

# High Level Requirements

1. The game must be developed for a Windows desktop PC.
2. The game must contain at least one map.
  - a. The map must have a designated spawning location for the player and AI.
  - b. The map must have a designated location for crafting weapons.
3. The game must contain a main menu
  - a. The main menu must have the options to start the game, read instructions on how to play the game, and exit the game
4. The game must contain at least one player, and at least one AI.
5. The player must find materials located around the map, and bring them to a designated crafting location.
  - a. Once all materials have been brought to the crafting location, the game must spawn a weapon for the player.
6. The player may optionally complete minor objectives.
  - a. The player must complete the minor objective by standing at its location for a set duration.
  - b. Each completed minor objective must provide either a tool or a trap for the player.
    - i. Tools will be items to aid the player.
    - ii. Traps will be items to hinder the AI.
7. For each instance of a game, the game must randomly select a Material Set
  - a. The Material Set contains a set of materials that the player must find to build a weapon.
  - b. Each Material Set must produce a different weapon.
8. The AI must prevent the player from building a weapon.
  - a. The AI must have health
  - b. The AI must start by roaming the map.
  - c. The AI must learn to prioritize areas of the map to track down the player.
  - d. The AI must learn to identify traps set by the player to avoid setting them off.
  - e. The AI must have skills to hunt down the player, including but not limited to night vision, sprinting, and leaping.
9. Once the game has spawned a weapon for the player, the player must be able to use the weapon to defeat the AI.
  - a. The player wins the game when the AI's health reaches 0.
10. The AI must be able to win the game by capturing the player three times.
  - a. The player is considered captured if the AI reaches the player.
  - b. If the player is captured, the player must respawn at the designated spawning location in the map.
11. The game must restart when the player or AI wins.