Project Design Phase-II Solution Requirements (Functional & Non-functional)

| Date | 15 October 2022 |
|---------------|--|
| Team ID | PNT2022TMID40543 |
| Project Name | Retail store stock inventory analytics |
| Maximum Marks | 4 Marks |

Functional Requirements:

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------------|--|
| FR-1 | Improvement in operation efficiency | It helps prevent stockout. It helps prevent overselling of products. Helps speed up the process of order fulfilment. |
| FR-2 | Sales and profit maximization | In the wholesale industry, it is very much important to have access to real-time data which helps in managing the sale with a tight profit margin with the help of greater insights. |
| FR-3 | Increasing customer satisfaction | By improving product description. Keeping an eye on the shipping box and making sure that the right product is being shipped. Switching to a reliable carrier service. Making the process of return and exchange more efficient to improve customer satisfaction. |
| FR-4 | Reducing shrinkage of inventory | The inventory management process that takes place with the data analytics helps in preventing these losses. With the ability to track the movement of inventory as well as the person responsible for the movement reduces the risk of warehouse theft. |
| FR-5 | Cost reduction | Storage costs. Risk-holding costs like inventory depreciation, obsolete stock, shrinkage, and the impact of stockouts. Insurance costs. |
| FR-6 | Retail data collection | Retail data collection is gathering information about your retail store performance as well as your customers and their demographics, behaviors, attitudes, and actions. |

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | Accurate receiving and shipping records. Real-time, reliable inventory counts. Merchandise traceability using bar codes or RFID. Simplified returns. Better forecasting. |
| NFR-2 | Security | Flex Your Ordering Muscle. Be Proactive with Your Supply Chain. Crunch Your Numbers. Use an Inventory Management System. Maximize Efficiency. |
| NFR-3 | Reliability | Manage Supplier Relationships. Utilize Open-To-Buy (OTB) Inventory Planning. Prepare a Contingency Plan. Accurately Predict Demand. |
| NFR-4 | Performance | Average order value. Units per transaction. Gross Margin Return on Investment (GMROI) Foot traffic. Inventory turnover ratio. Sell-through rate. Customer lifetime value. Sales per employee. |
| NFR-5 | Availability | Utilizing Sales & Operations Planning. Ensuring Records Are Accurate. Gaining Control. Continually Improving Operations. Building Rapport with Partners. Reasons to Improve Product Availability. Maximize Conversion Rates. |
| NFR-6 | Scalability | Quality of Data: Scalability is the measure of a system's ability to increase or decrease in performance and cost in response to changes in application and system processing demands. |