

Experiment No. 02: Prepare an SRS document in line with the IEEE recommended standards for the specified Case Study. (Non-Functional Requirements)

The key non-functional requirements for an Amazon clone e-commerce website as per IEEE standards are:

Performance

- The website should have high performance and respond to user requests within acceptable time limits. This includes page load times, search results, product load times, checkout process, etc.
- The system should be scalable to handle high traffic and a large number of concurrent users.

Security

- The website must ensure data security and protect customer information like payment details, login credentials, personal information, etc.
- Secure access control mechanisms should be in place to restrict access to authorized users only.

Availability

- The system should be highly available and have minimal downtime. This can be achieved through redundancy, failover, load balancing, etc.
- The target availability should be 99.9% or higher.

Reliability

- The system should be reliable and function correctly under normal operating conditions.
- Error handling mechanisms should be implemented to recover from failures gracefully.

Maintainability

- The system should be designed to be easily maintained and updated. This includes the ability to fix bugs, implement enhancements, integrate with new systems, etc.

Usability

- The user interface should be intuitive, easy to use and learn. It should comply with usability guidelines and best practices.
- Help features, documentation and tutorials should be provided.

Supportability

- The system should implement features to facilitate support and troubleshooting like logging, monitoring, diagnostics, etc.
- Technical support should be provided through various channels.

These are the key non-functional requirements as per IEEE standards for quality aspects that an e-commerce website like an Amazon clone should adhere to for a robust and reliable system.