

Due date: Thursday, March 21, 2024, 11:59 pm, add and commit a folder assignment6/ to our class SVN repository.

Exercise 6 [10 points]

This assignment reflects this week's topic: Sound Effects and Music. This is a programming exercise. Make use of your application from former assignments. We expect you to build your project as a Unity game and commit both the **sources** and the **binary** to the class SVN-Repository. The sources should be placed in the folder assignment6/src whereas the binary should be placed in assignment6/bin.

As we discussed in class: there are several options to include sound in a game. The lecture provided a way by using the AudioSource option. Here, we would like you to incorporate sound into your game. You are free to use any audio system that you find including parts of the sources we have seen in class.

More specifically, we would like you to do the following:

- 1. Import sound files into your Unity project. Ensure you have one AudioListener component in your game scene.
- 2. Attach the sound asset to a GameObject and write a script that is being used in the game to play the sound.
- 3. Use background music for your game. The user of your game should be able to switch off the music by pressing the 'M' key.

[Optional, up to 4 points extra] If you include sound together with an animation (e.g. the splash sound while jumping, the bomb explosion, or footstep example in class) make sure that the sound is synchronized with the animation. You might want to use a co-routine if you use the WaitForSeconds method to yield a few seconds. You might want to include a filter that runs in real-time on the sound file that you imported (e.g. an echo or a Doppler effect).