



## Dungeon Testing Plan

### 1. DungeonImpl

Test Case	Testing approach	Exception (if expected)
testDungeonImplInvalidRows()	Tests the zero or negative number of rows	IAE
testDungeonImplInvalidColumns()	Tests the zero or negative number of columns	IAE
testDungeonImplInvalidInterconnectivity()	Tests negative interconnectivity	IAE
testDungeonImplNegativeTreasurePercentage()	Tests negative treasure percentage	IAE
testCreatePlayer()	Asserts the player created	
testCreatePlayerNullPlayer()	Null player name	IAE
testCreatePlayerEmptyPlayer	Empty player name	IAE
testGetStartingCave()	Asserts starting cave	
testGetDestinationCave()	Asserts end cave	
testMinimumDistance()	Tests minimum distance between end points is 5	
testGetTreasuresOfPlayer()	Asserts player's collected treasures	
testGetPossibleMoves()	Asserts possible moves for current location	
testGetPlayerLocation()	Assert current location	
testMovePlayer()	Tests that player is correctly moved.	
testMovePlayerNullDirection()	Tests if Direction is null	IAE
testMovePlayerInvalidDirection()	If direction is invalid. Throws exception	IAE
testCollectTreasure()	Tests that treasures are collected correctly and are removed from the cave.	
testIsDestinationReached()	Tests if destination reached at end Node.	
testIsDestinationNotReached()	Tests if destination reached before end Node.	

### 2. PlayerImpl

Test Case	Testing approach	Exception (if expected)
testPlayerImpl()	Asserts the player created	
testPlayerImplNullPlayer()	Null player name	IAE

testPlayerImplEmptyPlayer	Empty player name	IAE
testGetCollectedTreasures()	Asserts player's collected treasures	
testGetLocation()	Asserts the current location	
testCollectTreasure()	Tests that treasures are collected correctly and are removed from the cave.	
testMovePlayer()	Tests that player is correctly moved.	
testMovePlayerNullDirection()	Tests if Direction is null	IAE
testMovePlayerInvalidDirection()	Id direction is invalid. Throws exception	IAE

### 3. Cave

Test Case	Testing approach	Exception (if expected)
testGetId()	Asserts location's id	
testGetTreasures()	Asserts location's treasures	
testGetMoves()	Asserts valid moves	
testIsTunnel()	Asserts is a cave with 2 entrances is tunnel.	
testIsTunnelFalse()	Asserts that caves with 1, 3 and 4 entrances are not tunnels.	
testAddTreasures()	Asserts that location has added treasures.	
testAddTreasuresToTunnels()	Treasures cannot be added to tunnels	ISE
testAddTreasuresNullList()	Invalid if null list of treasures	IAE
testAddTreasuresEmptyList()	Invalid is empty list of treasures	IAE
testAddTreasuresNullElement()	Invalid if any element of list of treasures is null	IAE
testRemoveTreasures()	Asserts that treasures are removed from the location.	