



Tecnológico de Monterrey
Escuela de Ingeniería y Ciencias

4.2.1 Actividad Diseño de Juego

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Construcción de software y toma de decisiones (Gpo 501)

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Shattered Timeline

Game Design Document

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Game Design

Summary

Shattered Timeline is an action-adventure roguelite where you travel through a broken timeline, from a primitive world to an industrial dystopia and finally to a futuristic realm. Fight through waves of enemies and bosses across three dynamic floors while restoring balance to your universe.

Gameplay

Players navigate through randomly selected rooms filled with enemies, using a variety of weapons, items, and food to survive. Tactical decisions are crucial: manage your stamina and food levels, craft and upgrade gear in the base, and defeat bosses to progress to the next era.

Mindset

The game encourages a sense of progression and triumph throughout the different floors. Players will feel tension during enemy encounters and relief upon returning to the base to upgrade. We aim to evoke feelings of determination, strategy, and reward.

Technical

Screens

1. Title Screen
 - Start
 - Options
 - Credits
 - Exit
2. Save Slot Selection
 - New Game
 - Continue Game
3. Game
 - Inventory
 - HUD (Health, Map, Weapons, Gold, Items, Stamina, Food, Mana)
 - Evaluation / Next Level
4. End Credits

Controls

- Diagonal movement enabled using vector input
- Dash / Roll to dodge
- Action buttons to interact with objects and use abilities
- Possible remapping in Options

Mechanics

- Food impacts stamina regeneration rate

- Stamina governs attacks and dodging
- Rooms are randomly selected from a designed pool
- Weapon upgrades, gear crafting, and cooking in base
- Enemy difficulty increases per floor

Level Design

Themes

1. Swamp / Forest / Caves (Floor 1)
 - Mood: Mysterious, primal, moody
 - Ambient: Mist, glowing plants, ruins
 - Interactive: Basic goblins, wolves, ...
2. Destroyed City / Factory / School (Floor 2)
 - Mood: Chaotic, broken, abandoned
 - Ambient: Cracked roads, rubble, flickering lights
 - Interactive: Trolls, ogres, ...
3. Spaceship / Futuristic Zones (Floor 3)
 - Mood: High-tech, futuristic, dangerous
 - Ambient: Electric panels, robotic parts, neon lighting
 - Interactive: Golems, laser barriers, ...

Challenges

- Wave-based battles per room
- Bosses with unique patterns and phases

Game Flow

1. Start at the base
2. Enter portal to Floor 1
3. Clear 5 rooms, face boss
4. Portal to Floor 2, repeat process
5. Portal to Floor 3, repeat process
6. Return to base between runs for crafting and upgrades

Development

Abstract Classes / Components

1. BaseEntity
2. BasePlayer
3. BaseEnemy
4. BaseObject
5. BaseWeapon
6. BaseItem

Derived Classes / Component Compositions

- Enemies:
 - Goblin (Bow, wizard, sword), Wolves
 - Dark Elves, Trolls, Ogres
 - Cyclops, Bears, Golems
- Objects:
 - Armor, Boots, Potions, Scrolls

- Weapons:
 - Katana, Bow, Shield, ...
 - Pistol, Assault Rifle, Lightsaber, ...

Graphics

Style Attributes

- Pixel-art with rich dark backgrounds and glowing highlights
- Vibrant effects for hits, dashes, item use
- Strong contrast between enemy/projectile vs background
- Visual feedback for damage, status effects, ...

Graphics Needed

1. Characters
 - Player (idle, attack, dash)
 - Enemies by type and difficulty
2. Environment Tiles
 - Forest, city, factory, ship, ...
3. Objects
 - portal, cooking station, ...
4. UI Elements
 - HUD indicators for each stat and item

Sounds/Music

Style Attributes

- Futuristic synths mixed with ambient environmental tones
- Battle music with heavy drums and rhythm

Sounds Needed

1. Effects:
 - Footsteps (dirt/metal), dash, hits, object usage, chest open
2. Feedback:
 - Hurt, heal...

Music Needed

1. Base theme
2. Floor 1 theme (swamp/forest)
3. Floor 2 theme (ruins/factory)
4. Floor 3 theme (spaceship)
5. Boss theme
6. Ending theme

Schedule