

# **Non-Functional Requirements**

## **1. Product Requirements**

- [NFR-1.0] **Usability:** A customer should easily find the right product for them and make a purchase. Their Order will be delivered to them within 10 – 15 days. Their Data will be Protected on our system.
- [NFR-2.0] **Accessibility:** The platform will be accessible to visitors 24/7 through the Domain name. Use the docker container to run the app and load balancer to distribute the load.
- [NFR-3.0] **Availability:** The ecommerce platform must maintain high availability, minimizing downtime and ensuring continuous service accessibility. You may use Kubernetes to scale up and scale down the container.
- [NFR-4.0] **Scalability:** Our main goal for the next two years is nationalization, so the website shall have multiple storeviews for each state we're providing deliveries to. The store shall expand to support 50k+ request per second on a single server without a negative impact on the website load speed.
- [NFR-5.0] **Maintainability:** The platform will be easily maintained and updated over time, with clear code structure and documentation. All the code has to be uploaded on GitHub repository so that multiple developers can work on the same codebase parallelly.
- [NFR-6.0] **Deployability:** New releases, updates, or patches will be deployed efficiently without disrupting ongoing operations. Implement the CI/CD Pipeline for this.
- [NFR-7.0] **Performance:** Our system maintains fast response times and throughput under various conditions, including peak loads by using caching techniques and message queues.
- [NFR-8.0] **Documentation:** Our system has the Comprehensive documentation, including user manuals, technical guides, and system architecture documents. You may use Readme.md files in the codebase to document the functionality.
- [NFR-9.0] **Security:** The platform implements measures to protect against unauthorized access, data breaches, and other security threats, including encryption and compliance with security standards. Use SSL certification and data privacy policy