

Requirements for Audio Engine - S3

By group 26 - The Fishermen

In sprint 3 we will add music and sounds to the game, which will improve the atmosphere of the game. This requirements document is part of assignment 3.1. The requirements are listed in the same way as our game, so we will use the MoSCoW method. Firstly, the functional requirements of the settings are listed as must, should, could and won't have. Secondly, the non-functional requirements are listed.

Functional Requirements

1.1 Must have

- The game shall have background music that will be played while the program is running, unless disabled with the settings.
- The game shall cycle through different background music tracks.
- The game shall have sound effects that will be played for different events in the program.
 - These include (but are not limited to):
 - Clicking a button
 - Eating a fish
 - Getting eaten by an enemy fish
 - Eating a powerup
- The Audio Engine will support three volume types, represented as percentage values in doubles (0.0 to 1.0):
 - Master volume, affects all audio played.
 - Music volume, affects background music
 - Sound effects volume, affects sound effects
- There will be a mute button for music displayed during the game, with which the user can toggle between the game playing all sounds, only sound effects and no sounds.
- The game will be able to play at least 10 sounds at the same time.
- The game shall be able to play sounds in mp3 format.

1.2 Should have

- The settings screen should have settings for controlling the aforementioned volumes.

1.3 Could have

- More sound effects could be added for other events in the game.

1.4 Won't have

- The game will not play a different background music track each time it is started.

Non-functional requirements

- The audio engine classes will have to adhere to the same non-functional requirements of Fish.io itself (except for the date of delivery).
- A first, fully working, version of the audio engine shall be ready and submitted to the staff of the course on the 9th of October.