

T192-003
Game Design and
Gamification FA

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Game Brief

Game overview (ReWeave):

- Players take the role of a young tailor captured in a kingdom in crisis. To earn freedom, they collect old clothes, repair, upcycle, and recycle textiles into new fabrics, following a circular fashion and textile system: Collect - Repair/Upcycle - Recycle - Craft - Reuse (Ellen MacArthur Foundation, 2017; Harmsen et al., 2021).

Purpose:

- Teach the environmental impact of fast fashion.
- Encourage sustainable fashion habits: buy less, repair, upcycle, swap clothes, support ethical brands (Ellen MacArthur Foundation, 2017; Harmsen et al., 2021).

Sources:

Ellen MacArthur Foundation (2017). A New Textiles Economy: Redesigning Fashion's Future, https://www.ellenmacarthurfoundation.org/a-new-textiles-economy?utm_source=chatgpt.com

Harmsen, P. et al. (2021). Textiles for Circular Fashion: The Logic behind Recycling Options, Sustainability, https://www.mdpi.com/2071-1050/13/17/9714?utm_source=chatgpt.com

Two Selected Reference Games

- Infinity Nikki
- Time princess

Infinity Nikki

- Infinity Nikki is a fashion adventure game where players explore different maps, gather materials and craft outfits. The game focuses on creativity, recycling old items and using collected resources to make new clothing. Its crafting, upcycling, and exploration system inspires the way my game will let players gather materials and create sustainable outfits.



Eight Formal Elements

- Player : PvE, single player game
- Objective : To create outfits that meet specific challenge requirements and gain high scores in order to progress through the story.
- Procedure : Players start by exploring a map. They explore around and interact with NPC to gather basics materials or start missions, Special actions are battling with monsters using outfits' attributes. Combine collected materials to craft outfits with enhanced abilities. Unlock rare outfits through special missions
- Rule : Players must complete challenges using a limited set of outfits, styles, and accessories. Time limits and points systems in challenges and dungeons restrict performance, and players must manage materials carefully, as resources are limited.
- Resources : Clothing items for crafting outfits, fabrics and materials collected for challenges, and gems, which are used to pull outfits from the gacha system. Coins or in-game currency are also used to purchase materials or special items.

Eight Formal Elements

- Conflict : Player face competition against NPC stylists or challenges achieving high scores to pass. There are restriction in outfits and limitation in resources. Grinding in dungeons for resources has time limit.
- Boundaries : Map, event map, Time restrictions in challenges and screen
- Outcome : Players aim to achieve high scores and rankings by creating outfits that meet challenge requirements. Success results in rewards such as new outfits, materials, coins, gems, and story progression, while failure leads to lower scores, lower rankings, or missed rewards.

AGE Framework

1. Action

- Interact with NPCs: Talk to villagers or characters to get quests, materials or tips.
- Collect and Craft: Gather clothing materials from monsters or environment and craft outfits by combining materials.
- Move/ Explore: Walk, run, jump, navigate dungeons, map, marking points on map and stages.
- Take Pictures: Dress up and take pictures of own character.

2. Gameplay

- Explore map and locations to gather materials.
- Complete the story missions and challenges to unlock outfits, items and story events.
- Compete NPC stylists to gain rewards and advance in the game.
- Craft outfits to upgrade abilities and attribute.

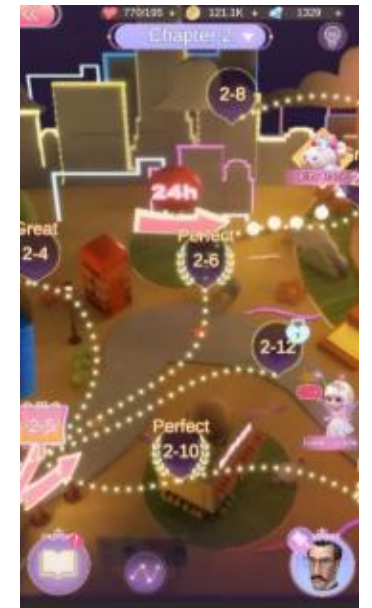
AGE Framework

3. Experiences

- Satisfied and excited when they win competitions or complete challenges with high scores.
- Happy and proud when the outfits they craft are visually appealing or creatively designed.
- Engaging in fashion creativity.
- Excited about the Gacha system and rewards.

Time Princess

Time Princess is a story-based dress-up game where players craft outfits to progress through different chapters. It also has a voting and PvP outfit competition system where players compare designs and choose the best look. This gives me ideas for how my game can use story missions and fashion competitions to make gameplay fun and engaging.



Eight Formal Elements

- Player : PvE Single player (story challenges), PvP (fashion competition with other players)
- Objective : To craft outfits that meet the story chapter requirements, gain high scores, and win votes in PvP fashion competitions.
- Procedure : Players start a story chapter by checking the outfit requirements. They then collect materials and clothing items from their inventory and craft outfits to match the challenge. For special actions, players can enter PvP competitions where other players vote for the best designs. Finally, the game resolves by giving scores, rankings, rewards, and progressing the story to the next chapter.
- Rules : Players must follow the style requirements for each chapter or competition. Materials and crafting resources are limited, and players can only use items they have unlocked or collected.
- Resources : Clothing items and outfits as the main resources, collecting and crafting them to complete challenges. In-game currency (gold) or special coupons to unlock story chapters, buy blueprints, or purchase clothes. Companions or pets can help players gather materials.

Eight Formal Elements

- Conflict : Meeting chapter style requirements with limited resources. In PvP, the conflict comes from competing against other players and trying to win votes.
- Boundaries : Physical Boundary; Story screens, crafting menus, and challenge interfaces. Time Boundary; Some events and PvP competitions have a limited time. Conceptual Boundary; Players can only use items unlocked, crafted, or owned.
- Outcome : Earn scores, rankings, and rewards like new outfits, materials, and story progress. In PvP, players win votes and improve their rank compared to others.

AGE Framework

1. Action

- Interact with Story: Select dialogue options or story paths that affect outcomes
- Dress up: Customize character's clothes according to tasks or competitions
- Take picture: Capture photos of own character and pose
- Collect and Craft: Receive items or materials from NPC interaction or events and craft outfits

2. Game play

- Progress through story chapters by completing outfit challenges.
- Enter PvP competitions to compete with other players' outfits and earn votes.
- Strategize selecting the best items to gain high scores and rankings.
- Craft required outfit to unlock the story chapters.

AGE Framework

3. Experiences

- Excited when winning voting competition and crafting beautiful outfits
- Satisfied from customizing characters and progression through story.
- Enjoy the story and feel emotions upon each storyline and choices made.
- The game is fun, creative and emotionally engaging.

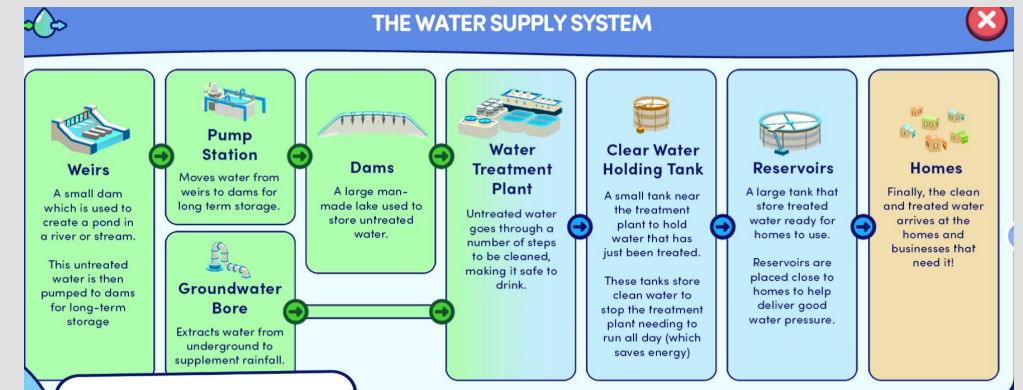
Compare and Contrast

Feature/System	Infinity Nikki	Time Princess	ReWeave
Material collection/ Exploration	Collect materials from dungeons, monsters	Collect materials from NPC and events	Combine both dungeons drop torn cloths NPC provides or exchange old materials and cloths
Crafting System	Craft outfits with attributes (combat stats, abilities)	Upgrade/craft outfits for tasks or events	Repair, upcycle, recycle materials into garments that boost Knowledge Level and dungeon abilities
Competition	Limited	Voting/events for best outfits to rewards	Villagers vote for best upcycled garments, rewarding Knowledge Points or rare fabrics

Serious Game Examples

Working with water

- This serious game explains how water systems work in real life, such as supply, distribution and limited availability. Players learn to manage water resources carefully for all people and understand the consequences of overuse. This inspires ReWeave to similarly teach real-world systems but focused on textile production and sustainable fashion where materials must be reused and recycled instead of wasted.



Serious Game Examples

Fashion repair game

- This game is designed for players to repair, clean and restore damaged clothing items instead of throwing them away. Players complete step-by-step tasks, such as stitching holes, patching tears, and cleaning stains, to make old clothes wearable again. These games teach upcycling, reuse, and sustainable fashion practices, encouraging players to understand the value of repairing instead of replacing. This inspires ReWeave's Textile Workshop where players collect torn garments, repair and upcycle them, and craft new outfits, promoting a circular fashion system.



Bartle Player type

The Achiever type best describes ReWeave's target users (aged 16–25). Players are motivated by progress, mastery, and completing goals.

There are extrinsic elements such as:

- Collecting and repairing/upcycling clothes
- Progression bar for each mission.
- Leveling up Knowledge and unlocking new fabrics
- Achievements, competitions, and crafting rewards

Overview of Serious game concept

ReWeave is a small RPG serious game designed to teach players aged 16–25 about sustainable fashion and circular textile practices with interesting storyline. Players take on the role of a tailor kidnapped and enslaved by a neighboring kingdom and must complete missions to craft garments for the people in order to earn freedom.

Players collect, repair and upcycle materials. They can also trade repaired garments for currency to unlock blueprints and essential resources and gain Knowledge Levels to unlock advanced fabrics, crafting techniques, workshop upgrades and story progress as well. The game combines extrinsic rewards, problem-solving and step-by-step textile recycling to reinforce practical sustainable fashion practices while driving players toward the ultimate goal of escaping slavery and returning to normal life.

Eight Formal Element

- Player - Single-player, PvE role as a tailor kidnapped by a neighboring kingdom
- Objective - Complete king-assigned missions within deadlines, earn currency to unlock blueprints for new outfits, craft garments for missions and personal attributes, achieve freedom from slavery and become a normal resident of the kingdom.
- Procedure - Starting Action: Player begins peacefully as a tailor, then is kidnapped and must survive as a slave, core loop: explore maps and dungeons to collect torn cloth and materials, recycle and upcycle them in the lab, craft outfits for story missions and personal use, Special Action: trade or collect materials from NPCs.
- Rules - Missions must be completed within deadlines, materials are limited and must be managed strategically, knowledge Levels unlock progression: higher levels allow advanced crafting, new blueprints and building upgrades.
- Resources - Torn or damaged cloth and fabrics, currency earned from reselling repaired/customized garments, blueprints for new outfit designs, knowledge points for upgrading workshop and unlocking advanced fabrics, energy bar for dungeon rewards.

Eight Formal Element

- Conflict - Mission deadlines create tension; failing results in penalties, limited materials require strategic choices: what to repair, craft, or trade, limitation resources can be collected in environment
- Boundaries - Kingdom map, dungeons, NPC towns, and the workshop, certain blueprints and building upgrades are locked until reaching higher Knowledge Levels, time limits in missions and scarcity of resources restrict actions.
- Outcome - Successful completion of missions increases knowledge level, unlocks advanced fabrics, new crafting techniques and workshop upgrades, players gain practical understanding of sustainable fashion and circular textile practices, mission failure or poor resource management affects rewards, progression and achievements, will get freedom after all missions completed.

AGE Framework

1.Action

- Move & Explore: Walk, run, and explore dungeons, towns, and the kingdom map to collect materials.
- Customize Outfits: Design and craft garments using collected materials and blueprints.
- Interact with NPCs & Story: Trade, gather information, and progress through the narrative.
- Battle with Monsters: Defeat monsters in dungeons to obtain torn cloth and rare materials.

2.Gameplay

- Players follow mission-based objectives to craft garments and complete tasks within deadlines.
- Core loop: Collect → Repair/Upcycle → Craft → Deliver → Earn rewards → Upgrade workshop.
- Progression: Gain Knowledge Levels, unlock advanced fabrics, new blueprints and workshop upgrades. Unlock the storyline.
- Extrinsic rewards: Currency, achievements. Progression.

AGE Framework

3.Experience

- Teaches planning, resource management and problem-solving through step-by-step textile recycling.
- Satisfied when completing missions and progressing toward freedom.
- Players can compete in fashion competitions, compare crafted outfits and engage with NPCs.
- Encourages practical sustainable fashion habits while keeping players motivated and engaged.

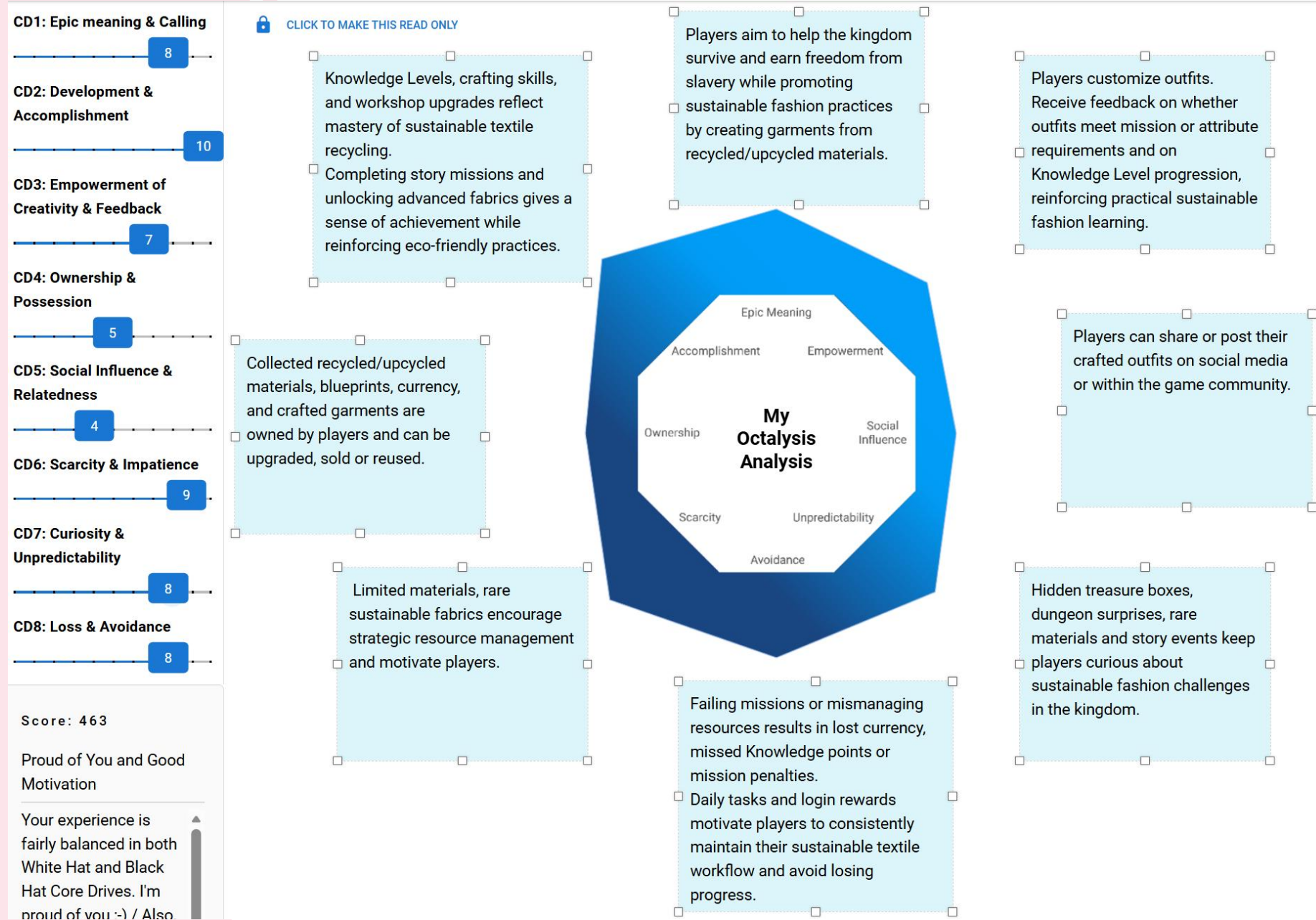
Justification

ReWeave addresses the design brief by teaching sustainable fashion habits in an engaging, interactive way.

- Practical learning: Players collect, repair, and upcycle materials, mirroring real-world circular fashion practices.
- Problem-solving & decision-making: Trading, crafting, and mission deadlines teach resource management and strategic thinking.
- Motivation: Extrinsic rewards and Knowledge Level progression keep Achiever-type players engaged while completing meaningful goals.
- Awareness & behavior change: By linking gameplay to missions, competitions, and recycling processes, players learn to value repair, reuse and ethical fashion choices in real-life.

Overall, the game combines fun RPG mechanics with educational objectives, making sustainable fashion both practical and motivating for the target audience.

Octalysis Diagram



Justification

1. Successfully motivated/engaged – Development & Accomplishment

- Players progress through Knowledge Levels, crafting skills, and workshop upgrades
- Circular system: Collect, recycle/upcycle, craft and deliver garments.
- Impact: Achievers feel accomplishment while learning practical sustainable fashion practices.

2. Motivation/engagement need to be improved – Social Influence & Relatedness

- Could be improved with guilds, multiplayer trade, or fashion competitions.
- Circular system: Players can share strategies, swap, recycled materials and collaborate to reinforce sustainable fashion habits.
- Have PVP battle.

Two changes added

1.Killer Player Type

Introduce competitive PvP battles to appeal to players who enjoy challenging others:

- Add: Introduce open PvP battles where players can compete for materials or currency.
- Impact: Winners gain rare resources; losers risk losing materials.
- Goal: Attract players who enjoy competition and high-stakes challenges.

2.Socializer Player type

Add multiplayer social features to appeal to players who enjoy collaboration and community:

- Add: Add multiplayer guilds for sharing materials, collaborating, and competing in guild fashion contests.
- Impact: Players connect, socialize, and gain recognition within the community.
- Goal: Attract players who enjoy collaboration, teamwork, and social interaction.

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