Stock Management system

1. Introduction

* Purpose :- The purpose of this document is to define the requirements and specifications for the development of a stock management system. It serves as a guide for stakeholders and the development team to ensure clarity and alignment throughout the development process.

* Scope :- This document outlines the overall working and main objectives of the stock management system. It describes the value it will provide to customers, including improved efficiency in stock management process.

* Overview :- The stock management system is a software application designed to streamline and automate stock management process within an organization it provides functionalities for efficient inventory management, order processing and reporting.

2. General description :-

The stock management system aims to

- Enable efficient stock management and tracking
- provide real-time visibility into stocks levels
- Facilitate order management and processing
- Generate comprehensive reports for decision-making

3. Functional Requirements
- Adding, updating, and deleting stock items
- Tracking stock level and movements
- Managing purchase orders
- Generating reports on stock status and transactions

4. Interface Requirements
* User interface :- The UI allows users to interact with the system providing interfaces for data input, manipulation, it includes forms, menus, buttons and other elements for user interaction.
x. Database interface :- The system communicates with the underlying database management system to store, retrive and manipulate data. This interface involves database queries, transactions and data modelling.

5. Performance Requirements
x. Response time :- The system should respond to user actions within an acceptable time frame, ensuring a smooth and responsive user experiance.
x. Throughout :- The system should handel a certain number of transactions or requests per unit of time to meet the demands of users and business operations.
x. Memory Usage :- The system should efficiently utilize memory resources minimizing memory leaks and excessive memory consumption.

6. Design constraints
* Hardware limitations :- The system must operate within the constraints of the hardware environment, including processing power, memory and storage capacity
* Software limitations :- The choice of software components, libraries and frameworks may be constrained by compatibility requirements & licensing restrictions.
* Algorithms :- Certain algorithms may be mandated or preferred for specific functionalities, influencing the design and implementation of the system.

7. Non functional Attributes
* Security :- Measures to protect sensitive data, prevent unauthorized access and mitigate security risks.
* Portability :- The ability of the system to run on difference hardware platforms.
* Reliability :- The system should operate consistently and predictably minimizing downtime and distruptions to business operations.

8. Preliminary schedule and budget
* Project plan :- An outline of the project phases, milestones and deliverables including requirements gathering, design etc.
* Time duration :- The overall time required for each phase of the project.
* Cost estimate :- An estimation of the overall cost of development.