Use Case Descriptions

Treasure Chase

Use Case: Play Treasure Chase

Brief Description: Enable the user to play the Treasure Chase game variant

Actor: Player

Precondition: The player has started the Labyrinth game up and is being presented with the menu of options

Main Flow:

1. The player selects the Treasure Chase game mode option from the menu.
2. A new game is now started for the player.

Alternative Flow:

1. The player selects the Alter Settings options.
2. The player changes the default settings to their own desired values.
3. The player goes back to the main menu.
4. The player selects the Treasure Chase game mode from the menu.
5. A new game (using the aforementioned setting changes) is now started for the player.

Postcondition: The player has started a new game using the Treasure Chase game mode.

Letter Chase

Use Case: Play Letter Chase

Brief Description: Enable the user to play the Letter Chase game variant

Actor: Player

Precondition: The player has started the Labyrinth game up and is being presented with the menu of options

Main Flow:

1. The player selects the Letter Chase game mode option from the menu.
2. A new game is now started for the player.

Alternative Flow:

1. The player selects the Alter Settings options.
2. The player changes the default settings to their own desired values.
3. The player goes back to the main menu.
4. The player selects the Letter Chase game mode from the menu.
5. A new game (using the aforementioned setting changes) is now started for the player.

Postcondition: The player has started a new game using the Letter Chase game mode.

Move Token

Use Case: Move Token

Brief Description: Move the player token to a particular tile

Actor: Player

Precondition: The player has started the Labyrinth game up and is currently in game

Main Flow:

1. The player is presented with the option to enter which tile they wish to move their token to.
2. The player enters a valid tile that can be moved to. The tile must not be blocked by any walls, there must be a direct path.
3. The players token is then moved to this specified tile.
4. In the case of Treasure Chase, if there is treasure on the tile then the player has won the game. If not, the players token stays here and the game is continued.
5. In the case of the Letter Chase, if there is a letter on the tile then the letter is added to the players letter bank. If not, the players token stays here and the game is continued.

Alternative Flow:

1. The player is presented with the option to enter which tile they wish to move their token to.
2. The player enters an invalid tile that cannot be moved to.
3. The players token does **not** move. Instead, the player is unable to move their token to this particular tile and is prompted to enter a new tile.

Postcondition: The players token has moved to a different tile.

Manipulate Tile

Use Case: Manipulate Tile

Brief Description: Rotate or insert a tile on the game board

Actor: Player

Precondition: The player has started the Labyrinth game up and is currently in game

Main Flow:

1. The player is presented with the option to either rotate an existing movable tile currently on the game board or insert their spare tile onto the game board.

2. In the case of rotation, the player is prompted with which tile to rotate. The tile **must** be non-fixed.

3. The specified tile is then rotated by 90 degrees.

4. In the case of spare tile insertion, the player is prompted with which column or row to insert the tile.

5. Using the specified row or column, the spare tile is then inserted and the existing tile that was on this row or column "falls off" the board.

Alternative Flow:

1. The player is presented with the option to either rotate an existing movable tile currently on the game board or insert their spare tile onto the game board.

2. The player enters a tile number of a fixed tile.

3. The tile is **not** manipulated in any way. Instead, the player is prompted to enter another tile, one which is non-fixed.

Postcondition: An existing tile on the board is manipulated, or a new tile is inserted onto the game board.

High score

Use Case: High score Submission

Brief Description: Enable the player to submit a high score

Actor: Player

Precondition: The player has completed the game.

Main Flow:

1. The players score is checked to see if they qualify for leader board entry.
2. The players score qualifies for leader board entry.
3. The player is prompted for their name.
4. The player specifies their name to the computer.
5. The players score is then submitted to the leader board and is then placed in accordance to their score.

Alternative Flow:

1. The players score is checked to see if they qualify for leader board entry.
2. The players score does **not** qualify for leader board entry.
3. The game ends without recording the players name and score.

Postcondition: The player's high score is entered into the leader board

Load Game

Use Case: Load Game

Brief Description: Enable the user to load a game they have previously played (but haven't finished) that was saved.

Actor: Player

Precondition: The player has started the Labyrinth game up and is being presented with the menu of options

Main Flow:

1. The player selects the Load Game option from the menu.
2. The player is then prompted to select which saved game they wish to load.
3. The player then selects their desired saved game.
4. The game begins from where the player left off.

Alternative Flow:

1. The player selects the Load Game option from the menu.
2. There are no saved games present, so the player cannot select anything.

Postcondition: The player has successfully loaded their saved game and met the criteria of having a saved game in the first place.

Save Game

Use Case: Save Game

Brief Description: Enable the user to create a saved game they can return to later.

Actor: Player

Precondition: The player has started the Labyrinth game up, and is in-game, and wishes to save their progress.

Main Flow:

1. The player selects a game mode from the main menu.
2. The player is now in game and is progressing.
3. The player selects the "Save Game" option from the in-game menu.
4. The player is then presented with a number of free slots to save the game in.
5. The player selects which slot to save the game in.

Alternative Flow:

1. The player selects a game mode from the main menu.
2. The player is now in game is progressing.
3. The player selects the "Save Game" option from the in-game menu.
4. There are no free slots available to save the game in.
5. The player is given the option to overwrite a previously saved game.

Postcondition: The player has successfully created a save file and has met the criteria of being in-game. The player can load this file later.

Computer (NPC) Move

Use Case: Computer Move

Brief Description: The NPC/Computer makes moves against the player.

Actor: Computer

Precondition: The player has started the Labyrinth game up, and is in-game.

Main Flow:

1. The player makes a move on the board.
2. The NPC makes a move on the board in response.
3. This is repeated until the postcondition is met.

Alternative Flow:

1. The player makes a move on the board.
2. The player has won as a result of this move, therefore the computer cannot make a move.

Postcondition: Either the player or NPC wins, based on which reaches the game objective first (dependent on game mode).