



Design Document for:

Epicarrot

“Help the bunny restore their land!”™

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Design History

This document explores the design journey behind "Epicarrot." From concept to completion, it outlines the moments, creative decisions, and collaborative efforts that shaped the game into what it is.

For those unfamiliar with design histories, this narrative provides transparency into the development process, offering insights into the brainstorming sessions in the whimsical world of Bunny Land. Whether you are a team member seeking context, a stakeholder interested in the decision-making process, or just a curious reader interested in the magic behind the game, this document invites you to step behind the scenes and witness the fascinating evolution of "Epicarrot."

Game Overview

Philosophy

Philosophical point #1

"Epicarrot" boards on a quest to achieve the extraordinary. My first philosophical support is that games should either break new ground, introduce players to joy and excitement, or refine existing elements with an artisan's touch.

Philosophical point #2

My philosophy is that my game should not be exclusivity because the game should be accessible across a wide range of devices. I believe in creating an expansive community, inviting players from diverse platforms to share in the magic of Bunny Land.

Philosophical point #3

"Epicarrot" intends to put the player first, offering an immersive and rewarding experience that transcends the traditional boundaries of gaming. Whether through inventive mechanics, engaging narratives, or delightful surprises, every aspect of the game is made to resonate with the player's emotions, creating a lasting connection and a sense of joy beyond the screen.

Common Questions

What is the game?

"Epicarrot" is a match 3 connecting game. I'm currently in the design stage of "Epicarrot," an enchanting match-3 connecting adventure game set in Bunny Land. In this whimsical journey, players assist adorable bunnies on a quest to restore the once-magical Harmony Gardens, solving captivating puzzles filled with carrot-crunching fun. The game features diverse garden zones, each presenting unique challenges, from growing carrots in the Carrot Patch to rescuing bunny friends in Bunny Burrows. With a focus on player-centric innovation, "Epicarrot" promises to deliver an immersive and joyous gaming experience, blending creative storytelling, captivating visuals, and engaging match-3 connecting gameplay for players of all ages.

Why create this game?

The primary motivation behind creating "Epicarrot" is to offer players a delightful and accessible gaming experience. By designing the game to be easy to play, I want to provide a welcoming and enjoyable environment for a broad audience. The emphasis on fun is at the core of my vision. The enchanting world of Bunny Land and the engaging match-3 connecting puzzles are made to bring smiles and moments of happiness to those who immerse themselves in the game.

Where does the game take place?

"Epicarrot" takes place in a fantasy world where the bunnies must save their land in the Harmony Gardens.

What do I control?

In "Epicarrot," players guide the bunnies through various garden zones, solving match-3 connecting puzzles filled with carrot crunching fun. With the ability to strategically match colorful carrots, swap flower tiles, and connect bunny-shaped tiles, players have direct control over the actions of their bunny team.

How many characters do I control?

In "Epicarrot," players control a team of bunnies. The exact number of characters is 3. They all have different abilities, and the play can pick which one to use power in each level. However, the users can only pick one bunny in each level.

What is the main focus?

The main focus of "Epicarrot" is to provide players with an enjoyable and engaging match-3 connecting puzzle experience set in the enchanting world of Bunny Land. The primary goal is for players to follow on a quest to restore the Harmony Gardens, which have lost their color and magic due to an ancient curse. Through strategic matching of colorful carrots, connecting flower tiles, connecting bunny-shaped tiles, and utilizing the unique abilities of the bunny characters, players must solve puzzles and collect Rainbow Carrots. The overarching objective is to bring joy back to Bunny's land by overcoming challenges, rescuing Bunny's friends, and uncovering the true origins of the magical Harmony Gardens.

What's different?

1. Adorable Bunny Theme: The cute bunny themes. This game is not just a match 3 game but a match 3 connecting game where players must connect colorful carrots, flower tiles, and bunny-shaped tiles to match and get points.
2. Mutant Fiddle Players or Bunny Brigade: The choice of characters is distinct, featuring either a band of mutant fiddle players or a brigade of adorable bunnies. This character choice contributes to the game's unique charm and influences the gameplay dynamics, offering varied abilities and strategies.
3. The players are not just solving puzzles for the sake of it; they are on a quest to restore the Harmony Gardens, adding depth and purpose to the gameplay experience.
4. "Epicarrot" prioritizes player-centric Innovation, planning to deliver an immersive and joyous experience.

Feature Set

General Features

Charming Bunny Characters:

- Players can control and collect various adorable bunny characters, each with a unique appearance and special abilities, contributing to the game's charm.

Enchanting World of Bunny Land:

- Explore the vibrant and magical Bunny Land, featuring diverse garden zones with distinct visuals, challenges, and puzzles.

Immersive Soundtrack:

- Enjoy a delightful and immersive soundtrack that complements the game's whimsical atmosphere, enhancing the gaming experience.

Multiplayer Features

No multiplayer in this game

Editor

Puzzle Configuration:

- Adjust and design match-3 connecting puzzle mechanics, setting parameters for carrot matching, flower swapping, and bunny-shaped tile connections.

Character Customization:

- Customize the appearance and abilities of bunny characters, allowing players to create unique and personalized experiences within the game.

Garden Zone:

- Arrange the order of garden zones to tailor the game's evolution, deciding which challenges and environments players encounter as they advance.

Special Abilities Editor:

- Define the unique abilities of bunny characters, specifying the impact and mechanics of each ability within the customized puzzles.

Sharing and Exporting:

- Share custom-designed levels with the gaming.

Tutorial Creation:

- Develop tutorials within the editor to guide players through the details of custom-designed levels, ensuring smooth and enjoyable learning.

Gameplay

1. Match-3 connecting Puzzle Dynamics:
 - a. Matching-3 connecting puzzle gameplay, where players match and connect colorful carrots, flower tiles, and bunny-shaped tiles to progress through levels.
2. Bunny Brigade:
 - a. Control a team of adorable bunnies, each with unique abilities, contributing to the strategic depth of the gameplay.
3. Garden Zones:
 - a. Explore distinct garden zones, including the Carrot Patch, Meadow of Petals, Bunny Burrows, and Magic Orchard, each presenting unique challenges and aesthetics.
4. Rainbow Carrots:
 - a. Collect Rainbow Carrots through successful matches (matching four tiles and up), using them strategically to clear entire rows and columns and break the curse on the Harmony Gardens.
5. Harmony Meter Progression:
 - a. Renew the Harmony Gardens by earning points through successful matches, unlocking new areas, and gradually unveiling the story behind the curse.
6. Player Progression:
 - a. Advance through levels with increasing difficulty, progressing through Bunny Land and facing new challenges in each garden zone.
7. Bunny Friend Rescues:
 - a. Connect bunny-shaped tiles to rescue adorable bunny friends trapped in caves, adding a compassionate and rewarding aspect to the gameplay.
8. Strategic Decision-making:
 - a. Strategically plan moves and utilizes the unique abilities of bunny characters to overcome challenges, fostering a balance between accessibility and depth.

The Game World

Overview

In “Epicarrot,” players are brought to Bunny Land, a whimsical realm where vibrancy and magic once thrived in the Harmony Gardens. Once a pretty haven of sweet-scented carrots, vibrant flowers, and lively bunnies, Bunny Land has fallen under the shadow of an ancient curse, draining the color and joy from its landscapes. Players begin a magical journey to restore the Harmony Gardens and uncover the Bunny Land.

World Feature #1

Diverse Garden Zones: Bunny Land is divided into distinct garden zones, each with unique characteristics, challenges, and puzzles. Players travel through a visually charming world filled with surprises, from the Carrot Patch to the Meadow of Petals, Bunny Burrows, and the Magic Orchard.

World Feature #2

Harmony Gardens' Evolution: As players progress through the game, the Harmony Gardens evolve, refreshing with vibrant colors and renewed magic. The visual transformation reflects the player's success in solving puzzles and breaking the curse.

The Physical World

Overview

The physical world of “Epicarrot” develops in the enchanting realm of Bunny Land, a beautiful land full of magical gardens and whimsical creatures. As players quest to restore the Harmony Gardens, they navigate through key locations, each contributing to the immersive and visually captivating experience.

Key Locations

Bunny Land is divided into key locations: the Carrot Patch, the Meadow of Petals, Bunny Burrows, and the Magic Orchard. Each location presents a unique visual theme, challenges, and puzzles, providing players with a diverse and engaging journey through the game world.

Travel

Players guide their bunny characters through Bunny Land by navigating the match-3 connecting puzzle within each garden zone. The movement is tied to puzzle-solving, seamlessly integrating gameplay and exploration. Traveling between key locations is achieved by progressing through the game's levels and unlocking new areas.

Scale

The scale is designed to balance the immersive qualities of Bunny Land with the practical aspects of match-3 connecting puzzle gameplay.

Objects

Different objects populate the Bunny Land landscapes, including magical flowers, vibrant carrots, and interactive elements like bunny burrows. Players interact with these objects to solve puzzles, rescue bunny friends, and progress through the game.

Weather

The dynamic world of Bunny Land experiences changing weather patterns. Rain may fall in the Meadow of Petals, and sunshine may bathe the Carrot Patch. Weather variations contribute to the visual atmosphere and influence puzzle mechanics, adding an extra layer of interaction and strategy.

Day and Night

“Epicarrot” will be in daytime. I have not featured the nighttime. In the future, they might develop a nighttime theme.

Time

As players advance through levels and restore the Harmony Gardens, time is represented by the evolving landscapes and the changing atmosphere of Bunny Land. The flow of time is different in each level. Some levels will be focused on solving problems, but some will limit time.

Rendering System

Overview

The rendering system in “Epicarrot” is designed to bring the enchanting world of Bunny Land to life, providing players with a visually captivating and immersive gaming experience. Leveraging a combination of 2D and 3D rendering techniques, the game's rendering engine is tailored to show the charm and vibrancy of the Bunny Land landscapes.

2D/3D Rendering

The game will be a hybrid rendering engine with 2D and 3D elements. While the core gameplay, connecting puzzles, and interactive objects are presented in 2D to facilitate the match-3 connecting mechanics, the overall game world, including characters, landscapes, and key visual elements, is rendered in 3D.

Camera

Overview

The camera operates with a dynamic approach, following the movements of the player's bunny characters as they navigate through the garden zones. As players progress through levels and solve puzzles, the camera smoothly adjusts to provide the point for the ongoing action. This movement allows players to focus on the match-3 puzzles, interact with objects, and enjoy the evolving landscapes of Bunny Land.

Camera Detail #1

The camera incorporates responsive tracking to follow the bunny characters closely during gameplay. Whether the bunnies hop between puzzle tiles, engage with interactive objects or rescue friends from caves, the camera adjusts its position to maintain a clear and engaging view.

Camera Detail #2

In certain exceptional circumstances, the camera introduces cinematic movements to highlight key moments in the game. For instance, when players successfully collect a set of Rainbow Carrots or uncover a story element, the camera may transition to a cinematic view, emphasizing the importance of the achievement. These cinematic moments add a touch of skill to the gameplay.

Game Engine

Overview

“Epicarrot” is made to bring the enchanting world of Bunny Land to life. The game engine is to deliver a seamless, immersive, and delightful gaming experience.

Game Engine Detail #1: World State Management

One of the core functions of the game engine is to keep track of the dynamic state of everything in the Bunny Land world.

Game Engine Detail #2: Puzzle Logic and Interaction

The game engine intricately handles the logic and mechanics of the match-3 puzzles, a central aspect of “Epicarrot.” The engine's puzzle logic is designed to be both challenging and accessible, striking a balance that keeps players engaged while maintaining the whimsical and enjoyable nature of the game.

Game Engine Detail #3: Character Animation and Behavior

Bunny characters come to life through the game engine's animation and behavior systems. It arranges each bunny's movements, expressions, and abilities.

Water

There will be no water in the Bunny Land.

Collision Detection

In “Epicarrot,” the collision detection system plays a multifaceted role in creating a responsive, dynamic, and immersive gaming experience. It contributes to the precision of movements, the accuracy of interactions, and the overall fluidity of gameplay within the whimsical world of Bunny Land.

Lighting Models

Overview

The lighting model in “Epicarrot” is designed to improve the visual appeal and atmosphere of the enchanting world of Bunny Land.

Lighting Model Detail #1

One of the key techniques employed in the lighting model is Dynamic Global Illumination (DGI). DGI allows for realistic and dynamic lighting conditions within Bunny Land. This technique considers changing environmental factors, such as weather patterns, influencing light sources' color, intensity, and direction. The result is a visually dynamic world where the illumination adapts to the evolving atmosphere, casting realistic shadows and highlights.

Lighting Model Detail #2

Real-time shadows and reflections are to add depth and realism to the game world.

The World Layout

Overview

The world layout in “Epicarrot” is an environment that is the stage for engaging gameplay and the canvas for a captivating narrative. With its diverse garden zones, interconnected paths, and visual evolution, Bunny Land offers players a rich and immersive experience as they embark on a magical quest to restore harmony to the gardens.

World Layout Detail #1

Bunny Land is divided into distinct garden zones with thematic elements and challenges. These zones include the Carrot Patch, the Meadow of Petals, Bunny Burrows, and the Magic Orchard. Each zone presents a visually captivating environment and introduces specific puzzle mechanics that align with the theme, providing players with a diverse and delightful journey through Bunny Land.

World Layout Detail #2

As players advance through the game, they unlock new areas within each garden zone, revealing additional puzzles and challenges.

World Layout Detail #3

Players can navigate through complex paths to uncover hidden areas, secret challenges, and bonus puzzles.

Game Characters

Overview

The characters in “Epicarrot” are a delightful and diverse cast that enhances the game's gameplay and narrative. From customizable main protagonists to mischievous enemies and interactive bunny friends, the characters contribute to the charm and excitement of the whimsical world of Bunny Land.

Creating a Character

Creating a character in “Epicarrot” is a delightful process that allows players to personalize their bunny protagonists. Players can choose from various bunnies with distinct appearances and special abilities. As players progress through the game, they can unlock additional bunny characters, expanding their brigade and gaining access to diverse skills that assist in solving puzzles and overcoming challenges.

Enemies and Monsters

These Guardians, born from the ancient curse, present unique puzzle mechanics and challenges for players to overcome, from sly creatures rearranging puzzle tiles to elusive foes requiring strategic thinking.

User Interface

Overview

The “Epicarrot” user interface is designed to provide players with a whole and enjoyable gaming experience, from essential puzzle elements to narrative indicators and customization options.

User Interface Detail #1: Puzzle Grid and Carrot Counters

At the core of the UI is the puzzle grid, where players match colorful carrots to solve puzzles. The visually prominent puzzle grid provides a clear and interactive space for players to make moves. Carrot counters, indicating the number of moves or special abilities available, are strategically placed for easy reference, allowing players to plan and utilize special skills strategically.

User Interface Detail #2: Harmony Meter and Progress Indicators

The Harmony Meter visually represents the player's progress in restoring the Harmony Gardens. It fills up as players complete puzzles, giving a sense of accomplishment and contributing to the narrative progression.

User Interface Detail #3: Score and Level Information

The UI includes a section that displays the player's score, giving feedback on their performance in each puzzle. Level information, including the current garden zone, stage, and any relevant narrative cues, is presented visually appealing to keep players informed and engaged throughout their Bunny Land adventure.

User Interface Detail #5: Pause Menu and Settings

A user-friendly pause menu provides players with options to adjust settings, access help or tutorials, and navigate between different game sections. Settings include audio controls, graphics preferences, and customization options.

User Interface Detail #7: Interactive Notifications

Interactive notifications are strategically placed to inform players of significant events, achievements, or challenges. These notifications are designed to be non-intrusive yet attention-grabbing, ensuring players know their accomplishments and ongoing events within Bunny Land.

Weapons

Overview

While “Epicarrot” is focused on puzzle-solving and the magical abilities of bunny characters, the game incorporates a whimsical approach to weaponry that aligns with the charming and lighthearted nature of Bunny Land. Rather than traditional weapons, special tools, and magical items are utilized to overcome challenges and interact with the environment.

Weapons Details #1: Magical Carrot Wands

The primary weapons bunny characters use in Bunny Land are magical carrot wands. These wands are not used for combat but to cast spells, solve puzzles, and interact with the enchanted elements of the Harmony Gardens. Each bunny character possesses a unique carrot wand, emphasizing their strengths and abilities.

Weapons Details #2: Golden Apples of Harmony

As players progress through the game, they discover special items known as Golden Apples of Harmony. These magical apples are crucial in overcoming challenges and unlocking new areas. When activated, Golden Apples of Harmony releases a burst of magical energy that influences the environment, such as creating pathways, revealing hidden objects, or temporarily altering puzzle mechanics.

Weapons Details #4: Harmony Restoring Artifacts

Players come across unique artifacts that catalyze renewal in their quest to restore the Harmony Gardens. These artifacts are not weapons for combat but tools for breaking the ancient curse. Interacting with these artifacts initiates key story events and influences the game's overall progression.

Musical Scores and Sound Effects

Overview

The musical scores and sound effects in “Epicarrot” intend to create a captivating and immersive auditory experience. From whimsical tunes to interactive sound effects, the audio elements are designed to complement the enchanting visuals and gameplay, making Bunny Land a delightful and engaging world for players to explore.

Red Book Audio

In “Epicarrot,” the game's audio will be delivered using digital formats suitable for the gaming platform.

3D Sound

The game will utilize 3D sound technologies. This allows for spatial audio, where the position of sound sources in the game environment corresponds with their position relative to the player.

Sound Design

The vision for sound design in “Epicarrot” is to create a diverse and dynamic auditory landscape that aligns with the whimsy and magic of Bunny Land.

Single-Player Game

Overview

As the chosen bunny brigade leader, the player's mission is to restore the Harmony Gardens by solving captivating match-3 connecting puzzles, rescuing adorable bunny friends, and unraveling the mystery behind an ancient curse.

Single Player Game Detail #1: Puzzle Progression and Garden Zones

The single-player game unfolds across different garden zones, each presenting a unique set of match-3 puzzles and challenges. Players progress through the zones by solving puzzles, unlocking new areas, and witnessing the visual transformation of the Harmony Gardens. Each garden zone introduces fresh gameplay mechanics, ensuring a dynamic and engaging experience.

Single Player Game Detail #2: Bunny Brigade Development

Players assemble and lead their bunny brigade, each member possessing extraordinary abilities. Throughout the game, players unlock new bunny characters with unique skills, expanding their brigade and providing strategic options for puzzle-solving. Developing the bunny brigade becomes critical to overcoming challenges and progressing through Bunny Land.

Story

Explore the charming narrative of Bunny Land, where the once Harmony Gardens have fallen under an ancient curse, draining the color and joy from the land. The wise Elder Bunnisus selects a team of brave bunnies armed with magical carrot powers to embark on a quest. Players uncover the story's intricacies, mysteries, and the origin of the magical Harmony Gardens as they progress through the game.

Hours of Gameplay

The single-player experience in “Epicarrot” offers hours of engaging gameplay. Time depends on the player's pace, puzzle-solving skills, and exploration tendencies.

Victory Conditions

The player wins the single-player game by restoring the Harmony Gardens. This is accomplished by progressing through all the garden zones, solving match-3 connecting puzzles, and breaking the ancient curse. As players renew each zone, they move closer to the ultimate victory condition of bringing life and color back to Bunny Land.

Character Rendering

Overview

The character rendering in “Epicarrot” is made to bring the adorable bunny characters and the whimsical world of Bunny Land to life. The goal is to create visually appealing, expressive, and dynamic characters that enhance the game's charm.

Character Rendering Detail #1:

Characters are designed with expressive features, ensuring each bunny has a unique personality that shines through during gameplay. The characters' aesthetics contribute to the game world's visual richness.

Character Rendering Detail #2:

The characters react to in-game events, showcasing emotions, excitement, and determination. This active feedback ensures that players feel connected to their bunny brigade and are more deeply engaged in the unfolding story and puzzle-solving challenges.

Character Rendering Detail #3:

Whether hopping through the Carrot Patch, exploring the Meadow of Petals, or navigating the Bunny Burrows, the character rendering system ensures that the Bunny brigade integrates harmoniously with the diverse landscapes of Bunny Land.

World Editing

Overview

With features for zone customization, puzzle design, path creation, lighting, and interactive elements, the world editor ensures that the game world offers a diverse and engaging gameplay experience.

World Editing Detail #1:

The world editor allows developers to customize each garden zone with ease. From the Carrot Patch to the Meadow of Petals, developers can define the visual themes, terrain features, and environmental elements that make each zone unique.

World Editing Detail #2:

Developers have control over puzzle placement and mechanics within each garden zone. The world editor facilitates the creation of diverse match-3 puzzles by providing a library of puzzle elements, including carrots, flowers, and bunny-shaped tiles. The tool allows for the customization of puzzle difficulty, progression, and interactive elements, ensuring a varied and engaging puzzle-solving experience for players.

World Editing Detail #3:

Developers can design intricate pathways for players to explore, uncovering hidden areas, bonus puzzles, and interactive elements.

Extra Miscellaneous Stuff

Overview

I had some ideas, but they only fell under this category.

Junk I am working on...

Crazy idea #1

Consideration is given to a social hub within the game, where players can connect with friends, share achievements, and even collaborate on solving community challenges. This crazy idea aims to foster a sense of community within Bunny Land, allowing players to interact beyond the match-3 puzzles and share the joy of restoring the Harmony Gardens.

Crazy idea #2

Exploring the possibility of incorporating seasonal events and festivities within Epicarrot. This could include special in-game events tied to real-world holidays, offering unique puzzles, rewards, and thematic changes to Bunny Land. The goal is to keep the game fresh and exciting, providing players with new challenges and surprises throughout the year.

Appendix

This section overviews essential appendices in the comprehensive design documentation for “Epicarrot.” Each appendix is a detailed reference guide, offering insights into elements critical to the game's development and design. Developers, artists, and other stakeholders can use these appendices to understand various aspects better, ensuring a cohesive and engaging gaming experience.

Objects Appendix

Purpose: This appendix details the various in-game objects, including their functionality, visual design, and roles in gameplay. Developers can reference this section to integrate objects consistently, ensuring a harmonious blend within the Epicarrot world.

User Interface Appendix

Purpose: This appendix elucidates the layout, functionality, and design principles guiding the player's interactions. Designers and developers can refer to this section to maintain a user-friendly and visually appealing interface.

Networking Appendix

Purpose: This appendix outlines the networking infrastructure, server-client interactions, and considerations for multiplayer functionality. Developers can use this as a guide to ensure seamless online experiences within Epicarrot.

Character Rendering and Animation Appendix

Purpose: This section provides comprehensive insights into visual design, animation techniques, and character development principles. Artists and animators can refer to this appendix for a unified and captivating character presentation.

Story Appendix

Purpose: This narrative-focused appendix explores the lore, character backgrounds, and plot details of “Epicarrot.” Writers and designers can use this section as a guide to maintain consistency and depth in the game's storytelling, ensuring an immersive player experience.