Game Design Document (GDD) - Fire Escape Simulation

Game Title: Fire Escape: Survival Training

Developed by: BEWILDER GAMES

Game Genre: Educational Simulation

Platform: PC

Game Overview

Survival Training is an educational simulation game that teaches players how to react and escape safely during an apartment fire. Through interactive scenarios and real-life safety tips, players learn essential survival skills

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Technical Aspects

Reactive environment

- fire spread mechanics.
- Smoke accumulation reduces visibility.
- Fire reacts dynamically to open windows and open doors.

Player Movement and Interaction

- Players can crouch or crawl to avoid smoke and heat.
- Interaction system to check doors, use fire extinguishers, and navigate escape routes.

Player Tag Implementation

- Player tag system is integrated to track player interactions within the environment.
- Ensures accurate identification of player movements and actions.
- Enables detailed feedback and analytics for player performance evaluation.

Fire Extinguishing

- The fire extinguisher is an interactable object that aligns with the player's hand when picked up.
- Pressing **Q** drops the extinguisher, and mouse input triggers the **Extinguish** function.
- The **Extinguish** function destroys any fire objects within its range.

Core Gameplay

Starting Position

- Players wake up in a bedroom with a fire already burning in the room.
- Players can get out of bed and start exploring the room.

Movement

- Players can crouch or crawl to avoid smoke and heat.
- Crouching or crawling reduces movement speed but increases safety.

Room Environment

- The room is filled with smoke and fire, creating a hazardous environment.
- Visibility is reduced as the room fills with smoke, making navigation harder.

Decision Points

- **Doors:** One leads to a room with fire, the other leads to a safe room.
- **Window:** Breaking it increases oxygen supply, intensifying flames.
- **Fire Extinguisher:** Choosing the wrong extinguisher (e.g., water-based for an electrical fire) results in failure.
- **Escape Route:** Stairs vs. elevator decision (elevator can trap the player).

Consequences

- **Opening the Fire Door:** Causes an explosion and forces a restart.
- **Opening the Safe Door:** Progresses the escape safely.
- **Breaking the Window:** Increases fire intensity and leads to a restart.
- **Choosing the Wrong Extinguisher:** Can worsen the fire and force a restart.
- **Choosing the Elevator:** Results in entrapment and restart.
- **Choosing the Stairs:** Safest option leading to escape.

Respawn System

- Players restart the scenario at the beginning with feedback on mistakes.
