**Spike:** Spike 18

**Title:** Game Resource Management (Loading)

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**Goals / deliverables:**

The goal of this spike is to provide a music bgm and sounds to the window, and to be able to control them. Also to display multiple images, including in sub-regions of the window.

Besides this report, what else was created?

* Only a code to control the music, sounds and images.

**Technologies, Tools, and Resources used:**

List of information needed by someone trying to reproduce this work

* Visual Studio 2022
* SDL2 version 2.30.8
* SDL2 image version 2.8.2
* SDL2 mixer version 2.8.0
* Files of 3 different sounds
* 1 file of a song
* 2 images

**Tasks undertaken:**

* Download VS Community 2022
* Download SDL2, SDL2\_image, and SDL2\_mixer
* Configure project properties to include all SDL2 libraries to files
* Configure system environment variables to include the path to the SDL2 libraries as well
* Download sounds, song, and images.
* Add previous downloads to project folder.
* Compile code.

**What we found out:**

I learned how to include music as bgm, how to pause it and how to include different sound to sound on top of the bgm. I also learned how to include an image in the window and how to toggle another image by pressing some keyboard beys.

**Open issues/risks:**

The only issue I found is the toggle of the second image on the random parts of the window. Only part of the image is visible, not all of it.

**Recommendations:**

I was not able to fix the issue, so only part of the image is visible at the moment. But I think that by making the window bigger, the image smaller, or make the image use more pixels, the hole image could be visible.