



Non-functional Considerations

Security

Requirement	Priority	How to Adhere
Password Strength	High	Enforces specific requirements for password creation: <ul style="list-style-type: none">• At least 10 characters long• Have at least one uppercase letter and lowercase letter• Have at least one special character
Failed Login Limit	High	Implements a login limit to prevent brute-force attacks on login registration: <ul style="list-style-type: none">• 3 consecutive fails will send a notification of login failure to the email and will require to reset the password via that email
Session Expiration	Medium	Implements a session expiration (log out users) after 24 hours.

Performance

Requirement	Priority	How to Adhere
User Scalability	High	Use Docker to containerize your services and Kubernetes to manage containerized applications, making it easier to scale services horizontally by adding more instances.
Response Time	Medium	Optimizes database queries and use indexing where necessary to improve the performance of record retrieval and storage, particularly for game results and statistics.

Reliability

Requirement	Priority	How to Adhere
Data Backup	High	<ul style="list-style-type: none">• Implements a regular data backup, especially for critical user datas and game history.

		<ul style="list-style-type: none"> • Implements an automated recovery processes to quickly restore the system to stable state.
High Availability (Uptime)	Medium	<ul style="list-style-type: none"> • Regularly conducts a system checkup to prevent emerging issues • Schedules regular maintenances during low traffic periods
Tested Features	High	Conducts extensive testing such as unit integration and user acceptance testing under different scenarios.

Usability

Requirement	Priority	How to Adhere
Accessible User Interface	High	Ensures that the User Interface (UI) Design is clean and easy to navigate
Error Messages	High	Provides a clear and user-friendly error messages throughout the application