# Non Functional Requirements

## Security

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| ID | Description |
| SEC1 | The system must authenticate users using a username and password. |
| SEC2 | They system will verify that each request to the server is authenticated. |
| SEC3 | Only the password hash will be saved, and all data transmitted will be encrypted. |

## Availability

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| --- | --- |
| ID | Description |
| AVA1 | The system must be available 24 hours a day, 7 days a week. |
| AVA2 | Online service must be available 24 hours a day, 7 days a week. |

## Speed

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| --- | --- |
| ID | Description |
| SPD1 | The time it takes for a player to see the opponents move in an online match must be less than 1 second. |

## Interoperability

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| ID | Description |
| INT1 | The back-end system will be able to interface with any mainstream client operating system via JSON. |

## Portability

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| --- | --- |
| ID | Description |
| PRT1 | The Android client application will be available for all Android operating systems from Android 5.0 to current. |

## Usability

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| --- | --- |
| ID | Description |
| USE1 | The UI must be intuitive to navigate in that the user will be able to find what they’re looking for in the app on their first or second try. |

## Scalability

|  |  |
| --- | --- |
| ID | Description |
| SCA1 | The system will be scalable to thousands of players playing concurrently. |

## Reliability

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| --- | --- |
| ID | Description |
| RLB1 | The online system will not experience critical failures at least 99.99% of the time. |
| RLB2 | The client application will not experience critical failures at least 99% of the time, excluding factors outside out control. (ex... dead battery, bad WIFI connection, no data coverage) |
| RLB3 |  |

## Maintainability

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| --- | --- |
| ID | Description |
| MNT1 | Broken features must be fixed within 24 hours 90% of the time. |