

# Non-Functional Requirements

## Performance :

- **Response time** : We used the latest technologies available to provide fast performance with reduced response time which makes users enjoy the best performance experience. (e.g., loading the homepage, searching for a product) .
- **Scalability** : Of course, a big idea needs scalability to include a larger number of users and we provide this in our application by scalability database .
- **Peak Traffic**: The platform should be able to handle increased traffic during peak times, such as holidays or sales events.

## Security :

- **Data protection** : we used mechanisms like (e.g., using multi-factor authentication , Using secure token generation) for protecting user's and admin's sensitive data (e.g., passwords , payment information) .
- **Secure Payment Processing**: The payment gateway should comply with relevant security standards (e.g., PCI DSS).
- **Hack prevention** : validation and sanitize the inputs before process to make sure that it's not cyberattacks like SQL injection or XSS .

## Accessibility:

- **Compliance with Standards**: Adhere to accessibility guidelines (e.g., WCAG) to ensure the platform can be used by people with disabilities.
- **Alternative Text for Images**: Provide descriptive text for images to assist visually impaired users.

## Availability :

- **Uptime** : Our system is designed to be 99.99% ready to use at all times , allowing for the convenience of use at any time .
- **Recovery plans** : There is feedback can the users use to report if there is any problem and there are plans to follow to guarantee their rights .

## Usability :

- **User interface** : Designed to be smooth and easy to use and surely, Make users understand how to use and reach to what they want by best ways .
- **Responsive Design**: The website will adapt to different screen sizes (desktop, tablet, mobile) for optimal user experience.
- **User-Friendly Checkout**: The checkout process should be straightforward and secure.

## Reliability :

- **Stability** : Our system is stable to provide to users deal with it safely .
- **Data accuracy** : Surely, it's important to care about the quantity of products that will be shown to users to know if it's available or not .
- **Data Backup**: Regularly back up critical data to ensure recoverability in case of data loss.

## Integration:

- **Third-Party Integrations**: Integrate with relevant third-party services (e.g., payment gateways, shipping providers, marketing tools).
- **RESTful APIs**: Provide well-documented RESTful APIs for developers to interact with the platform's functionality.
- **API Security**: Implement robust security measures (e.g., OAuth, API keys) to protect sensitive data.
- **API Documentation**: Provide clear and comprehensive API documentation to guide developers in using the platform's APIs.

## Maintainability :

- **Code Quality**: Ensure clean, well-structured code for easier maintenance and updates.
- **Ease of modification** : merchants can modify anything about their products easily and quickly and admins can do this but have more accessibility .

- **Documentation** : Complete documentation of all processes , system components and what it does to assist with future development and troubleshooting.
- **Modularity**: Design the platform with modular components for easier updates and scalability.