

Project Evasion

by
Beyond the Box

Pitch:

Project Evasion is a stealth-based game where the player attempts to navigate themselves through the four levels while evading detection from guards or cameras. Each level contains a unique item that allows the user to continue to the next level.

Setting:

The setting of each level depends on the specific mission being carried out and who the assigned target is. Level one will be set in a public market, level two will be set in a company building, level three will be set in a mansion, and level four will be set in a government building.

Game components:

Objects:

- Player character
- Guards (NPC's)
- Cameras/drones
- Obstacles (walls, crates, furniture, etc.)
- Hiding spots for players (bushes, sewers, vents, shadows, etc.)
- Power-ups that the player can collect to activate their special ability (3 power-ups needed for activation)
- GUI: Time (possibly a time limit or countdown)
- Ability button
- Hide button
- Level exit

Attributes:

- Position for a player
- Movement speed for a player
- Visibility level of a player
- Ability cooldown of a player (3 powerups needed for ability)
- Detection status of player
- Possibility of lives and/or checkpoints
- Gravity and physics of the player (left-right vs. top-down movement)
- Position of guards
- Patrol path of guards
- Vision cone direction and length of guards
- Alert level of guards
- Position of cameras/drones
- Rotation speed of cameras/drones
- Vision cone of cameras/drones
- Detection delay
- Position of obstacles

- Size of obstacles
- Ability to block line of sight of obstacles
- Position of hiding spots
- Occupancy status of hiding spots
- Duration before forced exit
- Position of power-ups
- Type of power-up (unique to each player character)
- Current time remaining
- Power-up count for ability
- Activation state of ability
- Interaction status of hide button (available when near a hiding spot)
- Position of level exit
- Activation state (open/locked) of level exit
- Pressed status for the buttons
- Position of checkpoints
- Checkpoint activation

Relationships:

- If a player enters a guard's field of view, they are detected and sent back to the last checkpoint or level start.
- Players must collect a unique item in each level to proceed to the next.
- Players must reach the exit of each level to progress.
- Each character has a unique special ability that can assist in avoiding detection, which is activated after collecting three power-ups.
- The player must complete each level within the allocated time limit. There will be a countdown timer displayed.
- In easier, shorter levels, the player will only have one life and if they die, they need to restart the level from the beginning. In harder, longer levels, the player may be either given 3 lives and if they die, they restart to start of level or they may have only 1 life but there will be checkpoints where they can respawn from.
- Some obstacles block line of sight, allowing players to hide.
- Hiding spots make players temporarily undetectable while inside them.
- Power-ups must be collected to activate special abilities.
- Cameras and drones scan areas and trigger alerts if the player is seen.
- The ability button is usable only when three power-ups have been collected.
- The hide button is only active when the player is near a hiding spot.
- Checkpoints save progress within a level when activated.

Game mechanics:

The player controls their movement with W-A-S-D. Additionally, the E button allows them to hide in a bush or vent, while the R button allows them to use their special ability. The player will be able to select from a few different classes. Each class will have slightly different base stats and a unique special ability. A special ability can be activated upon the collection of three ultimate orbs, which are scattered across the map.

The goal of the game is to complete each level without being caught before the timer runs out. It is yet to be decided whether there will be checkpoints or lives. The guards will be positioned in different areas across the map and patrol around that area. If the player is caught in their field of view, they will either lose a life or have to restart the game.

Once the player reaches the end of the level without time running out, they will be teleported to the next level.

Optional features:

High score list and achievements list (such as beating the game with every single class or without losing a single life)

Team Members:

Erick Hambardzumyan: 2 months experience of Unreal Engine, minimal experience in Unity, 2 years experience in C, C++, Java, 2 years experience and knowledge in math and physics, passion for video games

Arneh Khachatoorian: Minimal Unity experience, 1-2 years experience in C++, Java, and Python, experience playing video games

Division of Labor:

Erick Hambardzumyan: Gameplay, mechanics, testing, player controls

Arneh Khachatoorian: Level design, lore developer, character design, class breakdown