**Programming Learning Journal**

Programming learning journal:

Date unrecorded:

* Problem: Mac was opening dreamweaver not visual studio. Solution: going into unitys package manager and updating VS and then adding it as the app to open scripts on.

* Problem: couldn’t figure out how to make double jump counter be detected by and reset by the ground. Solution: using unitys webs site, was able to determine correct OnColliderEnter2D function.

* Problem: character kept sticking to side of platforms. Solution: adding new physics 2d to player, then turning friction to 0.
* Problem: player kept rotating when colliding with platforms. Solution: freezing Z rotation of rigid body.
* Problem: Ground was resetting jumps from all sides of its collider as it counted as the ground, giving the player the ability to stay airborne indefinitely.  
  Solution: Duplicate all ground pieces, shrink them slightly and tag them as ground instead so only the top part of the duplicated ground pieces reset the jump counter, making the floor look the same but function correctly.

Dec 5:

* Problem: enemy didn’t have a good patrol script and route as it kept feedback looping itself. Solution: recreating a new script with 2 waypoints as a reference to where the enemy should move.

Dec 14:

Problem: Player wasn’t getting jump resets and wasn’t able to jump near, or standing on enemy patrol waypoints.

Solution: change the tag for the waypoints to “Ground” so the player can use it as a grounded surface.

Problem: the previous way to detect which part the player would collide with on the enemy was not working, and was too complicated, this was to see if the player was jumping on the enemy to then destroy the enemy.

Solution: Created a separated child of the enemy called and tagged “KillHitbox” as it was a child it moved with the enemy patrol and so I made it smaller and above the enemies player-enemy-collision-detection hitbox so it essentially was a workaround to making the code all work in one script, this process was significantly easier and was very effective.

Problem: I had no way of knowing during testing if the collisions were working correctly or even being detected.

Solution: I went into all the necessary scripts and added debug logs to show me if the collisions or events were taking place, making troubleshooting a lot more manageable.

Problem: Player kept landing on the killhitbox instead of triggering the enemy to be destroyed.

Solution: ticking is trigger box on the collider.

Problem: Following many tutorials was frustrating as the unity versions were always different which causes some code in those tutorials to not function as intended, as a complete beginner to programming this was very daunting and caused to me to put of working on the project.

Solution: I used chat gpt to explain to me what I was doing wrong and what I need to fix, I didn’t mindlessly copy and paste everything as it gave me an explanation as to what it was giving me which not only helped me learn more about why the code works, but also why my code didn’t. After using the a.i I can say that my understanding of basic code has developed.