directly with one another.

6) Test plan and evidence of testing

Unit testing will be testing the use of various input and verifying the result, such as alt+enter to enter/exit fullscreen. It will also be used for testing audio/resolution settings.

I will also be performing testing myself by making sure that I can change the resolution and window mode without things moving around jankily on screen, as well as making sure that all buttons work as intended and are clickable.

7) Summary of sprint

Unit testing has not been accomplished, but extensive systems testing has been performed, and one issue (https://github.com/nichlas0010/SoftwareEngineeringCoursework/issues/1) has been found.

Resolution options has been discarded, as resizing the windowed window handles that just fine. All GUI elements work fine, key/click-listeners have been added with full functionality, and the functionality for having different screens of gameplay has been added.