



Project Misfits

Game Design Document

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Game Overview

Project Misfits is a zany, feel-good adventure game that encourages players to reflect on finding their self worth. In a world that twists traditional fantasy, the protagonist inspires other characters with their optimistic and empathetic perspective while avoiding violence.

The game is built on three main pillars: traditional medieval fantasy with a twist, non-violent design with a feel-good story, and exploration of self worth and unconventional success.

This 2D puzzle platformer, designed for gamers of a variety of skill levels around middle-school aged and up, is set in a world that intertwines a level of modern technology with traditional fantasy. The story follows the main character, Fenn, who is a budding young knight with some non-standard abilities. As Fenn works to free the castle from the Wizard of Doors, they meet friendly companions and win over the hearts of troubled foes by helping them learn to love themselves.

To help distribute the design load, Project Misfits will utilize design domains. These domains include all aspects of the game such as player abilities, obstacles and threats, levels and rooms, and more. The game design's goals are spread across each domain and inspiration is drawn from a variety of games and media.

On the technical side, Project Misfits will use Godot for development and follow Data-driven Design to try and maintain modularity and scalability. Additionally, the codebase will consist of three layers that separate the database, the game systems, and the intermediary code that connects everything. The team will also use Git to stick to a strict source control pipeline to streamline development.

Project Misfits's art strives to create a fantastical feeling through unique architecture, mythical creatures, and non-standard life styles. Characters will be a mix of anthropomorphic creatures and plants. Environmental art takes inspiration from Moorish architecture and combines medieval and modern elements of life.

The game's narrative should balance serious and silly moments while still presenting a satisfying character arc for Az, the first companion, and a parallel arc for Winston, the first antagonist. It will have a story line appropriate for people aged 12+, but enjoyable for everyone.

Audio for the game should encompass the feelings of a grand adventure and uplift the player. Additionally the audio should avoid being jarring and distracting from gameplay.

Vision

Project Misfits is a zany, feel-good adventure game that encourages players to reflect on finding their self worth. In a world that twists traditional fantasy, the protagonist inspires other characters with their optimistic and empathetic perspective while avoiding violence.

Pillars

Traditional Medieval Fantasy - with a Twist!

- The world includes a castle, great hall, throne room, and other medieval stereotypes
- The world has a level of modern technology that is believable and subverts traditional fantasy tropes (i.e. Adventure Time)
 - A refrigerator, but not a smartphone
 - A postage system, but not a motor vehicle
 - A 50s diner, but not a skyscraper

Non-Violent Design with a Feel-Good Story

- Narrative and gameplay emphasizes de-escalation and avoids violence
 - Violence only used when absolutely necessary
- The story does not avoid conflict, but uses comedy and comfort to address it
- Gameplay requires clever thinking to overcome challenges
- Accessible gameplay for players with a variety of skill levels
 - Simple set of actions with mechanical depth
 - Players should NOT become frustrated by gameplay

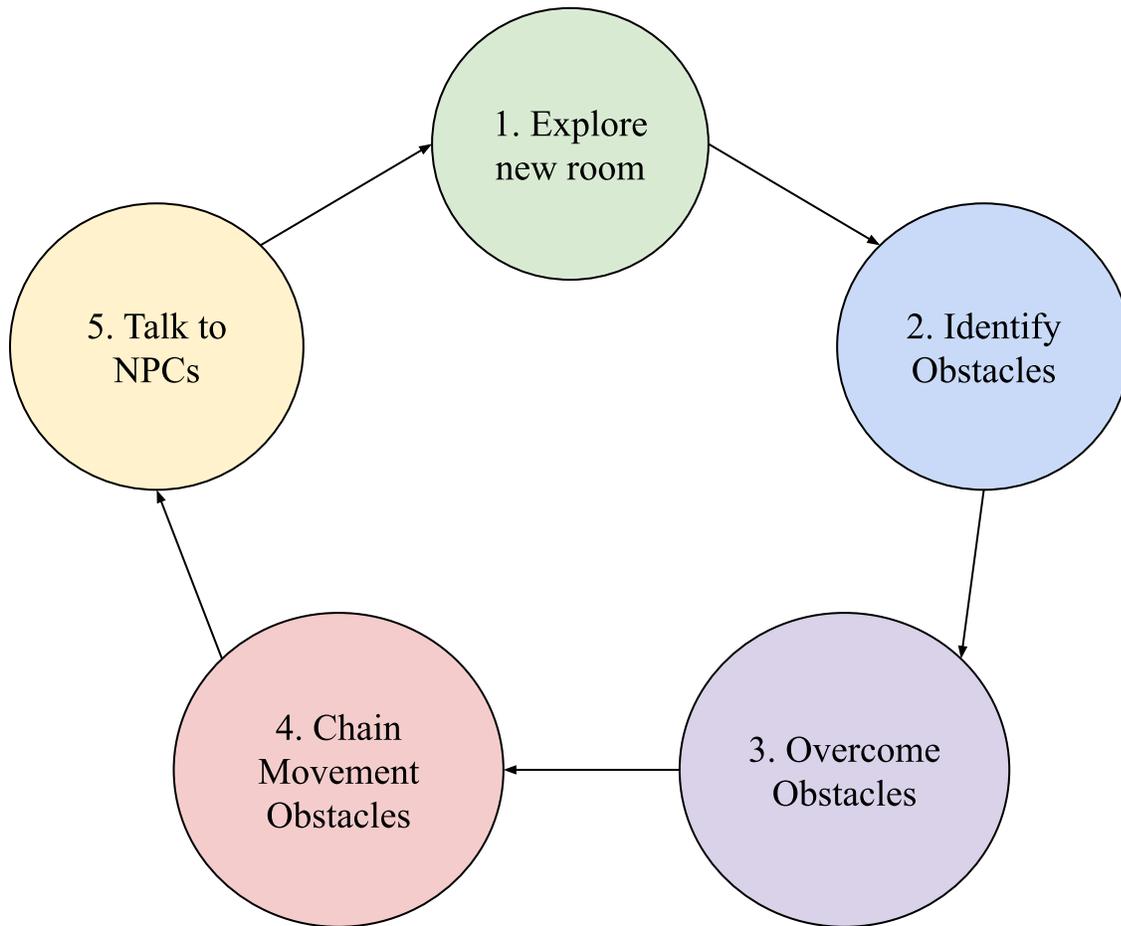
Exploration of Self Worth and Unconventional Success

- The understudies are the heroes
- The story shows non-standard success using “sidekick-level” skills
- Both protagonists and antagonists find self worth within themselves
 - All characters have opportunities for growth
 - No character is inherently evil or malicious
- The protagonist succeeds because of the intersection of their skills and mindset

Target Audience

Project Misfits is for anyone around middle-school age and up (11-13+) who have at least some experience playing platformers and enjoy engaging with narrative. Our game should be easy for a seasoned gamer and medium to hard for someone completely new to games.

Core Loop



Design

Design Goals

- Don't stop moving
- Leaf Dash as a performance
- Pressure player through time-based events or enemies chasing
- Chain together dashes to maintain momentum

Design Inspiration

- TetherGeist: unique zones and flinging mechanics that amplify main ability
- Super Meat Boy: continuous line of movement

Design Domains

We split up areas of our project into design domains, each with owners.

Domain owners:

- Makes the final decisions (but does not have to come up with the solutions)
- Documents those decisions and key details
- Responsible for communicating design decisions and getting the team onboard

When issues come up about the design domains (or the boundaries of multiple domains), get the relevant people involved to resolve the issues and update the documents.

Player: Ben and Jacob

Responsibilities:

- Deciding on player abilities & actions
- Deciding on player movement “feel”
- Documenting design decisions for the Player
- Delegating player tasks, including:
 - Player basic movement
 - Player jump
 - Player Leaf Dash
 - Player interact

Obstacles and Threats: Jacob

Responsibilities:

- Designing the enemies and obstacles that will appear throughout the level
 - Design small and challenging platforming patterns
 - Tweaking enemy and obstacle parameters during polish
 - Designing out how the player & companion abilities interact with everything
-

Levels and Rooms : Jeremy and Jacob

Responsibilities:

- Directing gameplay/room challenge designs
 - What will room-sized challenges like platforming sequences, overcoming enemies, enabling heaters, or overcoming the boss look and feel like to the player?
- Directing gameplay/room challenges into levels/pillar-oriented challenges
 - What overarching, level-sized challenges will the player have to overcome to reach the end of the game? What will those look like?
- Directing level progression
 - How will the player go from zero at the start of the level to hero at the end of the level?
- Documenting all of the above for use as a reference in other design domains
 - Most important for Obstacles and Threats, Player, and Narrative and Dialogue

Narrative and Dialogue : Casey

Responsibilities:

- Deciding how narrative and dialogue will appear in game
- Deciding writing conventions and tools
- Establishing narrative pipeline
- Deciding where/how non-conversational writing appears in game (menus, journals, descriptions, etc.)
- Documenting Narrative and Dialogue decisions
- Delegating all narrative related tasks
 - Narrative asset creation
 - Narrative systems and programming creation

UI/UX and Interfaces : Kat

Responsibilities:

- Deciding, documenting, and maintaining UI standards across all assets and elements
 - Fonts
 - Sizing
 - Color Palette
 - General Style guidelines
- Determining what UI elements the game should have and how critical each piece is
- Establishing UI/UX pipeline
- Debugging UI/UX implementation
- Delegating UI/UX asset creation and implementation

Art and Aesthetics : Jacob

Responsibilities:

- Leading art team meetings
- Helping art aesthetics stay consistent
- Helping design the visuals for the environment
- Helping design the visuals for characters

Audio and Music : Casey

Responsibilities:

- Making decisions about the soundscape and mix
- Deciding audio pipeline
- Documenting audio decisions
- Establishing audio conventions and tools
- Delegating audio tasks
 - Music and SFX asset creation
 - Music and SFX implementation

Disciplines

Tech

How Godot Supported Our Tech Goals

We decided to use Godot because it was the best fit for our game's genre and our goals. Here are some of the major draws of the engine:

- Features aligned with object-oriented programming and inheritance
- Built-in features targeted at 2D platformers, including complex physics
- In-depth documentation and community support
- Plugin support
- Godot is free, open-source, and doesn't require licensing fees

We will follow Data-driven Design during development.

- Separate **data** from **code** to keep the game scalable and modular
- Separate your codebase into 3 distinct layers: the Database, Game Systems, and "Glue" Code
 - The Database is where our immutable data will live.
 - Game Systems will not contain any data. Instead, they will read from the Database at runtime to configure themselves and set up the game world.
 - "Glue" Code connects the game systems and database together indirectly. This prevents the two layers from being directly reliant on each other, keeping the codebase modular and scalable. "Glue" code can be events, manager objects, connector scripts, or in-editor connections.
- Design the Database first, then build the other layers on top of it to keep the codebase data-first.

We will enforce a strict source control pipeline using Git.

- One team member will be designated as the "Git Moderator" and will be responsible for merging completed game iterations into main, as well as resolving any merge conflicts that appear.
- Commit regularly, especially when completing a core part of the task.

Art

Art Goals

Create a world that evokes feelings of fantasy with a unique spin on architecture, creatures, and life styles.

Art Inspiration

Inspiration for the game's art comes from the animated show *Scavengers Reign* and art pieces by Jean Giraud. Our color palette will focus on leafy greens, icy blues, and other organic colors.



Scavenger's Reign



Jean Giraud

Character Art

All of the characters in our world are anthropomorphic animals or fantasy creatures with varying levels of recognizability to their animal inspirations. There are also characters that have plant-like features, like the main character; however, this is not required for all characters.



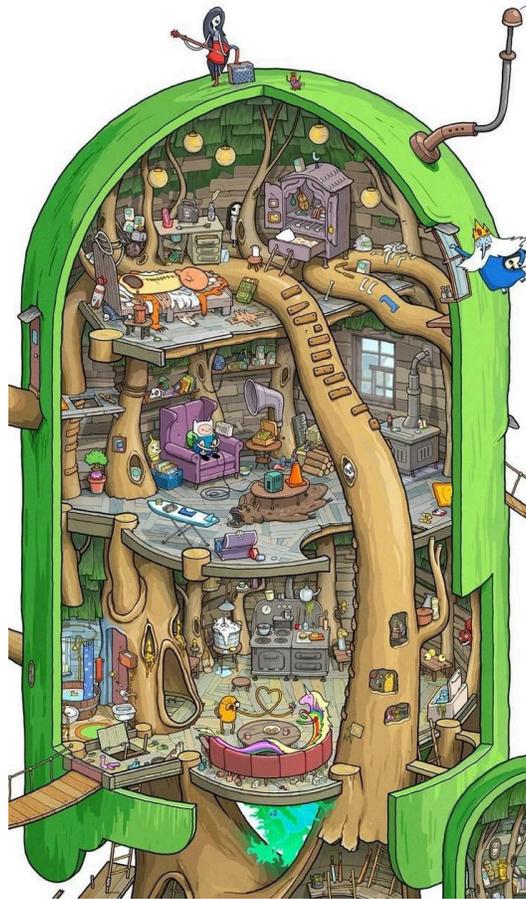
Main Character (Fenn) Turnaround

Environment Art

We are taking inspiration from Moorish architecture for the design of the castle. This western Islamic style has a focus on infinite patterns within the architecture as well as using a variety of colors. We also mix in some modern items and tools into this world with a focus on everyday living items such as stoves or fridges. To help with keeping the world feeling fantasy we are using the show *Adventure Time* as a reference on how to mix fantasy with modern aspects in a seamless and comedic fashion.



Moorish Architecture



Adventure Time Treehouse

Concept Art

Fenn (Main Character):



Az (Companion Character):



Winston, Wizard of Ice Makers (Boss):



Ice Scream



Environmental:

Dining Hall:



Narrative

Narrative Goals

- Create a story that is age appropriate for middle-schoolers, but enjoyable for all ages
- Create characters that have depth and chemistry
- Create a satisfying character arc for Az and parallel arc for Winston

Narrative Inspiration

Adventure Time

- PG episodic story, fantasy world with modern technology and infrastructure

Deltarune

- Narrative focused on character relationships, balancing seriousness and comedy

Game Narrative Overview

Fenn has always dreamed of being a Knight of the Kingdom. After getting invited to the Palace, it goes horribly wrong. A gang of Wizards traps all the knights in the room, and it's up to Fenn to save them. The wizards scatter across the castle, and Fenn must navigate the castle to reach them. He learns that each wizard is misunderstood and dealing with self-worth. It's Fenn's job to get through to them, while Fenn learns to stop idolizing the knights and instead take pride in himself and his abilities.

Level Narrative Overview

Winston, the Wizard of Ice Makers, has claimed the castle cellar as his own. Az, the daughter and apprentice to the Kingdom's blacksmith, needs help tracking down Winston and freeing her father (trapped with the other Knights).

Fenn and Az team up to deal with Winston, overcoming challenges together. Fenn learns about Az's asthma, and her negativity around it, as Winston continues to taunt the both of them. Az reaches a breaking point where she overexerts herself and must rest. Az wants Fenn to go on without her, but Fenn refuses, while Winston reflects how he hurt Az.

Finally, Fenn and Az reach Winston. Winston creates an icy copy of himself so he could control it, but it instead attacks him. It's up to Fenn to melt the ice copy and save everyone. After everyone is safe, all three characters have a heart to heart, talking about their skills and accepting their limitations as part of themselves.

Characters

Fenn, the protagonist:

- Young, naive kid with a fanboy-like obsession with the Knights of the Round Table.
- Wants to help others, and dreams of doing so by becoming a knight
- Empathetic and optimistic, but gives advice that they themselves don't take (hypocrite)

Az, the companion:

- Firebreathing blacksmith apprentice... with asthma
- Father is trapped (one of the knights) and she needs Fenn's help to track down Winston.
- Cold and aloof, but a heart of gold. Hates her asthma because it holds her back.

Winston, the antagonist:

- Wizard of Ice Makers and son of a the well-renowned Wizard of Ice
- He's hotheaded and frustrated easily. Constantly seeking attention and validation.
- Wants his reputation to surpass his Mom's. Thinks his power is strictly worse.

World and Setting

Project Misfits takes place exclusively in a castle within a larger kingdom. The setting is based on traditional fantasy, but incorporates modern technologies, government, and infrastructure. The tone of the world is whimsical and imaginative, similar to a child's imagination or a morning cartoon. Our key inspiration in regards to setting is Adventure Time in many of these aspects. A world that resembles traditional fantasy with many elements of modern society mixed in, wrapped in a package that is comfortable and accessible to younger audiences.

Audio

Audio Goals

- Capture the feeling of going on a grand adventure
- Create an uplifting, active atmosphere
- Avoid being jarring or distracting from gameplay

Sound Effects

- SFX should suit the needs of the game without feeling out of place
- SFX should NOT be crunchy/pixelated, but hyper realism and tactility is also unnecessary
- Ambience should be normalized to -12 dB, everything else normalized to -6 dB
- Beep speech should be unique per character and be suitable to that character's personality
- Games as references: Lil Gator Game
 - [Lil Gator Game FULL GAME WALKTHROUGH Gameplay HD \(PC\) | NO COMMENTARY](#)

Music

- Music should be cozy, whimsical, and comfortable. It shouldn't be static, necessarily, but give the feeling of going on a grand adventure, from a child's perspective.
- Ideally, we'll have four main themes that have motifs and musical ideas that make all the songs cohesive. Main Level theme, Boss theme, Slow theme, and Main Game/Hub theme
- Music should play in the same (or similar) time signature and relative major scale
- Games as references: Stardew Valley, Lil Gator Game, Celeste (examples below)
 - [Lil Gator Game Creek](#)
 - Stardew Valley's [Marimba of Frozen Bones](#)
 - Celeste's [Resurrections](#)
 - [Lil Gator Game Forest](#)
 - [Stardew Valley Overture](#)

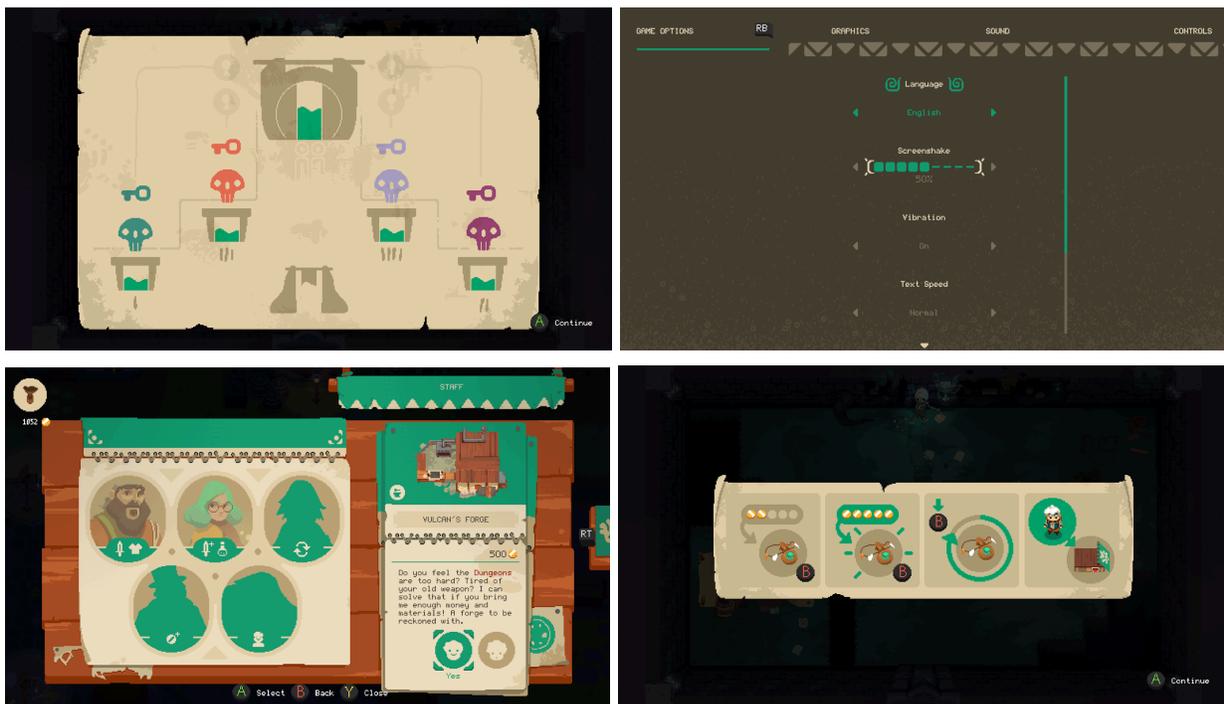
UI/UX

UI/UX Goals

- Simple, clear, and usable while still being informative
- Unobtrusive and does not pull focus or break immersion from the main game play
- Enhances and reinforces the game theme
- Consistent

UI/UX Inspiration

Inspiration for the UI draws from two existing games. The first game is *Moonlighter*. The UI in this game can be described as cute and simple with a bright color palette. Additionally, the assets are not overcrowded with icons or other elements. The second game is *Hollow Knight*. This UI has a very simple design that utilizes contrast and embellishments rather than more complex graphics.



Screenshots from *Moonlighter*



Screenshots from *Hollow Knight*