



# Lecture 4

## Announcements

- [Have you ever attempted to draw Kirby?](#)
- Output from EECS 298 ~ Cool characters (soon to be playable)
  - [Alien](#)
  - [Noelle](#)
  - [Fairy](#) (Scott Cawthon-style)
  - [Bear](#)
  - [Totoro](#)
  - [Gundam](#)
  - [Horror](#)
- Units Tips
  - Use [\[SerializeField\] attribute](#) instead of "public" to preserve encapsulation and prevent improper usage of your components / systems.
  - Need a reference to the Main Camera, but don't want to drag-drop into the inspector? Use [Camera.main](#) anywhere in your codebase.
  - Need a reference to the player? Use `GameObject.Find("player");`
- Re-use, re-duce, recycle [https://youtu.be/ipYWw\\_TuHq0?t=1560](https://youtu.be/ipYWw_TuHq0?t=1560)

## Assignments Released

- [P1 Alpha](#)
  - Start thinking about Custom Level + Mechanic

## Assignments Due

- [p1\\_milestone](#)

## Mini : “HasHealth” + “DamagingOnTouch” Roll-A-Ball Example

(Component-Reuse / Writing Generic Components)

- [Finished project Package here.](#) (also good starting point for Austin)
- To write generic, hardy components that “just seem to work anywhere”, make liberal use of GetComponent() so that we can understand what gameobject we’ve been placed on, and what components exist on other gameobjects we interact with.
  - [ChangeHealthOnTouch.cs](#) (Note, this component says nothing about “enemies”. It could be placed onto a “lava” floor gameobject to deal damage, for instance).
  - [HasHealth.cs](#) (Note its simplicity-- we could add this component to anything in order to give it “health”, from player gameobjects to enemies to destroyable walls, etc).

## Mini : Commercial-Grade Component Reuse Example (BTD)

- [slides](#)

## Mini : P1 Architectural Considerations

- [slides](#)