Assignment 4
EECS 4462 3.0 Digital Audio, Fall 2020, Section A

Due: Tuesday, December 8, 2020, 11:59pm.
Format: Individual.

Adding sound to a Unity game

The purpose of this assignment is to give you experience using Unity to add sound to a game.

To get started

Identify a Unity 3D game that you would like to add sound to. This can be a game you found online, a game you wrote, or one of the Unity sample games. It will need to have sufficient complexity to implement the required features (see below) in a meaningful way, but it does not have to be very complex, i.e. one scene with a couple of different rooms is probably sufficient.

What to do

Collect sound effects and background music (see links on the course webpage), record narration or dialogue using your own voice[1], and add sound to your game!
  Your final submission must have the following features:

1. It must contain all three aspects of video game sound, i.e. music, sound effects, and dialogue/narration.

2. It must demonstrate both instances of 3D sound (volume is relative to position changes of the audio listener) and 2D sound (volume is unchanged regardless of position).

3. All sounds must have appropriate reverb settings. The reverb settings must change at least once, e.g. when the player enters a new room.

4. It must demonstrate randomization for repeated events, e.g. laser shots by non-playing characters are randomly pitch shifted so they do not all sound the same.

5. The background music must change at least once, e.g. when the player enters a new room. The transition must be smooth, using fade in/out, or a stinger.

6. It must demonstrate an instance of "ducking", e.g. lowering the volume of music, so dialogue can be heard easier.

7. At least one of the sound effects in the game must change based on the state of the game, e.g. when the player starts walking on water the footstep sound changes.

  You are not required to change any of the visual aspects of the game, but you are of course free to do so if you prefer.

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[1]Your mark will not depend on your English pronunciation.

If any of the above requirements are hard to implement realistically in your game, e.g. all rooms are similar so it does not make sense for them to have different reverbs, then you must implement the requirement in an unrealistic manner and explicitly mention in your description that you have done so.

How to Submit

Click on Assignment 4 Submission in the course eClass page, and follow the instructions. The link will be available one week before the deadline.