

Use Case Specification Document

Use Case Name: Shoot bullet on enemy
Brief Description: Player wishes to kill enemy to protect castle and win game
Actors: Player, Enemy
Basic Flow: <ol style="list-style-type: none">1. Player starts the game2. Player uses 'Left Arrow' to navigate left on the game screen3. Player uses 'Right Arrow' to navigate right on the game screen4. Player uses "space button" to shoot a bullet on enemy
Alternate Flow: <ol style="list-style-type: none">1. Player gets hit by a bullet and absorbs the bullet. As the bullet didn't hit the castle, castle health remains unchanged.2. Enemy bullet hits the castle. Castle health reduces and game ends
Preconditions: Castle health is at least greater than zero
Success Guarantee: Player is able to shoot the enemy resulting in reduced enemy health
Minimal Guarantee: Player is able to navigate left and right on the game screen.

<p>Use Case Name:</p> <p>Collect Bonus Coins and use them</p>
<p>Brief Description:</p> <p>Player wishes to collect bonus points to gain extra abilities and use them to kill enemy</p>
<p>Actors:</p> <p>Player, Enemy</p>
<p>Basic Flow:</p> <ol style="list-style-type: none"> 1. Player starts the game 2. Player uses 'Left Arrow' to navigate left on the game screen 3. Player uses 'Right Arrow' to navigate right on the game screen 4. Player collects coin by navigating over the coin 5. Player presses "a" or "d" or "s" to set bullet type as Fire bullet, Default Bullet or Dragon Glass Bullet respectively. 6. Then, player presses "space" to shoot the selected bullet on enemy.
<p>Alternate Flow:</p> <ol style="list-style-type: none"> 1. Player collects bonus coins but does not set the bullet type resulting in using only default bullet with limited capabilities to destroy the enemy. 2. Enemy bullet hits the castle. Castle health reduces and game ends.
<p>Preconditions:</p> <ol style="list-style-type: none"> 1. Castle health is at least greater than zero 2. Bonus coin is present on screen
<p>Success Guarantee:</p> <ol style="list-style-type: none"> 1. Player is able to collect the bonus coin 2. Player sets the bullet factory to one of the types mentioned in basic flow point 5. 3. Player hits the enemy with bullets having added abilities.
<p>Minimal Guarantee:</p> <ol style="list-style-type: none"> 1. Player is able to navigate left and right on the game screen. 2. Player is able to press "a", "s", "d" keys to select bullet factory type. 3. Player is able to shoot bullets on the enemy.

Use Case Name:

Proceed to next level

Brief Description:

Player wishes to proceed to next level of the game to come closer to winning the battle.

Actors:

Player, Enemy

Basic Flow:

1. Player starts the game
2. Player uses 'Left Arrow' to navigate left on the game screen
3. Player uses 'Right Arrow' to navigate right on the game screen
4. Player uses "space button" to shoot a bullet on enemy
5. Enemy health decreases due to hitting player bullets.
6. Enemy army is killed and player is promoted to the next level.

Alternate Flow:

1. Player keeps absorbing bullets without hitting the enemy. In this case, the enemy health remains unchanged. Player is not promoted to next level.
2. Enemy bullet hits the castle. Castle health reduces and game ends

Preconditions:

Castle health is at least greater than zero

Success Guarantee:

Player is able to shoot the enemy, kill the enemy and proceed to next level.

Minimal Guarantee:

1. Player is able to navigate left and right on the game screen
2. Player is able to shoot bullets on the enemy

Use Case Name:

Trigger weapon strategy on castle health change

Brief Description:

When castle health is reduced to 50%, player should be able to reduce enemy health by double the rate than before.

Actors:

Player, Enemy

Basic Flow:

1. Player starts the game
2. Player uses 'Left Arrow' to navigate left on the game screen
3. Player uses 'Right Arrow' to navigate right on the game screen
4. Enemy shoots bullets on castle and castle health reduces to 50%.
5. Player gets extra ammunition and every bullet that hits the enemy reduces enemy health by double rate.

Alternate Flow:

1. Enemy bullet hits the castle. Castle health reduces and game ends

Preconditions:

Castle health is at least greater than zero

Success Guarantee:

Player is able to shoot the enemy, kill the enemy and proceed to next level.

Minimal Guarantee:

1. Player is able to navigate left and right on the game screen
2. Player is able to shoot bullets on the enemy
3. Enemy is able to shoot bullets on castle and player