Assignment 5: Textured 3D Model + Core Gameplay Mechanics

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Part 1: Advanced Materials – Comparison and Analysis

For the Fractured Mirror asset, we created two different material styles: a realistic version and a stylized version. Both styles were created to explore how the asset could visually support the game's themes of memory, mystery, and the power of light. The goal was to balance artistic design with emotional tone while ensuring technical quality in Blender.

Realistic Version The realistic version was developed using BlenderKit PBR (Physically Based Rendering) materials. We used a base cracked glass texture with enhanced surface detail through a roughness map. A normal map was applied to bring depth and make the cracks appear more three-dimensional. We also added subtle imperfections like smudges and dirt to reflect age and wear. The metallic edges of the mirror frame were also treated with realistic textures, showing slight corrosion. This version gives the mirror an ancient, grounded, and believable appearance. It looks like an object forgotten over time, fitting environments like ruins, old cabins, or forgotten caves.

The visual effect of the realistic material is very immersive. It helps the mirror feel like part of the world and adds weight to the scene. However, it lacks the magical or mysterious quality that is essential to Whispers of Light.

Stylized Version The stylized version was created using a custom shader node setup in Blender. In this version, the mirror cracks glow softly using an emission shader. We used a noise texture and transparency to create a shimmer effect that changes slightly when

viewed from different angles. This effect simulates the idea that the mirror is reacting to the player's lantern light. The glow also hints at energy, memory, or hidden magic. The rest of the mirror remains dark and slightly translucent, with a foggy glass effect.

Visually, the stylized mirror looks magical, emotional, and story rich. It gives the feeling that the mirror is not just an object, but something alive with memory. It fits locations where the player might discover hidden story moments, flashbacks, or puzzle mechanics.

The use of emission, mixed shaders, and soft transparency also matches the broader art style of Whispers of Light, which relies heavily on light and emotion. The technical node setup included the use of Mix Shader (combining emission and transparency), along with a ColorRamp to control intensity of glow, and a noise texture to drive the shimmer animation.

Comparison and Choice Both versions have their own strengths. The realistic mirror is grounded, believable, and would work well in a more physically based world. It's also relatively easier to understand visually for players. The stylized version, however, feels more aligned with the game's atmosphere. It adds mystery, emotion, and fits directly into gameplay — especially where mirrors reveal memories or act as portals.

Because Whispers of Light is a narrative game based on exploration, memory, and discovery, the stylized version was selected as the final material. Its glowing and magical quality fits perfectly with the story and the interactive nature of the mirror.

Part 2: Monetization and Development Cost Plan

Monetization Strategy

Whispers of Light is a narrative-driven, emotionally rich exploration game. The game focuses on visual storytelling, atmosphere, and puzzle elements, all tied together through the theme of light and memory. Because of this, the game is best suited for players who enjoy single-player experiences, meaningful stories, and artistic presentation.

To match this audience, we will release Whispers of Light as a premium paid game on PC and console platforms. The standard purchase price will be $19.99 CAD. This one-time purchase model ensures a complete and uninterrupted experience without any advertisements or paywalls. This decision is based on studying similar narrative games like *Ori and the Blind Forest*, *Journey*, and *Gris*, which have successfully launched with a paid model and were well-received by story-loving players.

We believe this pricing is reasonable for our intended audience, particularly those who value creativity and emotional depth over flashy gameplay or high action. A one-time

purchase also builds trust with players by offering them full access without requiring additional spending.

To extend the life of the game and maintain post-launch engagement, we plan to offer one optional downloadable content (DLC) pack after the main release. This DLC will be priced at $4.99 CAD and include an additional story chapter, extra collectibles, and expanded gameplay mechanics tied to the mirror's function. This allows dedicated players to explore more of the game world while maintaining the core game as a full and satisfying standalone experience.

We do not plan to include microtransactions, advertisements, or loot boxes in the game. These features, though common in some genres, would not fit the tone and purpose of Whispers of Light. Our goal is to offer a complete experience that feels artistic, personal, and polished.

Target Platform Justification

Whispers of Light will initially launch on PC via Steam and itch.io, followed by a console release on Nintendo Switch. These platforms were chosen because they are popular with indie game players and narrative game fans. Steam offers broad reach, visibility through indie showcases, and the ability to distribute updates and DLC smoothly. Itch.io is widely used by indie developers and aligns with our audience of story-driven, arts-focused gamers. The Nintendo Switch is ideal for reaching a wider and often younger audience that appreciates emotionally engaging games.

Cost Breakdown and Development Planning

Whispers of Light will be developed by a small indie team of five people. The roles and responsibilities include:

- 1 Game Designer and Writer: Handles the core mechanics, level design, narrative structure, and overall game vision.

- 2 Artists: Responsible for modeling, texturing, animating, and visual polish of characters and environment.

- 1 Programmer: Builds core systems, interaction logic, UI/UX, and performance optimization.

- 1 Marketing and Community Manager: Focuses on outreach, trailers, dev logs, Kickstarter updates, press releases, and managing the game's online presence.

Below is an estimated cost breakdown for the project:

Category	Estimated Cost (CAD)
Software and Tools (Unity Pro, Adobe, plugins)	$2,000
Team Compensation (6 months)	$30,000
Asset Store and Paid Plugins	$500
Marketing and Promotion (ads, trailer production, social media)	$2,500
Distribution and Publishing Fees (Steam Direct, Nintendo, etc.)	$1,000
Total Estimated Cost	**$36,000**

All team members will work part-time over a period of six months, making this both manageable and sustainable for an indie team. The art and design workload will be split evenly across the two artists, while the programmer will also handle basic testing and optimization.

Additional Expenses and Considerations

While the main tools used in development are free or low-cost (e.g., Blender, GIMP), some premium assets or plugins from Unity Asset Store may be necessary to speed up the development timeline. The estimated $500 for asset store purchases includes UI kits, shader tools, sound packs, or particle systems.

Marketing is essential for a successful launch. The marketing budget will go toward social media advertising (Instagram, YouTube, Twitter), develop a teaser and final trailer, and possibly hire a voice actor or narrator for key moments in the game.

Publishing fees include Steam Direct's one-time $100 USD fee and potential registration with Nintendo's developer portal, which may have administrative costs. The cost of testing and compliance for console publishing will also be factored into the post-Kickstarter stretch goals.

Funding Approach

To finance the project, the team plans to launch a Kickstarter campaign with a funding goal of $40,000 CAD. Kickstarter allows for community-driven support, builds early visibility, and gives players the opportunity to back the project during development. The campaign

will include reward tiers such as digital wallpapers, exclusive backer-only lore entries, and early access to the DLC chapter.

The $4,000 difference between the budget and the goal accounts for platform fees (Kickstarter takes a percentage of funds raised), taxes, and unexpected costs.

In case the Kickstarter campaign does not meet its goal, the secondary plan is to apply for Canadian game development grants. Specifically, the team will explore options through **Ontario Creates**, the **Canada Media Fund**, and **The Indie Superboost Program**. These grants are designed to support local and emerging game developers and can provide not only funding but also mentorship or marketing assistance.

If needed, the team is also open to small-scale partnerships with indie publishers who align with the game's vision. However, self-publishing remains the preferred route to maintain creative freedom.

Ethical Considerations in Monetization

Ethics are important when choosing how to monetize a game. Many games today use in-game purchases, ads, and microtransactions to boost profits. While this works in some genres, it often disrupts the player's emotional experience. For Whispers of Light, which is meant to be immersive and emotionally moving, such features would be distracting.

By choosing a one-time purchase model, we avoid exploiting player attention and maintain a clear value proposition. The optional DLC will only include additional content — not key story moments or features — so players don't feel forced to spend more to enjoy the full game.

We also commit to avoiding manipulative design tactics such as time-gated rewards, excessive notifications, or pressure-based purchases. These tactics do not align with the emotional tone and reflective gameplay of Whispers of Light.

Long-Term Vision and Revenue Goals

Beyond the initial launch, the goal is to continue supporting the game with small updates, accessibility improvements, and possibly more story-based DLC depending on community interest. If the game performs well, it may be ported to additional platforms such as PlayStation and Xbox, which will expand the reach.

While the initial revenue model is modest, we aim to build a loyal audience that can support future titles or expansions. Revenue from the base game and optional DLC will go toward maintenance, community engagement, and future project development.

Conclusion

The monetization and financial planning for Whispers of Light is built around fairness, creative focus, and sustainability. By using a transparent one-time purchase model and offering optional content later, we respect players' time and money. With the support of Kickstarter and Canadian grants, we can build a polished and emotionally impactful game while remaining independent and community focused.

Screenshots