Requirement Gathering and Analysis Phase Solution Requirements (Functional & Non-functional)

Date	03-07-2024
Team ID	SWTID1720199985
Project Name	Project – Grocery Webapp
Maximum Marks	3 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Registration	Registration through Gmail
FR-2	Login	Login by Email and Password
FR-3	Search	Search for the products by name
FR-4	Cart Management	Add items to the cart View items in the cart Edit items in the cart
FR-5	Checkout	Securely complete the checkout process
FR-6	Payment	User can save payment methods for quick checkout

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	Performance	Optimize the application to handle high volumes of user requests with minimal latency. Use techniques such as database indexing, load balancing, and content delivery networks (CDNs).
NFR-2	Usability	The interface should be easy to navigate for all users, including those with disabilities, and should work seamlessly on various devices and screen sizes.
NFR-3	Interoperability	Ensure compatibility with external systems and APIs, such as payment processors, logistics partners, and social media platforms for login and sharing functionalities.

NFR-4	Maintainability	Develop the application with clean, modular code that is well-documented and easy to update. Implement continuous integration/continuous deployment (CI/CD) pipelines and automated testing.
NFR-5	Reliability	The system should provide consistent performance with minimal errors. Include automated error detection and recovery processes, and ensure data integrity.
NFR-6	Availability	Ensure the application is accessible 99.99% of the time, with infrastructure in place to handle unexpected outages or maintenance. Utilize cloud services for high availability.
NFR-7	Localization	Provide support for multiple languages and regional settings, including date and currency formats, to cater to a diverse user base.
NFR-8	Security	Implement robust security measures, including SSL/TLS for data transmission, secure user authentication (e.g., OAuth), and regular security audits.
NFR-9	Scalability	Design the system to handle increasing amounts of data and user load by implementing scalable solutions like containerization, auto-scaling groups, and distributed databases.