4) Stock Maintenance System

Introduction

Purpose : Purpose of this document is to provide a detailed description of requirements for a stock maintenance system

Scope : This stock maintenance system will be a web based application that enables the user to manage stock levels and generate reports.

Overview: The stock maintenance system should be reliable and fast to make transactions as in low time lag since traders are at stock market prices are fairly volatile.

General Description :

The Stock maintenance system should be reliable and fast to make transactions in low time lag since stock market prices are fairly volatile

Functional Requirements:

Stock management:: ability to track inventory levels.

Order management : Ability to process orders

Reporting: The Ability do generate reports on stock level

User management : ability to manage user roles and permissions

Non Functional Requirements:

→ Performance requirements: response time and throughput

→ Security requirements, including data privacy

→ Availability requirements including disaster recovery

→ Usability: easily user usable user interface

Performance Requirements:

Throughput: There should be a minimum number of concurrent users and transaction rate

Scalability: The system shall be able to handle 20% relative increase in inventory levels without affecting performance

Availability: The system shall have an uptime of atleast 99%.

Load Testing: The system shall be load tested to ensure that it can handle peak user traffic & levels without affecting performance

Interface Requirements

User Interface: With least response time, user interface must be easy to use and fast to access. fields to increase speed of use

Transaction history and Reporting:

The system shall maintain a record of all credit card transactions and associated details such as transaction ID.

Design Constraints:

Hardware constraints: The system shall be designed to run on standard hardware configurations that are commonly available in the market

Software constraints: The system shall be designed to operate within commonly available platforms.

Preliminary Schedule and Budget:

Planning Phase : 5 weeks : $70,000

Design Phase : 5 weeks : $100,000

Development Phase: 10 weeks : $150,000

Maintenance Phase: $250,000 per year

Total: $570 000