Godot Notes

**Syntax**

* Similar to python
* Variables types can be inferred using : = or declared using the : operator.
* Pass can be used in functions where code isn’t yet written
* For Boolean comparisons, both or and || are accepted, same with other comparison operators.

**\_physics\_process**

* Called every frame
* Comparable to fixed update in unity.
* Use for everything to do with collision
* Physics processes in sub classes will be run after the physics process in the main class.
  + Eg if player extend s actor and they both have a physics process, actors will be run first and players after.

**Setting Variable Types**

* In Godot, to set a variable type you declare the variable as var
* You then use the : = operator to set the type
* Eg. var velocity: = Vector2(1,1)

**Making variables modifiable in the inspector**

* Use export keyword in front of variable to show in inspector
* Eg export var gravity : = 3000

**Tile Map**

* Can use tile map to build 2D levels
* Can import png tile map and split up in Godot, can also apply collisions

**Layers**

* In a nodes collision tab, can select which physics layer the object is
* New layers can be added in the project settings
* Masks can be created in the collisions tab to decide what an object should interact with, settings these up correctly can improve performance.

**Input**

* Input map can be found in project settings, can assign button presses to labels to be used in code.
* Using get\_action\_strength returns a float for the input value
* Is\_action\_just\_pressed is like GetKeyDown in unity.
* Is\_on\_floor() is a kinematic2D function that checks if the object is on floor but needs floor normal set in the move\_and\_slide function.

**Tertiary Operator**

* Instead of test1 = test1 < 2 ? true : false
* Have test1 = 1 if input < 1 else 1

**Time**

* Can use get\_physics\_process\_delta\_time() to get time similar to Time.deltaTime in unity.

**Editor**

* If you want to rename a variable and change all instances of its name can press Ctrl + R to open up the replace function.
* Find all references to a variable is Ctrl + Shift + F

**TUTORIAL PROGRESS 1:10:13 : https://youtu.be/Mc13Z2gboEk?t=4213**