iAcorn: Scheduled Growth

Concept:

iAcorn: Scheduled Growth began from a personal care metaphor I explored in therapy, where I was encouraged to draw a flower on my hand as a reminder that "we are like flowers" and need regular care to thrive. In reality, it's hard to prioritise even basic self-care like drinking water when we're busy, and many of us rely on smartphone notifications to tell us when to act.

Drawing on Cory Arcangel's ideas about how contemporary life runs on defaults, presets and schedules, where UI is not decoration but instruction. I wanted to connect that to self-care. Scheduled reinforcement trains us to wait for cues, and our "agency" often becomes performing the ritual when told.

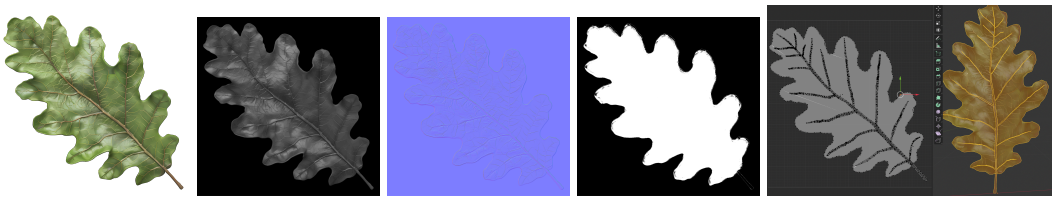
iAcorn uses a looping animation to argue that care has become maintenance performed on cue, and that "progress" is more of a feeling than a fixed state. The central acorn to the tree growth cycle carries the metaphor of nurture (hydration), and growth. This growth is framed inside an iPhone-style app UI, a water meter, and an acorn that gradually develops into a full oak tree. The idea is that as the user "hydrates" to 100%, the acorn is watered and grows too. Once the oak is fully grown and produces a new acorn, the camera zooms into the falling acorn and the loop resets back to the starting frame (acorn to oak cycle), then shifts perspective back to an empty, 0% hydration state. The piece reflects a smartphone-dependent culture where notifications function as instructions, and self-care becomes another gamified progress bar.

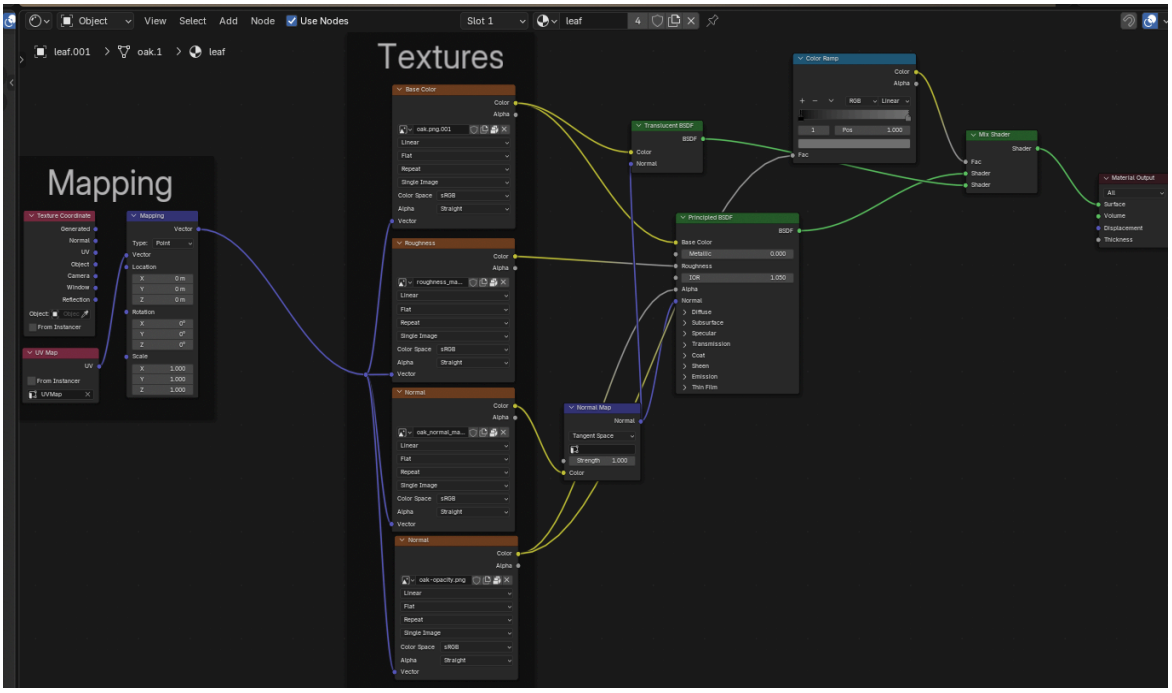
Key Checkpoints:

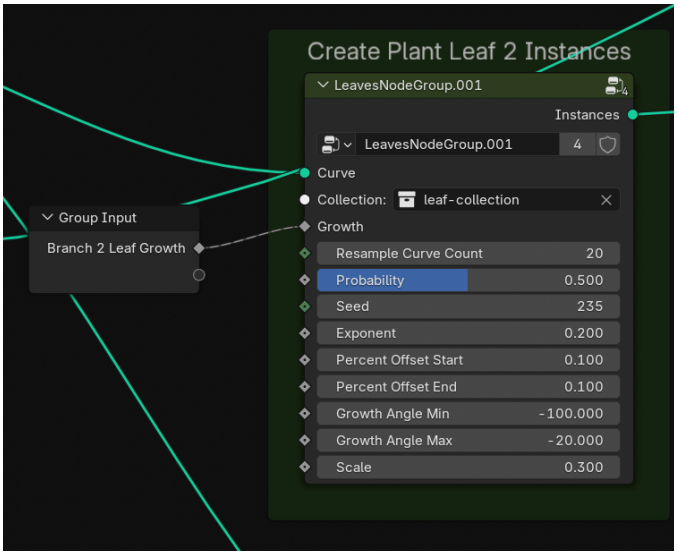
- **Initial setup and growth logic**
  I first experimented with manually modelling each stage of the tree's growth, but pivoted to using a "Growing Tree" asset animation. This allowed me to focus on integrating the growth into my concept rather than hand-animating every stage.

- **Oak leaves and Geometry Nodes**

  I edited an oak leaf PNG into alpha, normal, roughness, opacity, and UV maps, then added them to a leaf material shader textures replacing the original leaves . Using the tree Oak to Tree Geometry Nodes, I replaced the existing leaves across the tree, by replacing leaf-groups (collections with the leaves) in geometry nodes. and I troubleshooted texture coordinates until the foliage looked natural, which required unrealizing all instances before geometry group output with my new oak leaves.

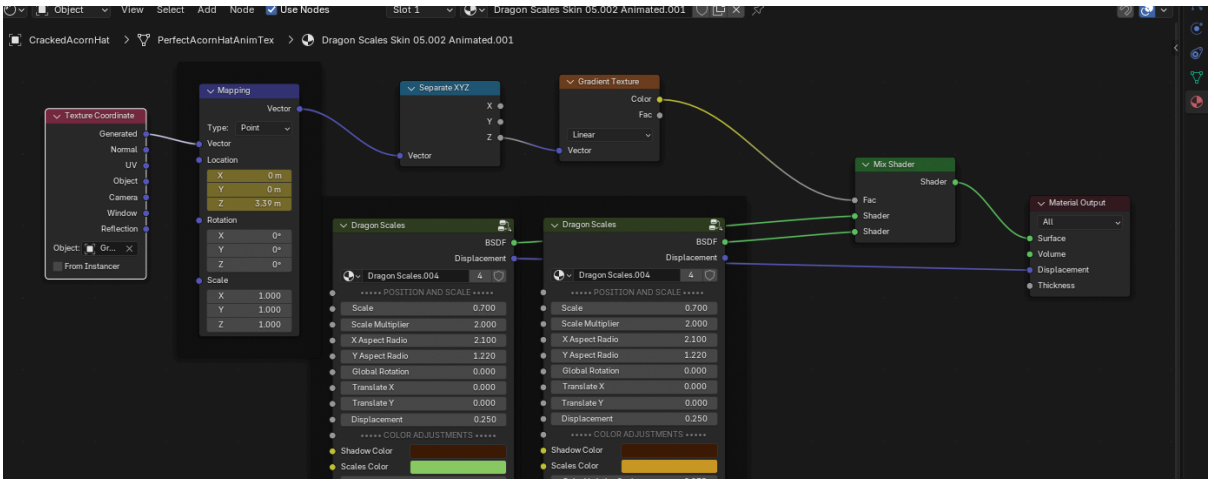






- **Acorn creation and material transitions**

  I modelled the acorn (following a tutorial), and used Blender's shading nodes (Gradient Texture, Separate XYZ (Z), Mapping and Texture Coordinate) to transition the material from a "baby" acorn to a mature one using keyframes. A Blender tutorial on transitioning between materials was particularly helpful here.





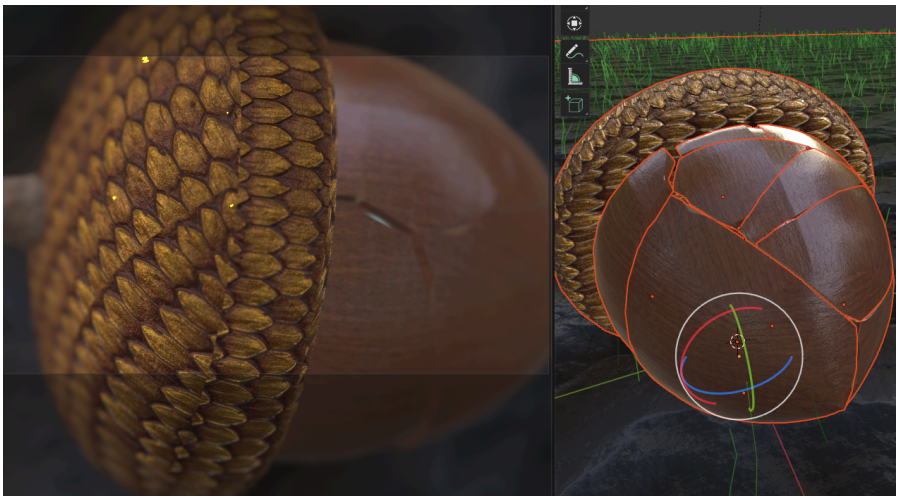
- **Environment, grass and lighting**

  I created particle-system grass (following a tutorial), which pleasantly only took a couple of minutes to set up. I then added a sun animation for a day-to-night transition by keying the time value using the Sun Cycles add-on (tutorial) and keyframed world brightness to avoid overly contrasted sky scenes. Camera movement, sun position and world lighting are all keyframed to support the narrative.

- **Acorn cracking and tree emergence**

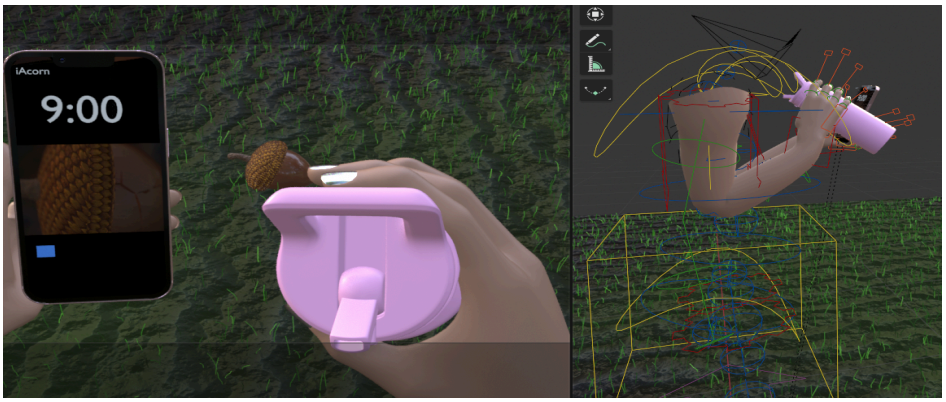
  To show the sapling emerging, I used a fracture add-on to break the acorn into pieces, then hand-keyframed them falling apart as the sapling pushed through (I'm

curious if a rigidbody would have helped here, but I chose to manually edit it).



- **Character/rig animation and phone UI**

  First I appended a rig/mesh (Universal Human Body & Face) into the file, hid everything but the arms mesh, then added Rigify human body armature bones and generated the rig, which I parented the mesh to (with automatic weight), to animate a character via pose mode keyframes. This made animating really seamless. And I certainly learned what *not* to do: the difference between animating the rig vs. the armature (after initially choosing the wrong one).

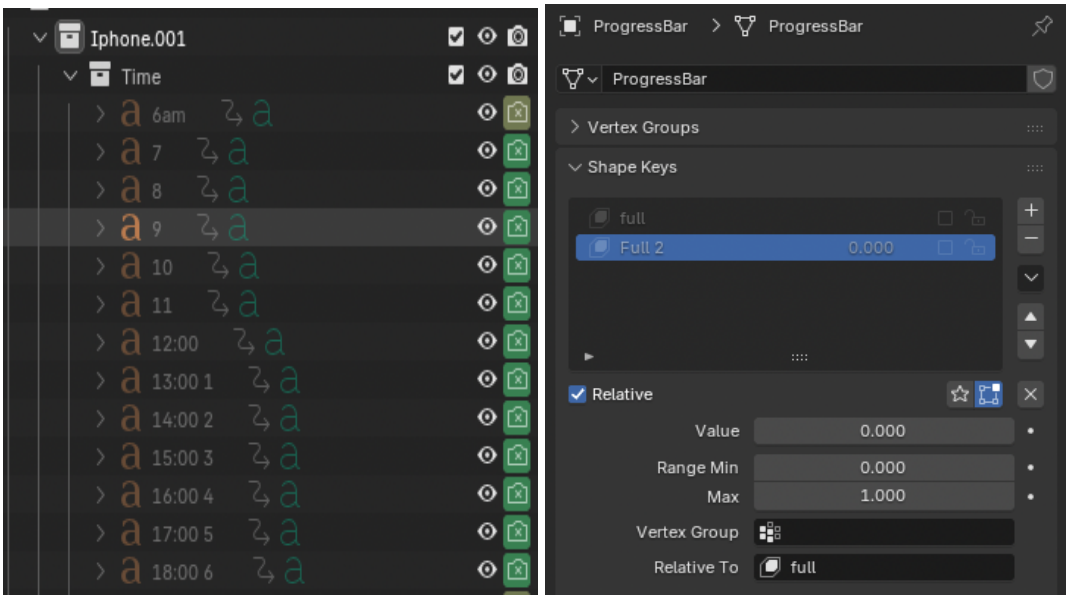


- **Phone UI**

I also created a **phone display** using a MP4 render of the sapling to oak tree, placing the animation within a smartphone frame as a material on a plane (following a tutorial) to reinforce the "scheduled reminder" concept.

To create the **water progress loading bar** I used shape-keys key (using a tutorial) frames (0 and 1 value) on a plane with a pivot point at the left.

I added the **time** as text by adding each hour as a text on the phone screen, and keyframing each hour in and out at the right time.

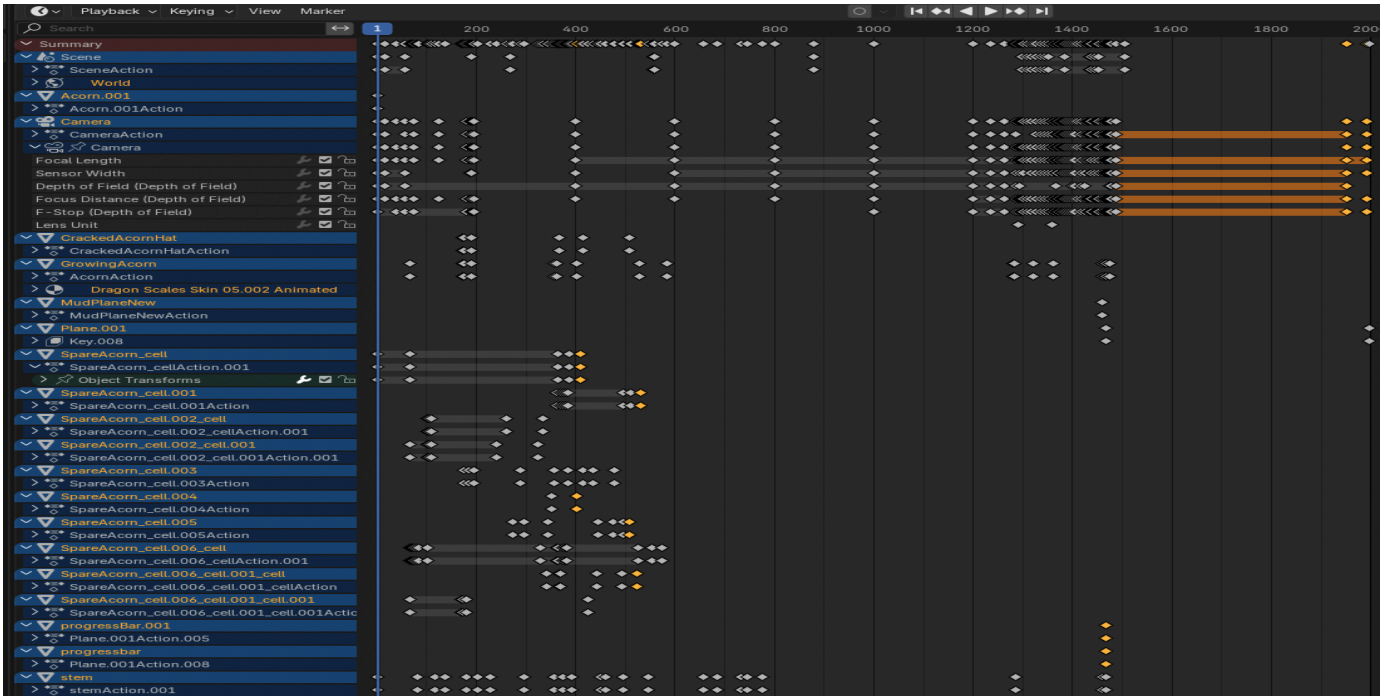


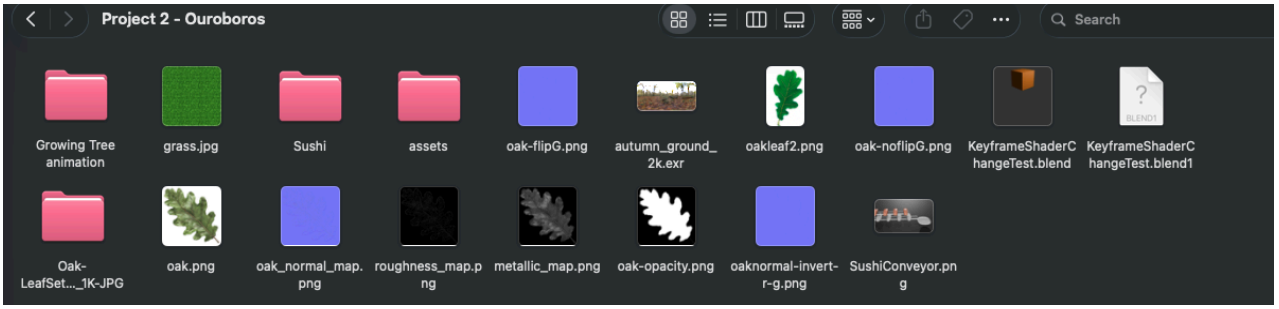
- **Editing and re-rendering**

  Because of the way the tree grows via Geometry Nodes, I used the Video Sequencer to clip sections, adjust speed and re-import updated renders. After noticing the first render was over-lit, I re-rendered the overly contrasted white sky with golden hour

keyframes and revised world lighting.

After the first render my goals are to: fix the speed, improve transitions, add sound and make small adjustments (i.e., fix the growing acorns pivot back to the branch after changing the mesh), and polish the phone (text, sounds, notifications, more gamified aesthetic) and overall flow of the video.




Project 2 - Ouroboros
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Growing Tree animation
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oak-noflipG.png
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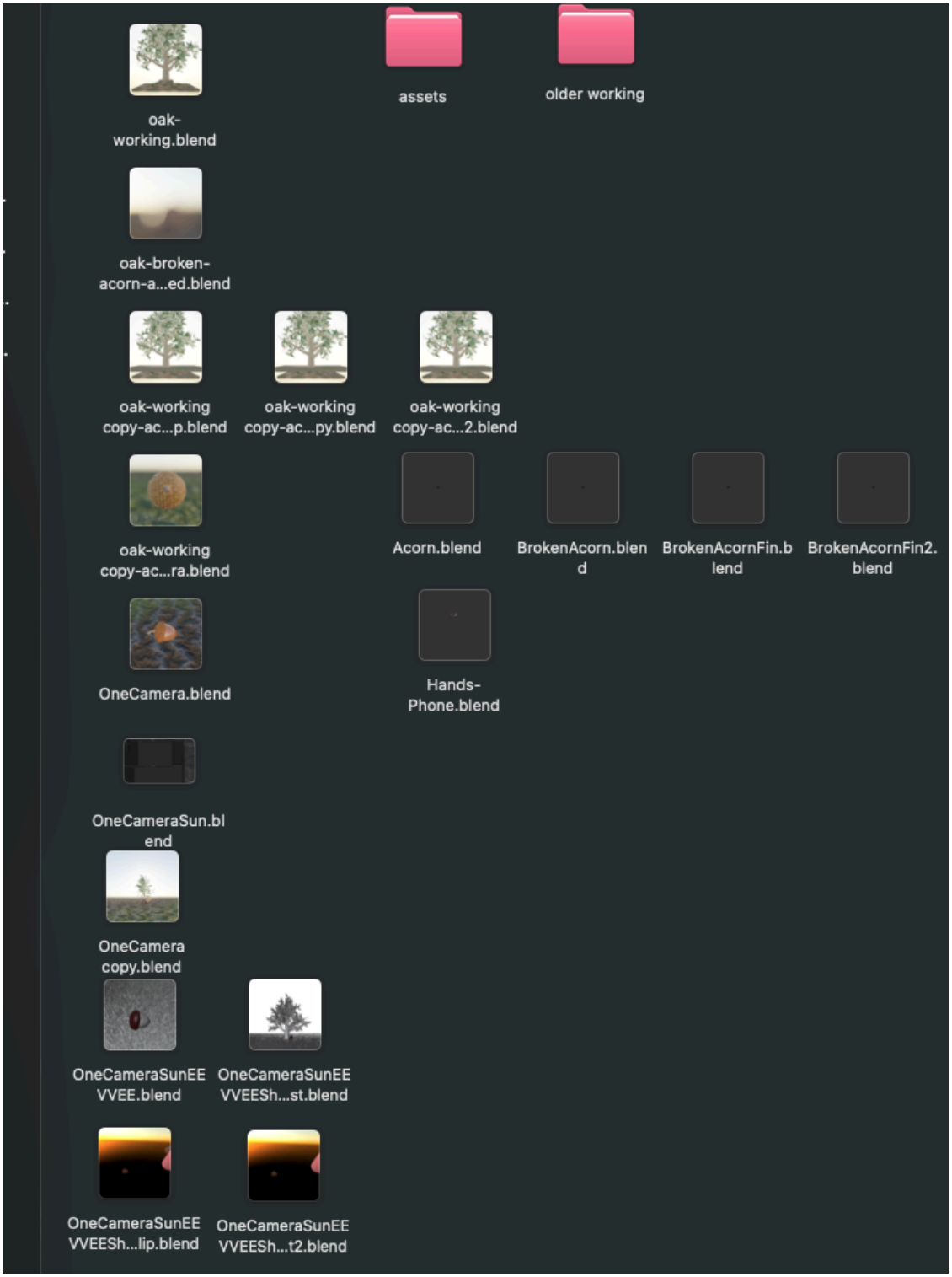
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OneCamera.blend
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Reflection:

Over this project I've become much quicker at problem solving in Blender, especially compared to the start of the semester. I've gained a deeper appreciation for add-ons (from fracture tools to Sun Cycles) and how they can dramatically speed up workflows. I also realised how powerful keyframes are: not just for movement, but for transitions between materials, lighting changes and character animation. The downside is that once many keyframes exist, fixing or adding one value can mean chasing down and updating a lot of others.

Because of the way the tree grows with the geometry nodes, I used the video sequencer in blender to clip parts out and modify the speed. I found it very helpful how you could render the images and easily reimport them this way if you decided to update the scene (which I did to readjust camera pans, scene time, after fixing materials)

A technical challenge was the acorn top materials. I had noticeable gaps in the acorn "hat" and stem due to displacement, which I eventually solved by switching displacement + bump to bump-only. Because I'd already keyframed the original mesh, I had to carefully transfer materials and replace the mesh across all keyframes, as well as reframing the camera keyframes after, which was tedious but educational. Learning animating keyframes certainly had its challenges too but I've learned how to use interpolation methods, shape keys, rig animating, the video sequencer and even geometry nodes.

On a personal level, the biggest lesson in this course was learning to work against my perfectionism and time management (understanding there is always going to be an infinite number of unknowns when learning software and how to manage my time accordingly). At every step in every project involves a lot of problem solving. Instead of obsessing over an ideal final vision or getting stuck in rabbit holes trying to solve a problem, I am learning to focus on implementing core mechanics and prioritising what mattered most for the concept. Blender continues to be a process of trial and error with constant unknown variables, but I now feel more confident troubleshooting unknowns and less intimidated by them.

Overall, I'm proud of how far I've come with Blender this semester. I started this project feeling overwhelmed. This project and course not only expanded my technical skills (Geometry Nodes, rigging, shading, VSE, and keyframed lighting) but also taught me invaluable experience. I'm excited to keep using Blender in the future. I will definitely

continue using it all the time to create game assets. Being able to do this is a huge win for me.

References

Tutorials

How to Make Stylized Acorns in Blender (Tutorial)

[3.4] Blender Tutorial: Transition Animation Between Materials

Create realistic grass in 1 minute in Blender Tutorial

How To Easily RIG Characters With RIGIFY in BLENDER 3

Texture Animation | Import Any Video Into Blender With Animated Image Texture or ...

How to Animate EVERYTHING with Absolute Shapes Keys

Blender 3.1 Day and Night Cycle Tutorial

Assets:

- Growing Tree Animation - Superhive
- IPhone 13 | FREE Smartphones models | BlenderKit
- Universal Human Body & Face Rig

Image Textures:

- Grass texture: Seamless green grass pattern | Free Vector
- Oak leaf: Green Oak Leaf with Detailed Texture - CleanPNG

Blenderkit Materials:

Acorn:

- Twig: Old Wood Bark - Blenderkit
- Hat: Dragon Scales Skin - Blenderkit
- Body: Simple Wood - Blenderkit

Add Ons

- Fracture-Iterator
- Rigify