| **Use Case Name** | Client Connection |
| --- | --- |
| **Relevant Requirements** | * · · |
| **Primary Actors** | * · · Client |
| **Pre-conditions** | * · · Server is running |
| **Post-conditions** | * · · Player is connected |
| **Basic Flow or Main** | * . . 1. Client requests connection to server * . . 2. Server accepts the connection request * . . 3. Server sends acknowledgment. * . . 4. Client is now connected |
| **Extensions or Alternate Path** | * · 1. If client times out waiting for acknowledgement show error. |
| **Exceptions** | * · · If there is no internet, then you cannot login, even if valid credentials are correct * · · If server is not found. |
| **Related Use Cases** | * · · UC2 * · · UC3 |

| **Use Case Name** | Authenticate User |
| --- | --- |
| **Relevant Requirements** | * · · |
| **Primary Actors** | * · · Client |
| **Pre-conditions** | * · · Client is connected to the server. |
| **Post-conditions** | * · · Client is authenticated and authorized to perform further actions. |
| **Basic Flow or Main Scenario** | * · 1. Client sends login credentials. * · 2. Server validates the credentials. * · 3. If valid server grants access. |
| **Extensions or Alternate Path** | * · 1. Invalid login credentials * · 2. Server sends error message. |
| **Exceptions** | * · · Client is blocked. |
| **Related Use Cases** | * · · * · · |

| **Use Case Name** | Client sends data |
| --- | --- |
| **Relevant Requirements** | * · · |
| **Primary Actors** | * · · Client |
| **Pre-conditions** | * · · Client is authenticated |
| **Post-conditions** | * · · Data is successfully received and stored by the server. |
| **Basic Flow or Main Scenario** | * · 1. Client formats and sends data packet. * · 2. Server receives packet and verified it. * · 3. Server stores and processes data. |
| **Extensions or Alternate Path** | * · 1. Data format is invalid. * · 2. Server sends error message. |
| **Exceptions** | * · · Server has an internal error and sends error message to client for client to try again. |
| **Related Use Cases** | * · · * · · |

| **Use Case Name** | Player Login |
| --- | --- |
| **Relevant Requirements** | * · · |
| **Primary Actors** | * · · Client |
| **Pre-conditions** | * · · Client is authenticated * · · requested data is in the server. |
| **Post-conditions** | * · · Client receives requested data or an appropriate error message. |
| **Basic Flow or Main Scenario** | * · 1. The client sends data request. * · 2. The server processes the request. * · 3. The server sends requested data back to the client. |
| **Extensions or Alternate Path** | * · 1. The data is not found. |
| **Exceptions** | * · · The permission is denied. |
| **Related Use Cases** | * · · * · · |