

TESTING PLAN

CONTROLLER TESTS

- 1. Player Finishes the Game successfully by traversing the dungeon and reaching the End point.
- 2. Check if the Player is able to move successfully through one node to another in the dungeon.
- 3. Check if the Player has the ability to shoot arrow the Dungeon.
- 4. Check if the Player can pick Treasure from Dungeon.
- 5. Check if the Player can pick Arrows from Dungeon.
- 6. Check the ability of arrow to hit monster.
- 7. Test when the Player Hits an Arrow, the Otyugh can take damage.
- 8. A damaged Otyugh when hit by Arrow, check if it is dying or not.
- 9. Check if there can be weak smell detected when monster is at 2 nodes away.
- 10. Check if there can be Strong smell detected when monster is at 1 node away.
- 11. Check if there can be Strong smell detected when multiple monsters are 2 nodes away.
- 12. Check if player can be killed by monster when inside same node with it.
- 13. Check player avoidance ability when the monster is damaged and player is in the same node with it.
- 14. Check if Otyugh is Present at the last ending node of the cave.
- 15. Check if player has 3 crooked arrows at the beginning of the game.
- 16. Check if the id missing input in controller can handle NoSuchElementException or not.

MODEL TESTS (Added New Ones After Project 3)

- 1. Test if the Arrows are populated in the dungeon or not.
- 2. Test if the Otyughs are populated in the dungeon or not.
- 3. Test if it throws IllegalArgumentException if the number of Otyughs in the Dungeon is greater than the number of Nodes.
- 4. Test if it throws IllegalArgumentException if the number of Otyughs in the Dungeon is negative or zero.
- 5. Test to check if there is always a Monster present at the end node.
- 6. Test to check if there is no monster at the starting node.
- 7. Test if the Otyughs only occupy Cave Nodes and not the Tunnels.
- 8. Test if the caves can contain Treasure with Arrows or not.
- 9. Test to see if there is no presence of smell, when no Otyugh are present.
- 10. Test to see if there is a presence of strong smell with single monster, when Otyugh are present.
- 11. Test to see if there is a presence of strong smell with multiple monsters, when Otyugh are present.
- 12. Test to see if there is a presence of weak smell, when Otyughs are present.
- 13. Test to see if player can die when present in the same cave as monster.
- 14. Test to see if player has chance to survive when inside the cave with a injured monster.
- 15. Test to see if player has 3 arrows at the start of the game.
- 16. Test to see if the number of arrows cave in the dungeon is equal to percentage in the treasure in the dungeon.
- 17. Test to see if the player has the ability to shoot arrows.
- 18. Test to see if the arrow hits the wall and drops.
- 19. Test the crooked arrows through curved tunnels, whether they turn or not.
- 20. Test if the Otyugh takes 2 arrow hits by the player to die.