

Creating a world you can linger in



The Drifting Afternoon

From a pond daydream to an interactive 3D garden.

A crooked tower rises from teal water. A boy drifts in a canoe. Fish gather, frogs hop, and the garden changes season. The experience was built through repeated visual choices, assets built in Scenario and custom real-time behavior.

This guide expands the trailer's second half: **Concept Exploration**, **Concept to 3D** and **Simplify the geometry**. It also shows the work that connects those stages to a living, playable scene.

18

models built in Scenario

3

season palettes

Explore the mood. Establish the rules.

Concept exploration built in Scenario tested how the same pond could feel in three different visual languages.



Painterly storybook

Broad painted shapes, expressive silhouettes and an illustrated surface treatment.



Sculpted miniature

Rounded clay-like volumes, tactile surfaces and the intimacy of a handmade set.



Cinematic 3D

Transparent teal water, soft lighting and stronger material depth.

What stayed constant

The tower remains the focal point; its lower architecture is submerged. The canoe needs a clear loop. Open water must leave room for fish, reflections and the wake.

What the direction became

The selected language mixes angular, origami-like plants and fauna with soft cube-headed characters, a smooth manta, and simple painted architecture and lily pads.

Turn the atmosphere into an asset library.

Image references built in Scenario with GPT Image 2.5 define the silhouettes before 3D generation in Scenario.



GIRL / cube head + white hair



BOY / curls + reclining pose



CANOE / visible open interior



FERN / angular leaf rhythm



MANTA / smooth flat wings

Specify identity

Character iterations fixed the girl's cube-shaped head, dot eyes, black clothing and long segmented white hair. The boy's curls and pose were refined independently.

Specify construction

The canoe reference exposes its hull and seats. The koi was revised into a straight rest pose. These choices give the next stage clearer forms to reconstruct and animate.

Keep traceable references

Saved prompts, image IDs and model IDs connect the chosen design to its asset built in Scenario. The composition image guides layout; individual references resolve detail.

Generate objects, then inspect them in space.

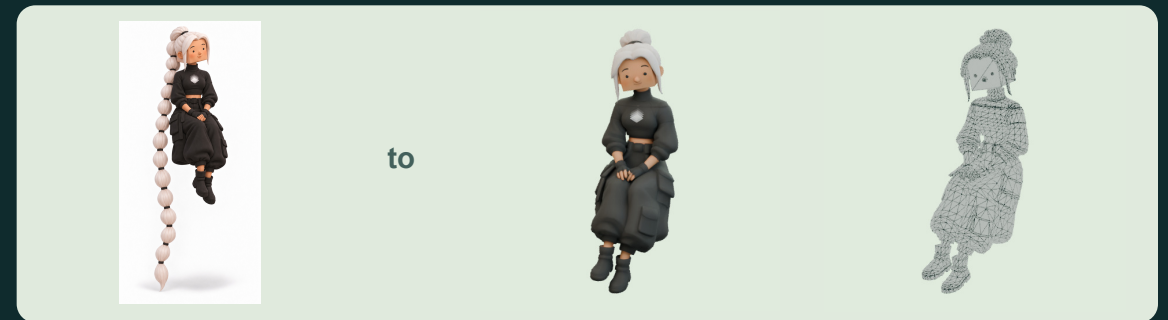
3D assets built in Scenario using Tripo P2 and GPT Astra 3D.

Each panel reads left to right: approved reference, textured model, wireframe.



Canoe / GPT Astra 3D in Scenario

Open hull and interior. Its export axes required a 90-degree correction before scene placement.



Girl / Tripo P2 in Scenario + local repair

Character geometry built in Scenario was later repaired and combined with a lighter body.



Shore flower / Tripo P2 in Scenario

The coral trumpet reference became a reusable sculptural accent along the bank.



Fern / Tripo P2 in Scenario

The selected fern was retained after a lower-triangle alternative was reviewed.

Build the composition around open water.

Assets built in Scenario supply the pieces. Scale, placement and spatial checks turn them into one coherent place.



The wide view balances a central landmark, a readable canoe route and planted edges. Ground and underwater forms remain visible through the pond.

01 Establish the main relationships

Place the pond, tower and canoe first. Fit the balcony above the waterline, submerge the ruins, and size the reclining boy to sit inside the hull.

02 Plant the banks

Fit the lowest root vertices to the terrain and bury them slightly. Group ferns in pairs and trios; vary tree scale and rotation to avoid identical-looking repeats.

03 Reserve movement space

Check the full boat loop against giant pads. Give four deep koi a closed route through the submerged colonnade; let eight surface koi roam and feed.

Make independent systems feel connected.

Water, boats, animals and hair share the scene clock, so pause freezes the garden consistently.



Water as a layered effect

Four irregular wave components displace the surface. A finer normal ripple layer adds detail; planar reflections mirror the sky and scene. Underwater light patterns and terrain variation help the pond read as a volume.

Canoe and wake

The canoe travels a curved loop. Six soft-edged wake ribbons follow that route, keeping the wake aligned with the boat rather than leaving a static mark on the water.

Swimming with direction

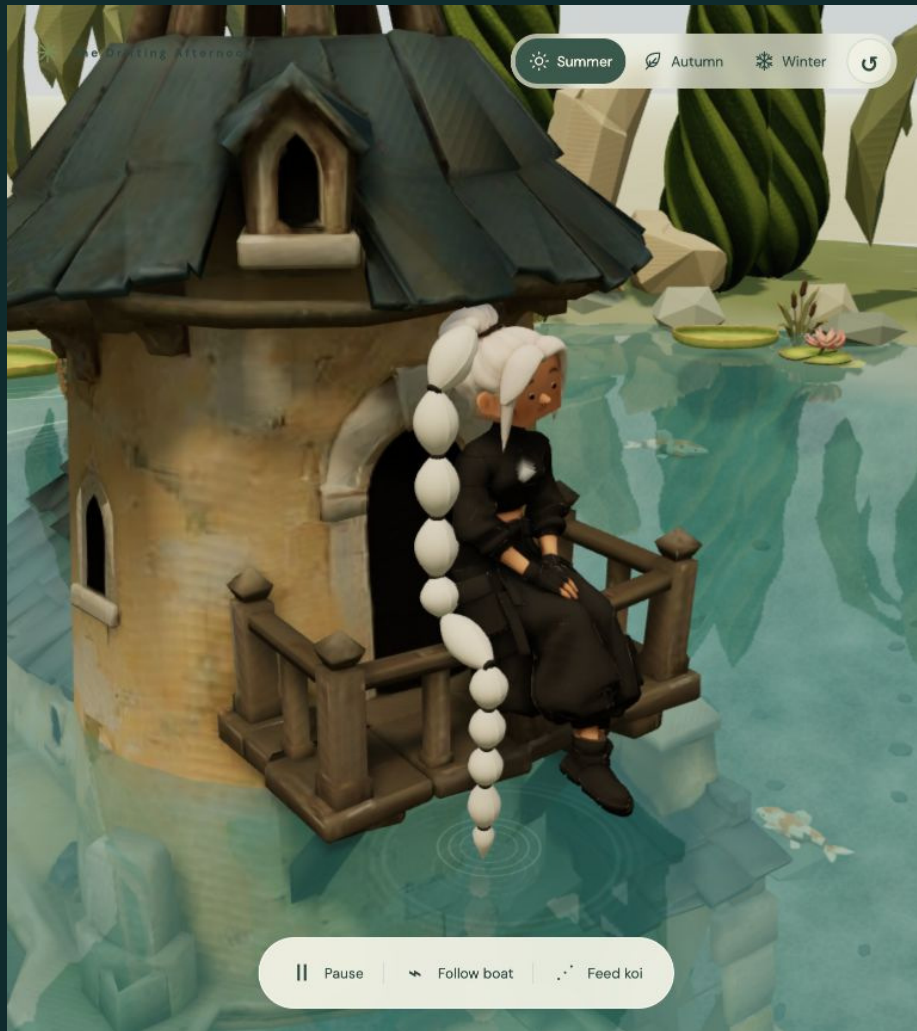
Koi steer forward with bounded turning and shore containment. Their tails bend in a vertex shader, without adding a skeletal rig. The manta's orientation follows the velocity of its path.

Small events at contact points

Water taps create rings. Frog hops trigger ripples. When the hanging hair approaches the animated surface, the scene emits a small ripple near its tip.

Preserve the face. Rebuild the moving hair.

Built in Scenario, the balcony character then needed local modeling work to hold together under motion and close inspection.



Repair and preserve the identity

A cheek and forehead opening was closed with 17 textured triangles. The repaired original head, white crown hair and bun were kept when a lower-triangle body was selected.

Fit the body at the collar

The original head and new body were clipped and fitted at the black collar, then joined with a closed neck seam. The result contains 6,240 triangles and preserves 1,452 original head vertices with their UVs and normals.

Construct a connected chain

Ten sculpted hair sections form the hanging braid. The top follows the head; the rail-supported section stays in place; the free end sways. Overlapping joints hide gaps, and each section stays attached to the previous endpoint.

Check the motion, not just the pose. Sampled tests cover 120 seconds of attachment, segment continuity and balcony clearance.

Give the visitor a few gentle ways to play.

The controls support looking, drifting and small discoveries without interrupting the mood.



Explore from outside or inside the canoe

Orbit, zoom and pan reveal the diorama. Follow boat moves to a forward-facing camera near the boy's head, with a 64-degree field of view. The boy is hidden to prevent camera intersections; leaving restores the previous view.

Feed koi through a complete behavior cycle

Enable Feed koi, then tap open water. Fish turn toward assigned spots, approach with a speed cap and settle into tiny hover movements. Food fades away and the fish return to roaming. The latest code uses a 9-16 second food lifetime.

Make feedback immediate

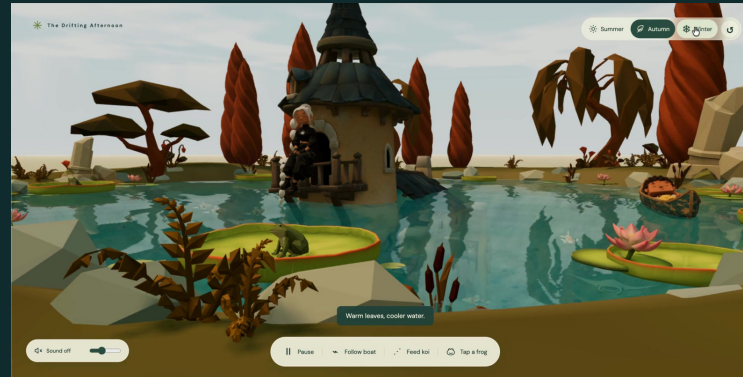
Tap either frog, or use the button that alternates between them, to trigger a hop, ripple and optional croak. Water taps create rings. Pause and reset remain available, and the mobile controls wrap into two rows.

Change the atmosphere, keep the place familiar.

Color, lighting and restrained audio give the same small world several different moods.



SUMMER / original colors



AUTUMN / warm foliage



WINTER / pale scenery

Seasonal art direction

Summer restores the original materials. Autumn warms the leaves and light. Winter whitens above-water scenery and uses a paler sky while preserving teal water, underwater forms, and the identifying colors of characters and creatures.

These are material and lighting palettes. The current build does not add snow accumulation, ice, or new seasonal geometry.

A quiet audio layer

Scenario-generated audio combines ElevenLabs Music v2.5 with Sound Effects v2: soft instrumental music, water ambience and occasional frog calls. Crossfades soften the loop seams; random call intervals avoid a mechanical rhythm.

Audio loads after Sound is enabled. Volume control, pause and hidden-tab suspension keep playback under the visitor's control.

Spend triangles where the silhouette needs them.

The trailer's wireframe comparison shows lighter replacement models built in Scenario and reviewed before integration.

Spiral cypress

ORIGINAL



4,480 triangles

APPROVED



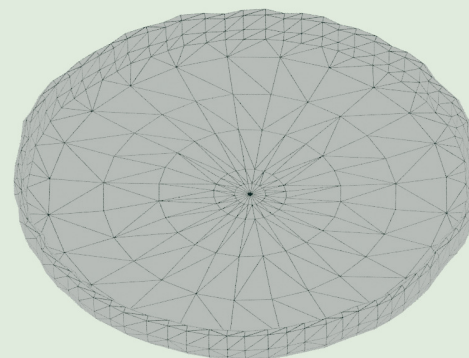
1,932 triangles

56.9% fewer

8 copies x 2,548 saved per model = **20,384 fewer scene triangles.**

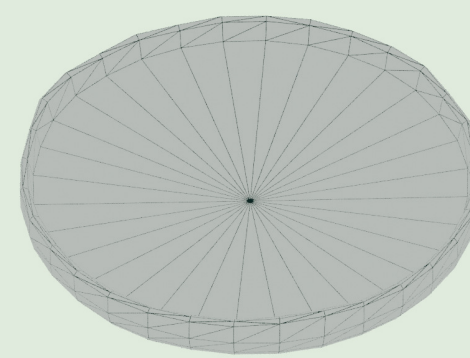
Giant empty lily pad

ORIGINAL



1,632 triangles

APPROVED



480 triangles

70.6% fewer

9 copies x 1,152 saved per model = **10,368 fewer scene triangles.**

Review textured and wireframe views together: check silhouette, thin leaves, rims and shading. The lower-triangle fern and exotic plant were declined; their existing models stayed. Optimization remained a visual choice.

Optimize more than the mesh.

Geometry, texture memory and rendering work were treated as separate costs, then checked against the intended appearance.

SCENE GEOMETRY

268,229

before approved replacements

214,817

after approved replacements

19.9% fewer

53,412 triangles removed across the documented replacement rounds. This total includes repeated geometry before visibility culling.

A geometry estimate, not a frame-rate benchmark.

Reduce texture cost

Small props use 512px color maps; giant pads use 1024px. The earlier small-texture pass recorded an estimated 136 MiB reduction in decoded texture allocation while preserving geometry and UVs.

Limit expensive rendering work

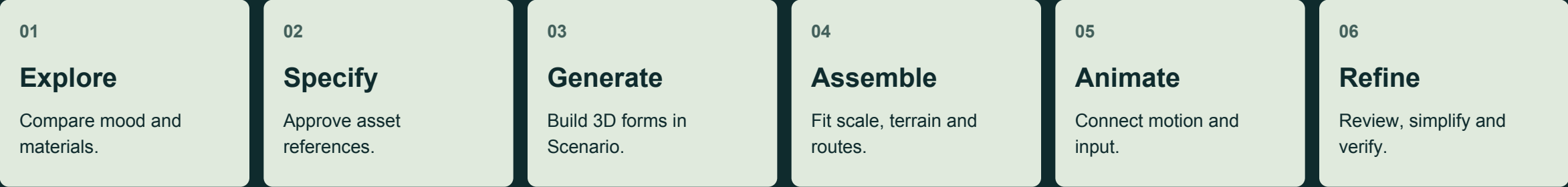
The pixel-ratio ceiling is 1.35, with adaptive reduction on slower devices. Shadows use a 1024 x 1024 map at up to 10 updates per second. Reflections use 512 x 512 at up to 15 updates per second and can reuse a paused view.

Validate what the visitor can notice

The project records checks for asset and texture loading, grounded plants, boat clearance, fish steering, hair continuity and collar closure. Browser reviews cover interaction, season changes, audio decoding and return from the boat camera.

An iterative path from image to experience.

Each stage creates something concrete to review before the next layer is built.



Images and 3D assets were built in Scenario; audio was also generated in Scenario. GPT Astra is credited in the trailer for the experience. The finished garden combines those assets with local Three.js code for composition, water, motion, interaction and review tools.

PROJECT SOURCE GUIDE

[1] Art direction

output/style-samples/prompts.md; asset-references/scene-composition-layout.md. Original style studies and intended spatial relationships.

[2] Asset provenance

assets/manifest.json; output/asset-references/*.json. Models and reference images built in Scenario, plus orientation corrections.

[3] Trailer evidence

video-production/v5/edit-timeline.json; v2/render_assets.py; review/mesh-verification.json. Chapter structure, comparison renders and counts.

[4] Scene implementation

src/main.js, environment.js, assets.js, water.js, actors.js, seasons.js, swimming.js, grounding.js and ruin-route.js.

[5] Character construction

scripts/repair-girl-face.mjs; combine-girl-models.py; output/3d/low-poly-review/girl-composite.json; check-hair-drape.mjs.

[6] Visitor behavior

src/boat-camera.js and feeding.js; tests/feeding.mjs. Current behavior takes precedence over older settings in the revision notes.

[7] Audio

output/audio/provenance.json; src/sound.js; tests/sound.mjs. Generation credits, looping, activation and pause behavior.

[8] Optimization

README.md revision history; output/3d/low-poly-review/results.json; project-status.json lily-pad record; texture reports.

[9] Validation

tests/scene-invariants.mjs; scripts/check-ruin-route.mjs; scripts/check-hair-drape.mjs. Coverage described from project records and code.