1. 1.1 Test Objectives  
   The testing plan of the Dungeon system should validate all the requirements from the perspective of user that
   1. System should be able to create a new dungeon.
   2. System should be able to get user input for number dimension of dungeon, interconnectivity, non-wrapping or not.
   3. Dungeon should have path from one cave to other.
   4. Dungeon should be two-dimensional array.
   5. Dungeon should be created with correct interconnectivity.
   6. Dungeon should be correctly wrapped.
   7. Dungeon should check start and end points correctly.
   8. Dungeon to be created with correct number of treasures.
   9. System should be able to print the treasures players collected.
   10. System should be able to print the location of the treasure.
   11. System should check if move by the player is correct or not.
2. 1.2 Scope of Testing  
   The system integration test will test interfaces to create dungeon and test player movement in the dungeon.
3. 1.3  System overview  
   The dungeon system is used to play game where player can move from one cave to another using tunnels. Player can also collect while moving from cave to another.

1.4 Functional testing of items

1. a)  Dungeon creation
   * Create dungeon
   * Check if non-wrapping is correctly handled
   * Check if inter-connectivity is correctly handled.
   * Start the game by defining start and end positions.
2. b)  Player create
   * Create a player
3. c)  Track player movement

* print the place player move
* print the treasure have
* check if path length is greater than 5.

1.5 Unit testing

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| Test Class | Test method | Test description |
| DungeonModel | createDungeon | Create a dungeon with specified dimension, non-wrapping, interconnectity |
| DungeonModel | move | Move a element from one cave to other |
| DungeonModel | pickUpTreasure | Pick treasure from cave |
| DungeonModel | enterDungeon | Enter the dungeon |
| DungeonModel | printPlayerDescription | Print complete description of the player |
| DungeonModel | printPlayerLocation | Print the location and treasure of cave |
| DungeonModel | testInterconnectityOfHabitat | Test the interconnctity of the dungeon |
| DungeonModel | Test wrapping functionality of caves | Test the wrapping functionality of dungeon |