

### SO3 Load Camera Data at Runtime

You are still working on the horror game from Exercise SO2, which makes use of locked camera position rotation and field of view in different rooms. This time, however, you are in a fortunate situation since another programmer already has taken care of creating a system so the Game Designers can save these Camera Data Scriptable Objects.

However, now the Game Designers would also like to be able to load the different camera data and apply the changes to the Camera component.

#### Exercise

- Create a Custom Inspector for a CameraController class that is attached to the Main Camera in the scene.
- The Custom Inspector should have a Button that can load in all of the Camera Data Scriptable Objects you have in the “Saved Camera Data” folder (You can use the same objects from Exercise SO2)
- For each object, there should be 2 UI elements in the Custom Inspector.
  - A button named “Load X”, where x is the name of the Scriptable Object
  - A button named “Remove”
- Clicking the “Load X” button will apply the values from the Scriptable Object to the Camera, so you can see the values in real time.
- Clicking the “Remove” button should remove the Scriptable Object from the list of Scriptable Objects in the Custom Inspector. It should not delete the Scriptable Object from the project.
- The changes should be saved in the CameraController class, so the selected Camera Data Scriptable Objects can be used in the game.

#### Hint:

If you have not solved Exercise SO2 already, you can create a Scriptable Object that has the following fields:

- RoomName (string)
- Position (Vector3)
- Rotation (Vector3)
- Field Of View (Float)

And add some different values to the different fields and save them in a folder named “Saved Camera Data”

#### Optional Exercises:

1. Depending on how long the different room names are, the buttons are going to have different widths. How would you make sure that they all have the same width?
2. If you implement this in a straightforward way, you may run into the issue that the list of Scriptable Objects might now be saved to the camera controller when exiting Playmode. Why does this happen, and can you think of a way to solve this issue?