Reflection on Fish Collector

Challenges I faced and how I overcame them:

Originally the fish jumping was physics based, which working through the Godot docs on physics, and watching a couple tutorials online, I managed to get to working pretty well. But only it only worked for the screen size that the project was defaulted to.

So, I learned about Path2Ds and how they can make a Bezier curve and have PathFollow2D follow that curve. I originally had a curve set, that I planned to then scale, and move to fit the randomised jump path I would calculate based on the screen size. But this was a bad solution since the fish sprite would be scaled with the parent Path2D's scale.

I found pretty quickly how to edit the node positions of the Path2D, by deleting the existing ones, and making new ones at the correct positions. But I was having issues with the fish suddenly pinging all over the screen, and none of them ever reaching the end of their paths, and thus never despawning. It turns out each time I edited the Bezier nodes, I was editing it for ALL the fish at once. I had to research how to fix the solution and luckily a forum had my answer. I had to make the PathFollow2D unique each time it was instantiated.

I also decided I wanted score saving in this project. I wasn't hard to implement since the Godot docs cover it very well. I essentially copy pasted their example code and edited to my needs. The issue with save data was that it acted differently in editor and in a build. It took me quite some time to figure out why it was saving, but not loading. I ended up putting console spam all through my project and finding it just needed to wait a frame to load the data fully.

What I would do differently in future projects:

I would immediately think about how to work with different screen sizes. I didn't implement a lot of the features to work with that until v2. Which was too late since I had to rewrite a decent amount of code

I would also look into using Resources sooner. I had used them in previous projects, so thought I had a good enough understanding, but it had been too long and I had to look back at the Godot docs on Resources and relearn. I also had to rewrite a decent amount of code to get the Resources implemented, which would have been resolved by introducing them into the project sooner.

New skills, tools or practices I learned during the project

I don't think there are any new tools or practices I learned.

I learned about 2DPhysics, Path2D, PathFollow2D and game saves in Godot, which I am unsure if they are skills.

I also completed a large amount of practice. Using the Godot editor and writing in GDScript, which is quite important to me.