

#### Use-case 1: start game

- **Primary actor:** player
- **Goal in context:** to load the main character onto the start cell on the board from start UI and allow player to start the game
- **Preconditions:** proper log in detail and system fully configured
- **Trigger:** player decides to start a new game
- **Scenario:**
  - The system display 'start game', 'settings' and 'Exit Game' buttons
  - The player selects 'start game' button
  - System display new board with enemies and reward and place main character at start tile
- **Exception:**
  - Incorrect log in - see use-case 'validate ID and password'
- **Priority:** high

#### Use-case 2: move main character (up,down,left, right)

- **Primary actor:** player
- **Goal in context:** player move character in arcade with arrow keys indicating direction of movement
- **Preconditions:** successful login and player starts a new game and board is properly configured - see use-case 'start game'
- **Trigger:** player's turn (tick) to choose movement
- **Scenario:**
  - The player enters his/her user ID on the Desktop Application
  - The player enters password
  - The system display 'start game', 'settings' and 'Exit Game' buttons
  - The player selects 'start game' button
  - System display new board with enemies and reward and place main character at start tile
  - Player press an arrow key (up, down, left, right) and main character move according to the key pressed
- **Exception:**
  - Invalid move: character encounter barrier or wall on target cell - see use-case 'invalid move'
  - Invalid key: player press non-valid key for movement - see use-case 'invalid key'
- **Priority:** high

#### Use case 3: change setting

- **Primary actor:** player
- **Goal in context:** allow player to change sound volume or text size of interface during the game
- **Preconditions:** proper log in detail and system properly configured to audio and user interface

- **Trigger:** player decides to change audio or user-interface
- **Scenario:**
  - The player enters his/her user ID on the Desktop Application
  - The player enters password
  - The system display 'start game', 'settings' and 'Exit Game' buttons
  - The player selects 'settings' button
  - The system displays an audio icon and a text icon with sliders.
  - Player drag slider with mouse to adjust audio volume or text size
- **Exception:** Incorrect log in - see use-case 'validate ID and password'
- **Priority:** moderate, implement after basic game functions

#### Use case 4: restart game

- **Primary actor:** player
- **Goal in context:** allow player to restart game at the 'game over' interface
- **Preconditions:** proper log in detail and system fully configured, game is over (player wins or loses)
- **Trigger:** player decides to restart game
- **Scenario:**
  - The player enters his/her user ID on the Desktop Application
  - The player enters password
  - The system display 'start game', 'settings' and 'Exit Game' buttons
  - The player selects 'start game' button
  - System display new board with enemies and reward and place main character at start tile
  - The player plays the game until they win (collect rewards and exit) or losses (encounter enemy or score below 0)
  - System display user-interface with 'Good Job' or 'Game Over' message and also buttons with options 'Return to Main Menu', 'Restart Game' and 'Exit Game'
  - The player selects 'Restart Game' button
  - System display new board with enemies and reward and place main character at start tile
- **Exception:** Incorrect log in - see use-case 'validate ID and password'
- **Priority:** low
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#### Use case 5: exit game

- **Primary actor:** player
- **Goal in context:** allow player to return to menu at the 'game over' interface
- **Preconditions:** proper log in detail and system fully configured, game is over (player wins or loses)
- **Trigger:** player decides to return to menu
- **Scenario:**
  - The player enters his/her user ID on the Desktop Application
  - The player enters password

- The system display 'start game', 'settings' and 'Exit Game' buttons
- The player selects 'start game' button
- System display new board with enemies and reward and place main character at start tile
- The player plays the game until they win (collect rewards and exit) or losses (encounter enemy or score below 0)
- System display user-interface with 'Good Job' or 'Game Over' message and also buttons with options 'Return to Main Menu', 'Restart Game' and 'Exit Game'
- The player selects 'Exit Game' button
- System closes user-interface and logs out of player's account
- **Exception:** Incorrect log in - see use-case 'validate ID and password'
- **Priority:** high

#### Use case 6: return to menu

- **Primary actor:** player
- **Goal in context:** allow player to return to menu at the 'game over' interface
- **Preconditions:** proper log in detail and system fully configured, game is over (player wins or loses)
- **Trigger:** player decides to return to menu
- **Scenario:**
  - The player enters his/her user ID on the Desktop Application
  - The player enters password
  - The system display 'start game', 'settings' and 'Exit Game' buttons
  - The player selects 'start game' button
  - System display new board with enemies and reward and place main character at start tile
  - The player plays the game until they win (collect rewards and exit) or losses (encounter enemy or score below 0)
  - System display user-interface with 'Good Job' or 'Game Over' message and also buttons with options 'Return to Main Menu', 'Restart Game' and 'Exit Game'
  - The player selects 'Return to Main Menu' button
  - System display Main Menu user-interface with 'start game' and 'settings' buttons
- **Exception:** Incorrect log in - see use-case 'validate ID and password'
- **Priority:** high

#### Use case 7: validate ID and password

- **Primary actor:** system
- **Goal in context:** validate ID and password
- **Preconditions:** log in detail entered by player and system fully configured
- **Trigger:** player decides to enter log in detail
- **Scenario:**
  - The player enters his/her user ID on the Desktop Application
  - The player enters password

- The system verify ID and password with previous registered accounts
  - Display 'Error' if no match found
- **Priority:** high