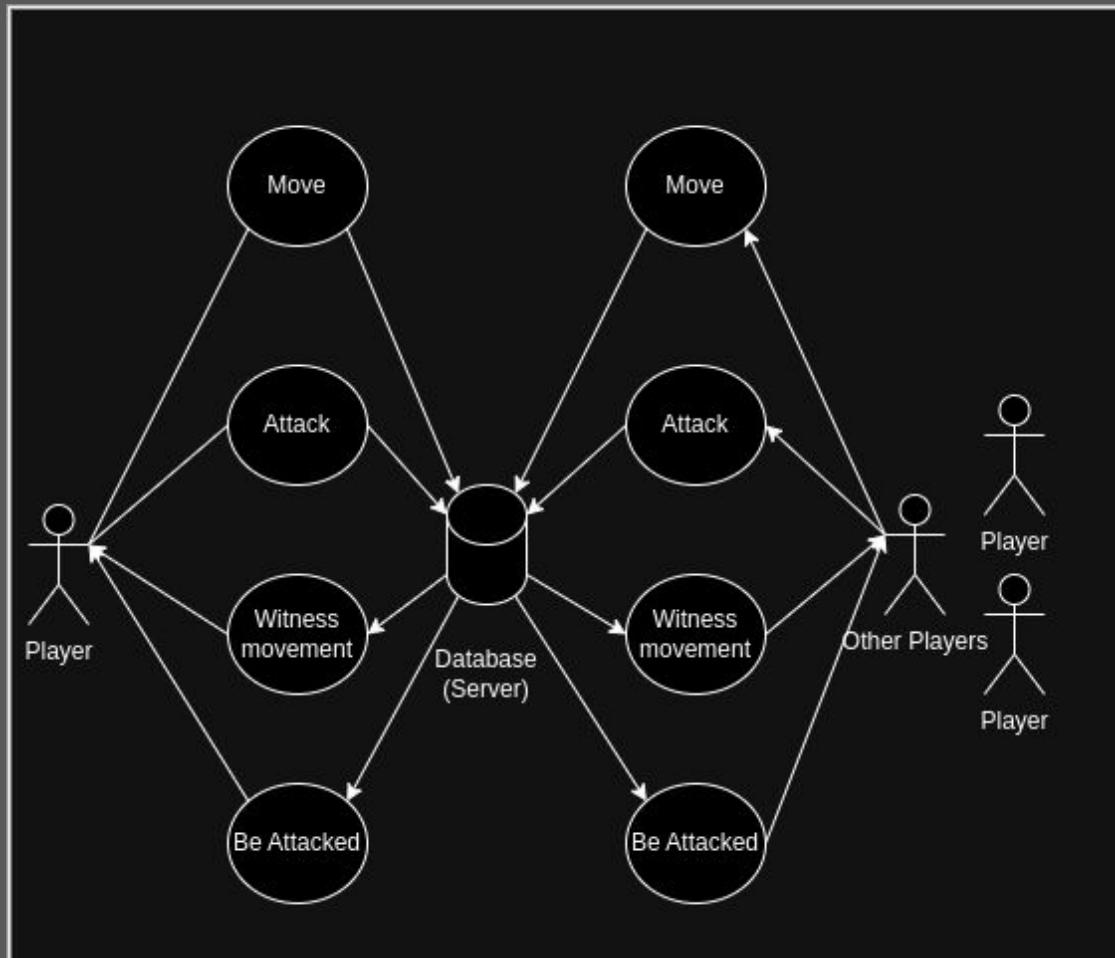


# Use Case: Castles and Creatures

Elijah Moore, Alex Thomas

Noah Sickels, Isaiah Denard, Garrett Sutton



# 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

# Use Case: Join Game

## Acceptance Test:

- Enters correct IP
- Enters invalid IP

## Edge Case:

- Correct IP, Bad Port Number

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

# Use Case: Move

## Acceptance Test:

- Player is moving in open area
- Player can move in all directions

## Edge Case:

- Player Walks Off screen (You are allowed to do that)

# 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

# Use Case: Attack

## Acceptance Tests:

- Player can shoot
- Bullets shoot in the direction a player is walking
- When player shoots others, they take damage

## Edge Case Tests:

- Player should not be able to be hit by their own bullet



# Use Case: Server

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

# Use Case: Server

## Acceptance Tests:

- Server Maintains Database of all entities that exist in game
- Server Manages Collisions and Damage dealing
- Server Responds correctly to requests to change entity data
- Server Responds correctly to requests for an entity's data
- Server should initialize with randomly placed stumps and stones

## Edge Case Tests:

- Client Disconnect (Removes all their entities from the server)