## **Shader Lab Assignment 6: Character Animation**

My character is a California poppy bobbing up and down, flapping its leaves to music. After office hours this week, I decided I wanted to practice reading mesh data since that was what confused me before. As a result, I tried to incorporate a variety of data in my shader code by using vertex colors, as well as creating movement with position data using both world and object space.

I created the meshes in Blender in 5 pieces: headphones, flower bud, stem, and two leaves. Before moving them to Unity, I colored them with Vertex Paint, reconfigured some of the normals, and moved all of the mesh origins to the world origin point in Blender. For the leaf shader, I adapted the wave demo from two classes ago to the vertical axis, using a square function so the leaves would curve a bit more. For the rest of the elements, I used the world position to change the x, y, and z position of the head on another wave with time. I also added an animation jitter adapted from two classes ago.