Use Cases for Dead City Chronicles

Use Case: Start new game
Primary Actor: Player
Goal in Context: To begin a new game session and start playing the game
Precondition: The game application is running and the player is at the main menu
Trigger: The player presses the "New Game" option from the main menu
Scenario:
1. The game initializes a new maze
2. The player and objects are placed in their respective spots
3. The game timer starts

Use Case: Game attempt
Primary Actor: Player
Goal in Context: The player wants to control the character to reach the end point while meeting all requirements and
Precondition: The game has started and all objects are placed in the maze
Trigger: The player provides input to move the character using 'WASD'
Scenario:
1. The character's position is updated based on the player's keyboard inputs
2. The game checks for collisions with walls, zombies, traps, and the endpoint
3. The game displays the points, timer, and a pause button on the top of the screen (refer to pause game use case)
4. The player can click on the pause button to open a menu

Use Case: End of game (Win or loss)
Primary Actor: System
Goal in Context: When the player wins or loses, display the end screen
Precondition: When the player meets all requirements, the endpoint object spawns
Trigger: The character's health drops to <0 or the character collides with the endpoint
Scenario:
1. If the player's health drops to zero
   a. The game recognizes the health is < 0 and indicates loss condition
   b. The game stops and displays a lose screen
   c. The lose screen displays the player score, time taken, and provides options for the player to restart or return to main menu
2. If the player collides with the endpoint object
   a. The game recognizes the collision and indicates a win condition
   b. The game stops and displays a win screen
   c. The win screen displays the player score, time taken, and return to menu button

Use Case: Choose difficulty
Primary Actor: Player
Goal in Context: The player wants to select a specific difficulty level

Precondition: The player has selected the "start" button
Trigger: The player selects the "start" button and is prompted to choose difficulty level
Scenario:
1. Player selects "start" button
2. Player can select difficulty level depending on their preference:
   a. If the player selects easy, there will less obstacles and less enemies
   b. If the player selects medium, there will be a bit more obstructions in the map and more enemies
   c. If the player selects hard, there will be more obstacles and many enemies(very challenging)

Use Case: Pause Game
Primary Actor: Player
Goal in Context: The player wants to pause the game during active gameplay
Precondition: The game is in progress and the player is actively playing
Trigger: The player clicks on the pause button
Scenario:
- The game pauses and displays a menu with options to resume, restart, or quit the game
- The timer stops at the time when pausing
- The player can select an option to perform the desired action
  - Resume: the game continues at the same state as when the game was paused
  - Restart: the game starts as a "new game" (see start new game use case)
  - Quit: the game stops and the player is sent back to the main menu

Use Case: Settings button
Primary Actor: Player
Goal in Context: Changing some properties in the game
Precondition: The game application is running and the player is at the main menu
Trigger: The player clicks on the 'setting' button on the main page
Scenario:
1. Before the game starts, players can change properties of the game
2. Player can change volume level of game with slider
3. Player can turn on and off music to the game

Use Case: Rules button
Primary Actor: Player
Goal in Context: Players can learn how to play the game and rules
Precondition: The game application is running and the player is at the main menu
Trigger: The player clicks on the 'rule' button on the main page
Scenario:
1. Before the game starts, the player wants to check how to play the game and clicks the 'rule' button
2. After clicking, a display of all the rules of the game will be shown