

Testing Plan

1. **System Tests:** Write simple tests to assure reading in JSON config files and JSON dungeon file is implemented -> Tests JSONReader class
2. Write **unit tests** for each individual class including:
 - a. Player
 - i. Tests movement
 - ii. Tests collecting items
 - iii. Tests interacting with static entities -> Portal, door, wall, zombie toast spawner, exit
 - b. All Item subclasses
 - i. Tests item appears in dungeon
 - ii. Test build for buildable entities
 - iii. Test placing bomb
 - c. All MovingEntity subclasses
 - i. Tests movement -> Movement influenced by player's potion state
 - ii. Tests interaction with static entities -> Portal, door, wall
 - d. All StaticEntity subclasses
 - e. Goal
 - i. Test all basic goals individually
 - ii. Test complex goals
 - f. Battle
 - i. Test battle between player and all moving entities
 - ii. Test player cannot battle with bribed mercenary
 - iii. Test player win and lose battle situations
 - iv. Test battle with invincibility potion
 - v. Test battle with bow and/or shield buffs
3. Write **integration tests** for each of the main superclasses. Includes testing all subclasses together for the following superclasses:
 - a. Item
 - b. MovingEntity
 - c. StaticEntity