EGG-ROUP

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Virtual Reality Zombie Game

Concept: A FPS VR Zombie survival game where players, as stuffed animals, use toy guns to fight endless waves of zombified toys.

Setting: A toy store where players seeks escape through aim and exploration.

Virtual Reality Zombie Game

Features Summary:

- Unique character selection with different perks
- Toy gun models with unique designs and firing styles
- Toy machines acting as enemy spawners that can be jammed using in-game currency
- Gated sections that unlock with currency for expanded exploration
- Mystery boxes providing random toy guns
- Multiplayer support up to four players

Inspirations

Gameplay attributes from:

COD BO2 & BO3 Zombies, The Walking Dead: Saints & Sinners, After The Fall

Flavoring and theme from:

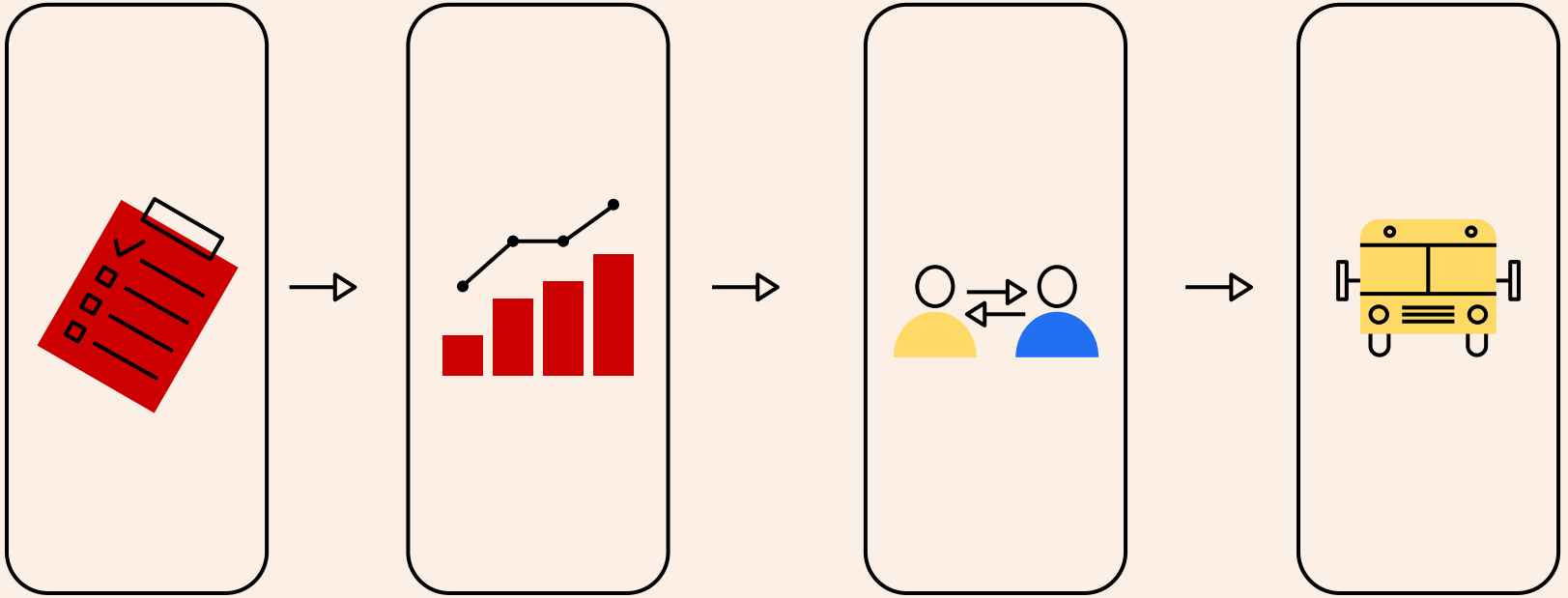
FNAF, Poppy Playtime

Week 1
Planning and Design

Weeks 2-4
Development

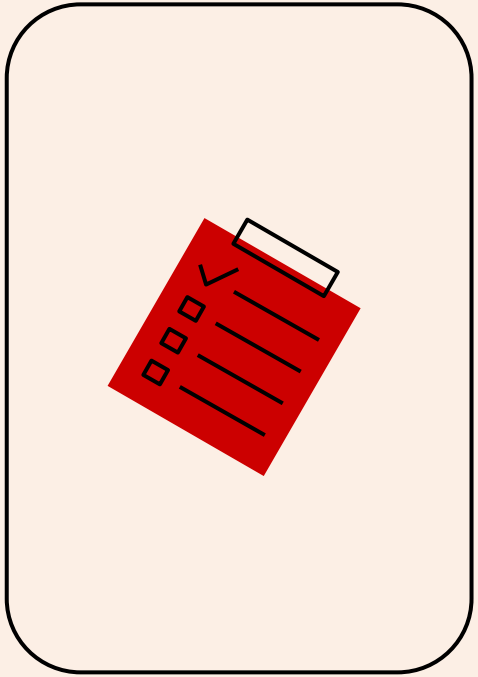
Week 5
Testing and Feedback

Week 6
Finalization and Deployment



Week 1

Planning and Design



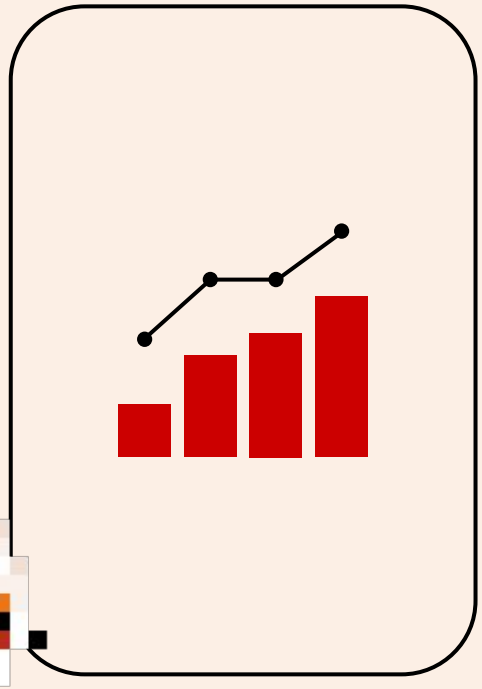
Concept Finalization: Define core gameplay mechanics, objectives, and unique selling points.

Technical Specifications: Determine hardware and software requirements, including VR platforms and control schemes.

Team Assignment: Allocate roles to developers, designers, and testers, ensuring a collaborative workflow.

Week 2-4

Development



3D Modeling: Create character models and toy gun models.

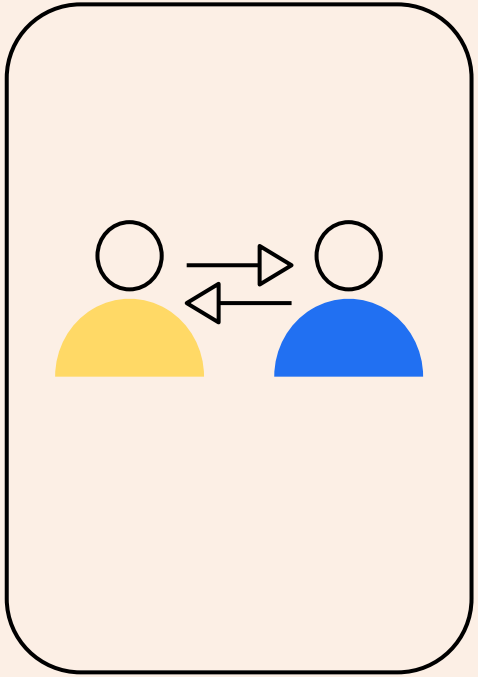
Physics Engine Integration: Implement somewhat realistic toy movement with ragdoll physics and accurate weapon handling physics.

VR Interface Design: Develop VR controls and weapon usage.

Gameplay Mechanics: Establish core wave-spawner functionalities, including single-player and multiplayer modes, toy gun types, and scoring systems.

Week 5

Testing and Feedback

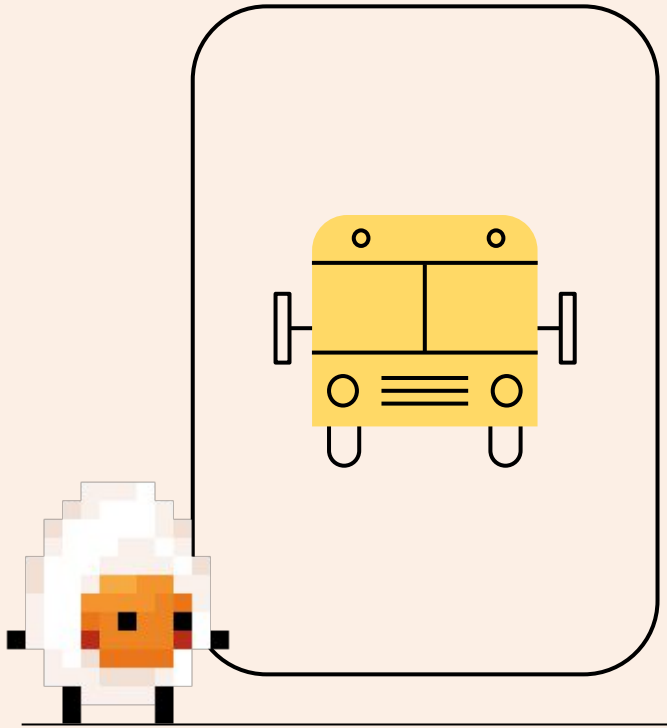


Internal Testing: Identify and resolve critical bugs, performance issues, and ensure stability across platforms.

User Feedback Sessions: Gather input from a select group of testers to refine gameplay mechanics, controls, and overall user experience.

Week 6

Finalization and Deployment



Polishing: Enhance visual and audio elements, optimize performance, and implement final adjustments based on feedback.

Deployment: Prepare the game for release on selected platforms, ensuring compatibility and compliance with platform requirements.

Components	
4 **Objectives**	Toy Gun Models Toy Machines Gated Sections Mystery Boxes
6 **Attributes**	Physics Engine | Currency System Character Selection | Scoring System Zombified Toy Enemies Multiplayer Mode
3 **Relationships**	**Player to Weapon** **Player to Environment** **Player to Game World**
4 **Environments**	Visual Settings Audio Landscape User Interface VR Compatibility

Components of the VR Zombie Survival Game

Our **objectives**, **attributes**, **relationships**, and **environments** within our game.

Components

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Objectives

Toy Gun Models: Multiple toy gun types, featuring different firearms, designs, and game styles.

Toy Machines: Wave-spawner point for zombified toy enemies, which can be delayed by jamming the machine using in-game currency.

Gated Sections: Locked parts of the map that can be unlocked with in-game currency to explore new areas for better loot and more area to move around.

Mystery Boxes: Uses in-game currency to open and receive a random toy gun.

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Attributes

Physics Engine: Somewhat accurate toy movement with ragdoll mechanics.

Character Selection: A selection of different stuffed animals, each with their unique designs and perks.

Zombified Toy Enemies: Zombified toys follow the player around playfully (thinking they are playing a harmless game) and want to be friends.

Scoring System: Based on the number of rounds survived and the scoreboard.

Currency System: Earn in-game currency by killing zombies and jamming toy-making machines.

Multiplayer Mode: Online multiplayer support up to 4 players.

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Relationships

Player to Weapon: Control with different firearms, allowing players to have different playstyles

Player to Environment: Interaction with map unlocking, item unlocking, obstacles, and interactables.

Player to Game World: Immersive engagement through VR movement, aiming controls, and 3D spatial audio.

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Environments

Visual Settings: Quality to fit the theme of the game with an immersive map with expandable portions.

Audio Landscape: 3D spatial audio for zombie sounds, environmental effects, and in-game communications.

User Interface: Intuitive HUD displaying health, amount of ammo left, in-game currency, and overall points.

VR Compatibility: Support for leading VR headsets to ensure an immersive and responsive experience.

Equipment and Software Requirements

- **Hardware:**
  - *VR Headsets:* Meta Quest 3, HTC Vive, Valve Index, or Pimax for development and testing.
  - *Development Workstations:* High-performance PCs equipped with NVIDIA RTX GPUs to handle intensive development tasks.
  - *Control Devices:* Standard game controllers
- **Software and Tools:**
  - *Game Engine:* Unity with XR Toolkit
  - *3D Modeling Software:* Blender
  - *Networking Framework:* Photon Unity Networking (PUN) or Mirror to facilitate seamless multiplayer experiences.
  - *Audio Design Tools:* FMOD or Wwise for creating immersive and dynamic soundscapes.
  - *Version Control Systems:* Git or Perforce to manage source code and asset versions effectively.