**Lab Week 5**

*50.033 Game Design and Development*

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**Are you participating in the Weekly Lab competition?** No

**Provide the YouTube/other platform link to your screen recording:**

<https://drive.google.com/file/d/1t73uYMwjd44XIQHuBW_9Bg1ZiHRji_3j/view?usp=sharing>

**Provide the link to your lab repository (video is viewable in repo as well, as .gif):**

<https://github.com/arglux/50033-game-dev-lab/tree/main/lab-5>

**Describe what you have done to achieve the desired checkoff requirement for this lab:**

Implemented all items in lab check-off except for restart which is optional. Now uses entirely scriptable object architecture to accomplish event-based actions and referencing values, including:

* Scene change to MarioLevel2 while retaining score and unused powerups
* Various event scriptable objects and their listeners and the responses (code to run when event is raised)
* Note, for collecting coin and adding the score and spawning new enemy when coin is collected, I just reuse onEnemyDeath event (even though no enemy dies when coins are collected).
* Additionally, for the mario death sound and audio view transition, I also reuse the onPlayerDeath to play to transition and play the source one shot. These are attached in the game manager object.
* The rest of the implementations are pretty much similar to tutorial.

Scripts added:

* + CastEvent.cs
  + CastEventListener.cs
  + ChangeSceneEV.cs
  + ConsummableTriggerChecker.cs
  + EnemyControllerEV.cs
  + GameEvent.cs
  + GameEventListener.cs
  + GameManager.cs
  + IntVariable.cs
  + Inventory.cs
  + MushroomControllerEV.cs
  + PlayerControllerEV.cs
  + PowerUp.cs
  + PowerUpEvent.cs
  + PowerUpEventListener.cs
  + PowerUpManager.cs
  + ScoreMonitor.cs
  + SpawnManagerEV.cs
* Assets added
  + BlueMushroomEV prefabs
  + GreenMushroomEV prefabs
  + GameManagerEV prefabs
  + GoombaEV prefabs
  + GreenEnemyEV prefabs
  + PowerUpManagerEV prefabs
  + ScoreEventListener prefabs
  + SpawnManagerEV prefabs
  + Even More Scripts
  + MarioLevel1 Scene
  + MarioLevel2 Scene
* General modifications that you have done:
  + All values references from scriptable objects
  + All events are transmitted through scriptable object which is invoked by some script which then raise some event.
  + These raised invocations are then listened by listeners attached to some other game objects whose response are defined in the inspector
  + Some of these responses include updating the score, using power ups, deleting or adding said power ups to inventory etc and updating UIs in general or playing audio.