

# Assumptions for Major Project

- Assume the player starts with 100 health.
- Assume the player starts with 10 attack/damage.
- Assume the game is over when the player has 0 health.
- Assume the player starts on the top left hand corner of the maze.  
Otherwise the player's starting point is moved down/towards the right but keeping its left and topmost starting point.
- Assume a spider or a zombie has 5 health and 5 attack/damage.
- Assume a mercenary has 10 health and 10 attack/damage.
- Assume 20% of zombies and 10% of mercenaries spawn with armour.
- Assume swords increase the attack/damage by 10.
- Assume a bomb can destroy any entities within a 2 tile radius (except the player).
- Assume arrows can be used to construct a bow.
- Assume shields can decrease an attack by 25%.
- Assume shields can last against 4 enemy attacks
- Assume bows have an attack/damage of 10.
- Assume bows can last for 4 enemy attacks.
- Assume both invincibility and invisibility potions last for 30 ticks.
- Assume a One Ring will appear in 5% of the player's battles.
- Assume the battle will be within a 3 tile radius.
- Assume zombie toast spawners will appear in 50% of the game duration.
- Assume max 4 spiders will appear in 70% of the game duration.
- Assume mercenaries will appear in 30% of the game duration.
- Assume that the game mode can be selected at the start.
- Assume RareCollectibleEntity is an extension of CollectibleEntity.
- Assume all characters perform their action before any other entities perform their actions.
- Assume collectible rewards picked up by the player can be used one round after within same tick().