

Software Test Report: Castles and Creatures

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Use Case: Join Game

After User Opens Application:

- User Clicks Join Game
- User Enters IP Address
- User Enters Port Number
- User Clicks Join
- User selects Character
- User is now in game as selected character

Error Flow

Failed to join:

- Reopens Pop up to join

Actors:

- User
- Database
- Server

Join Game Acceptance Test: Valid IP Address

Description: User enters a valid IP address

Expected Result: User Joins Game as Selected Character

Acceptance Test Result: **PASS**

Notes: N/A

Join Game Acceptance Test: Invalid IP Address

Description: User enters an invalid IP address

Expected Result: User does not join game; Popup reopens

Acceptance Test Result: **PASS**

Notes: N/A

Join Game Acceptance Test: Valid IP, Invalid Port

Description: User enters a valid IP address and an invalid Port number

Expected Result: User does not join game; Popup reopens

Acceptance Test Result: **PASS**

Notes: N/A

Actors:

Use Case: Move

- User
- Database
- Server

After the user Joins the game:

- User presses and holds WASD, IJKL, ←↑→↓
- Player begins to move in the corresponding direction
- Player sends updated location to server
- Player can change directions when the user begins pressing and holding a different combination of keys corresponding to a different direction
- Player begins moving in the corresponding direction
- User releases all direction keys
- Player stops moving

Move Acceptance Test: Open Area

Description: User presses and holds w, a, s, d, i, j, k, or l

Expected Result: User's player moves in the specified direction and the animation reflects this movement

Acceptance Test Result: **PASS**

Notes: N/A

Move Acceptance Test: All Directions, All Keys

Description: User presses and holds w, a, s, d, i, j, k, or l, and then switches to another key

Expected Result: User's player moves in the specified directions and the animation reflects the change in direction

Acceptance Test Result: **PASS**

Notes: N/A

Move Acceptance Test: Off Screen

Description: User moves off screen and then attempts to return

Expected Result: User's player moves out of and back into sight and is still targetable by projectiles

Acceptance Test Result: **PASS**

Notes: N/A

Use Case: Attack

After user joins the game:

- The user shoots at enemies (Spacebar)
- When projectiles collides with enemies, they take damage
- Once a target's health reaches zero, they are destroyed
- Projectiles have limited range

Attack Acceptance Test: Shoot

Description: User presses Spacebar

Expected Result: A projectile is spawned and travels in the direction of the player

Acceptance Test Result: **PASS**

Notes: N/A

Attack Acceptance Test: Receive Damage

Description: A Player collides with an enemy projectile

Expected Result: Player takes damage

Acceptance Test Result: **PASS**

Notes: N/A

Attack Acceptance Test: Friendly Fire

Description: A Player collides with their own projectile

Expected Result: Player takes no damage

Acceptance Test Result: **PASS**

Notes: N/A

Use Case: Server

- Compile and Run Server Project!
- Server Starts automatically, and displays IP and Port number to join.

Server Acceptance Test: Entity Database

Description: Entities are added and removed from play

Expected Result: Server Maintains Database of all entities that exist

Acceptance Test Result: **PASS**

Notes: N/A

Server Acceptance Test: Collisions and HP

Description: Entities collide with projectiles

Expected Result: Server manages collision detection and HP adjustment

Acceptance Test Result: **PASS**

Notes: N/A

Server Acceptance Test: Adjust Data Request

Description: Server receives Client Request to change entity data

Expected Result: Server updates data accordingly

Acceptance Test Result: **PASS**

Notes: N/A

Server Acceptance Test: Entity Data Request

Description: Server receives Client Request for an entity's data

Expected Result: Server responds with the correct data for the correct entity

Acceptance Test Result: **PASS**

Notes: N/A

Server Acceptance Test: Random Obstacle Generation

Description: Game Spawn prompts Obstacle Generation

Expected Result: Server randomly generates positions and adds obstacle entities to those locations in the database

Acceptance Test Result: **PASS**

Notes: N/A

Server Acceptance Test: Client Disconnect

Description: Client disconnects from Server

Expected Result: Server removes Entities owned by the Client from the Database

Acceptance Test Result: **PASS**

Notes: N/A