Testing Plan

Priorities

| 3 - High |
| 2 - Medium |
| 1 - Low |

Entity	Name	Description	Priority
Battle	testMercenaryInitiate	Test mercenary intitiates battle	3
Battle	testPlayerInitiates	Test player initiates battle	3
Battle	testMercenaryDeath	Test mercenary death	2
Battle	testPlayerDeath	Test player death	3
Battle	testBattleHydra	Test Battle hydra	2
Battle	testBattleAssassin	Test Battle assassin	2
Battle	testBattleZombieToast	Test Battle Zombie Toast	2
Battle	testBaseAttack	Test no weapons calculations	2
Battle	testAllBuffedAttack	Test all weapons calculations	2
Battle	testAlliesBuff	Test allies calculation	2
GameGeneration	testGameCreation	Test the game is being created	3
GameGeneration	testPlayerCreated	Test player created successfully	3
GameGeneration	testBasicGoal	Testing basic goal creation	3
GameGeneration	testCompositeGoal	Testing composite goal creation	3
GameGeneration	testEntitiyGeneration	Testing entity generation	3
GameGeneration	testMultipleEntityGeneration	Testing multiple entity generation of some type	3
GameGeneration	testTickMovesPlayer	Testing tick moves player	3
GamePersistence	testSaveGame	Test saving game	3
GamePersistence	testSavePlayerPosition	Test loading game saves player position	2
GamePersistence	testSaveStaticEntityPosition	Test loading game saves static entity position	2
GamePersistence	testSavePlayerInventory	Test loading game saves player inventory	2
GamePersistence	testSaveDoorStatus	Test loading game saves open door status	2
GamePersistence	testSaveMovingEntityPosition	Test loading game saves moving entity position	2
GamePersistence	testSavePotionStatus	Test loading game saves player potion status	2
GamePersistence	testSaveBribeStatus	Test loading game saves moving entity bribe status	2
GamePersistence	testSaveWeaponsDurability	Test loading game saves armour durability after battle	2
GamePersistence	testSaveGoalStatus	Test loading game saves goal status	2
Arrow	testMovementDown	Test arrow creation	3
Bomb	testCreateBomb	Test create bomb	3
Bomb	testPickupBomb	Test pickup bomb	3
Bomb	testPlaceBomb	Test plac bomb	3

Bomb	testInvalidPickup	Test bomb cannot be picked back up	3
Bomb	testBombExplode	Test bomb explode	2
Bow	testBowBuildable	Test bow is buildable	3
Bow	testInvalidInput	Test throws exception for invalid build	1
Bow	testCreateBow	Test bow is successfully build	2
InvincibilityPotion	testCreateInvincibility	Test create invincibility potions	3
InvincibilityPotion	testPickupInvincibility	Test pickup invincibility potions	3
InvincibilityPotion	testConsumePotion	Test consume potion	2
InvincibilityPotion	testInvincibilityDuration	Test duration	1
InvisibilityPotion	testCreateInvisiblity	Test creat invisibility potions	3
InvisibilityPotion	testPickupInvisibility	Test pickup invisibility potions	3
InvisibilityPotion	testConsumePotion	Test consume potion	2
InvisibilityPotion	testInvisibilityDuration	Test duration	2
Key	testCreateKey	Test create key	3
Key	testPickupKey	Test pickup key	3
SunStone	testCreateKey	Test create key	3
SunStone	testPickupKey	Test pickup key	3
Sword	testCreateSword	Test create sword	3
Sword	test	Test sword and pickup invincibility potions	3
Assassin	testCreateAssassin	Test create assassin	3
Assassin	testAssassinBasicMovementTowardsPlayer	Test simple assassin movement	3
Assassin	testAssassinBasicMovementAroundWall	Test simple assassin movement around wall	2
Assassin	testAssassinMovementAroundBoulder	Test simple assassin movement around boulder	2
Assassin	testAssassinMovementWithExit	Test simple assassin movement through exit	2
Assassin	testAssassinMovementThroughFloorSwitch	Test simple assassin movement through floor switch	2
Assassin	testAssassinMovementWithClosedDoor	Test simple assassin movement through closed door	2
Assassin	testAssassinMovementWithOpenDoor	Test simple assassin movement through open door	2
Assassin	testAssassinMovementWithPortalInPath	Test simple assassin movement with portal in the way of path	1
Assassin	testAssassinMovementWithoutTreasure	Test bribe assassin without treasure	2
Assassin	testBribeAssassinNotWithinRadius	Test bribe assassin not within bribing radius	2
Assassin	testBribeAssassinMovement	Test bribe Assassin movement	2
Assassin	testBribeAssassinMovementWithPortal	Test bribe Assassin movement with portal	2
Assassin	testBribedAssassinDoesNotAttackPlayer	Test bribe Assassin does not attack player	2
Assassin	testAssassinMovementWithInvincibilityPotion	Test assassin movement with invincibility potion potion	3
Hydra	testBasichydraMovementWithWall	Test basic movement of hydra with wall	2
Hydra	testBasichydraMovementWithBoulder	Test basic movement of hydra with boulders	2
Hydra	testBasichydraMovementWithExit	Test basic movement of hydra with exit	2
Hydra	testBasichydraMovementWithFloorSwitch	Test basic movement of hydra with floor switch	2

Hydra	testBasichydraMovementWithPortal	Test basic movement of hydra with Portal	2
Hydra	testBasichydraMovementWithClosedDoor	Test basic movement of hydra with closed door	2
Hydra	testBasichydraMovementWithOpenDoor	Test basic movement of hydra with open door	2
Hydra	testhydraCannotMoveBoulder	Test hydra cannot move boulder	1
Hydra	testhydraTrappedCannotMove	Test hydra trapped cannot move anywhere	1
Mercenary	testCreateMercenary	Test create mercenary	3
Mercenary	testMercenaryBasicMovementTowardsPlayer	Test simple mercenary movement	3
Mercenary	testMercenaryBasicMovementAroundWall	Test simple mercenary movement around wall	2
Mercenary	testMercenaryMovementAroundBoulder	Test simple mercenary movement around boulder	2
Mercenary	testMercenaryMovementWithExit	Test simple mercenary movement through exit	2
Mercenary	testMercenaryMovementThroughFloorSwitch	Test simple mercenary movement through floor switch	2
Mercenary	testMercenaryMovementWithClosedDoor	Test simple mercenary movement through closed door	2
Mercenary	testMercenaryMovementWithOpenDoor	Test simple mercenary movement through open door	2
Mercenary	testMercenaryMovementWithPortalInPath	Test simple mercenary movement with portal in the way of path	1
Mercenary	testBribeMercenaryWithoutTreasure	Test bribe Mercenary without treasure	3
Mercenary	testBribeMercenaryNotWithinRadius	Test bribe Mercenary not within bribing radius	3
Mercenary	testBribeMercenaryMovement	Test bribe Mercenary movement	3
Mercenary	testBribeMercenaryMovementWithPortal	Test bribe Mercenary movement with portal	2
Mercenary	testBribedMercenaryDoesNotAttackPlayer	Test bribe Mercenary does not attack player	2
Mercenary	testMercenaryMovementWithInvincibilityPotion	Test mercenary movement with invincibility potion potion	2
Spider	testSpiderBasicMovement	Test basic clockwise circular movement of spider	3
Spider	testSpiderTraverseStaticEntitiesExceptBoulders	Test spider can traverse through static entities, except boulders	3
Spider	testSpiderReverseDirectionBoulder	Test that spider reverses direction when encounters a boulder	2
Spider	testSpiderReverseDirectionTwoBoulder	Test spider movement when there are two boulders	1
Spider	testSpiderMovementBoulderAbove	Test spider movement when there is a boulder directly above it	2
Spider	testSpiderSpawnRateThree	Test spider spawn rate at 3	2
ZombieToast	testBasicZombieMovementWithWall	Test basic movement of zombie with wall	2
ZombieToast	testBasicZombieMovementWithBoulder	Test basic movement of zombie with boulders	2
ZombieToast	testBasicZombieMovementWithExit	Test basic movement of zombie with exit	2
ZombieToast	testBasicZombieMovementWithFloorSwitch	Test basic movement of zombie with floor switch	2
ZombieToast	testBasicZombieMovementWithPortal	Test basic movement of zombie with Portal	2
ZombieToast	testBasicZombieMovementWithClosedDoor	Test basic movement of zombie with closed door	2
ZombieToast	testBasicZombieMovementWithOpenDoor	Test basic movement of zombie with open door	2
ZombieToast	testZombieCannotMoveBoulder	Test zombie cannot move boulder	1
ZombieToast	testZombieTrappedCannotMove	Test zombie trapped cannot move anywhere	1
Boulder	createBoulderTest	Test the door entity is correctly created	3
Boulder	playerMoveBoulderTest	Test player can move the boulder	2
Boulder	playerMoveOnlyOneBoulderTest	Test player cannot move more than one boulder	2

Door	createDoorTest	Test the door entity is correctly created	3
Door	playerOpenDoorWithKeyTest	Test player can open the door with the matching key	2
Door	playerBlockedByDoorWithoutKeyTest	Test playeris blocked by the door without a key	2
Door	playerBlockedByDoorWithoutMatchingKeyTest	Test player is blocked by the door without a matching key	2
Exit	createExitTest	Test the exit entity is correctly created	3
Exit	playerOnExitTest	Test player can step on an exit	3
FloorSwitch	createSwitchTest	Test the floor switch entity is correctly created	3
FloorSwitch	switchBehaveLikeEmptySquareTest	Test floor switch acts like empty square without boulder on it	3
FloorSwitch	boulderTriggerSwitchTest	Test boulder triggers a switch and then untriggers it	2
Portal	createPortalTest	Test the portal entity is correctly created	3
Portal	simpleTeleportTest	Test the simple teleport	3
Portal	teleportBlockedTest	Test teleport to a blocked entity	2
Portal	teleportZombieFailTest	Test zombie cannot teleport	1
ZombieToastSpawner	createZombieToastSpawnerTest	Test the zombie toast spawner entity is correctly created	3
ZombieToastSpawner	simpleZombieToastSpawnerTest	Test zombie toast spawner can spawn	3
ZombieToastSpawner	zombieToastSpawnerSurroundedByWallTest	Test zombie toast spawner cannot spawn if all the cardinally adjacent cells to the spawner are walls	2
ZombieToastSpawner	playerDestroyZombieToastSpawnerTest	Test player can destroy zombie toast spawner if they have a weapon and are cardinally adjacent to the spawner	1
ZombieToastSpawner	playerDestroyZombieToastSpawnerWithoutWeaponTest	Test player cannot destroy zombie toast spawner if they don't have a weapon and are cardinally adjacent to the spawner	1
ZombieToastSpawner	playerDestroyZombieToastSpawnerNotAdjacentTest	Test player cannot destroy zombie toast spawner if they have a weapon but are not cardinally adjacent to the spawner	1
Wall	createWallTest	Test the wall entity is correctly created	3
Wall	wallBlockPlayerTest	Test the wall blocks the movement of player	1
Wall	wallBlockEnermiesTest	Test the wall blocks the movement of enermies	1
Wall	wallBlockBoulderTest	Test the wall blocks the movement of boulder	2
TimeTravellingPortal	createTimeTravellingPortalTest	Test the TimeTravellingPortal can be created sucessfully	3
TimeTurner	createTimeTurnerTest	Test the TimeTurner can be created successfully	3
DungeonGeneration	testCorrectPositionPositive	Test correct player & exit position : +ve case	3
DungeonGeneration	testCorrectPositionNegative	Test correct player & exit position : -ve case	3
DungeonGeneration	testCorrectGoalCondition	Test goal condition	3
DungeonGeneration	testInvalidArguments	Test for invalid config file	2
Goal	testAllOrGoalConditionsExit	Test all or goal conditions - EXIT	3
Goal	testAllOrGoalConditionsTreasure	Test all or goal conditions - TREASURE	3
Goal	testAllOrGoalConditionsEnemies	Test all or goal conditions - ENEMIES	3
Goal	testAllOrGoalConditionsBoulders	Test all or goal conditions - BOULDERS	3
Goal	testTreasureAndSunStone	Test treasure and sun stone goal condition	3
Goal	testExitAndTreasure	Test exit condition and treasure	3
Goal	testExitAndEnemies	Test exit condition and enemies	3
Goal	testExitAndSwitch	Test exit condition and switch	3
Goal	testAllAndGoalConditions	Test all and goal conditions	3

Player	testbasicMovement	Test basic movement of Player	3
Player	testBasicCollect	Test basic pickup of item	3
Player	testCollectMultiple	Test pickup multiple of item	3
Player	testPlayerCannotMoveIntoWall	Player cannot move into wall	2
Player	testPlayerCannotEnterDoorWithoutKey	Player cannot exit through door without key	2
Player	testPlayerCanEnterDoorWithKey	Player can enter door with key	2