Virtual Reality (VR) First Player Shooter Game

Generic Game Name is a VR zombie survival game where you and your stuffed animal friends fight off endless waves of toys, using various toy gun weapons with different features to decimate your enemies. Set in a world where you are a stuffed animal in a toy store, looking for "a way out" through aim and exploration.

1. Components of the VR Zombie Survival Game

- **Objects:**
    - *Toy Gun Models:* Multiple toy gun types, featuring different firearms, designs, and game styles.
    - *Toy Machines:* Wave-spwaner 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.
- **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.
- **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.

- **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.

2. Development Timeline and Tasks

- **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.
- **Weeks 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-swawner 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.

3. 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.

By adhering to this structured plan, the development team can deliver a high-quality VR **Zombie Survival Game** that offers an exhilarating and immersive shooting and survival experience within the condensed 1.5-month development timeframe.