1.) INTRODUCTION

1.1 DOCUMENT PURPOSE:

The purpose of this document is to give detailed information about the product specifications and to serve as a reference for developers, designers and users (stock managers). It covers all the information related to overall functionality of the software which is “Stock management system”.

1.2 PRODUCT SCOPE:

“Stock Management System” is an inventory management software which can be used in any shop or market where it is required to keep the records of inventory. This software is easy to use and user will be able to easily add and remove stocks to and from inventory through computer thereby eliminating the paper work. It can easily calculate the price of items just by knowing the amount and price per item. This software can be used by shopkeepers or large retailers.

1.3 INTENDED AUDIENCE AND DOCUMENT OVERVIEW:

This document is mainly intended towards software developers (Student), and the user (Professor). This document provides a description of the software product, its interface and features.

1.4 DEFINITIONS, ACRONYMS AND ABBREVIATIONS:

IEEE: Institute of Electrical and Electronics Engineers

SRS: Software Requirement Specification

RAM: Random Access Memory

SMS: Stock Management System

1.5 DOCUMENT CONVENTIONS:

Font Style: Times New Roman

Line Spacing: 1.5

Font Size: 16 (Heading), 14 (Sub Heading), 12 (Content)

All the text in the document is properly justified.

1.6 REFERENCES AND ACKNOWLEDGEMENT:

Software Engineering: A Practitioner’s Approach (By Roger S. Pressman)

Software Engineering: By Shalini Puri, Girdhari Singh

Software Engineering: By Ian Sommerville

[The C Programming Language](http://www.amazon.com/exec/obidos/ASIN/0131103628/lynnallain) by Brian W. Kernighan, Dennis M. Ritchie

[C Programming: A Modern Approach](http://www.amazon.com/exec/obidos/ASIN/0393969452/lynnallain) by [K.N. King](http://knking.com/)

IEEE SRS Format

[**http://www.slideshare.net/**](http://www.slideshare.net/)

[**http://en.wikipedia.org/wiki/Software\_requirements\_specification**](http://en.wikipedia.org/wiki/Software_requirements_specification)

2.) OVERALL DESCRIPTION

2.1 PRODUCT PERSPECTIVE:

This is a new self-contained product. It does not require any external components. The software will be executed as a standalone application on a single machine. The user will interact with the software via a text based user interface. The user will use keyboard for providing input and all information will be outputted on the monitor. All the records regarding the products will be maintained in a flat file database.

2.2 PRODUCT FUNCTIONALITY:

* GoodsIn Function: This function will add items to stock.
* GoodsOut Function: This function will remove items from stock.
* Information Function: This function will generate information of stock items including quantity and price of an item.
* Authentication Function: This function will check authenticity by asking Username and Password from user and allow login if user enter correct input.

2.3 USERS AND CHARACTERISTICS:

The user should have knowledge of how to operate this software in windows environment. User doesn’t need to have knowledge of programming language of any kind. Stock manager is the primary user for this software.

2.4 OPERATING ENVIRONMENT:

Processor: Intel Core i3 2.4 GHz and above

RAM: 2 GB, Keyboard

Operating System: Windows 7

Developing Tool: Dev-C++

2.5 DESIGN AND IMPLEMENTATION CONSTRAINTS:

This software is designed to be executed on a PC or laptop running a Windows OS. This software would not able to provide GUI

2.6 USER DOCUMENTAION: SRS is based on IEEE format.

3.) SPECIFIC REQUIREMENTS

3.1 EXTERNAL INTERFACE REQUIREMENTS

* User Interfaces:

The user will utilize the console to input required information. In this interface, on the first screen user will get Login option. In this screen if user enters the user ID and password correct, then user find next screen. Second screen contain menu option in which function information is displayed in list manner. User select function from list by providing respective function number to software through terminal then output of respective function is shown to same screen.

* Hardware Interface:

Keyboard and Monitor Screen are two important components of software. Keyboard will take input from user. User supply user ID, password, stock quantity (i.e. item price, user ID of item, item quantity) and other inputs of all functions from keyboard only. Monitor will display warning message, error message, information and output of all functions. Monitor will display the product information, billing information. It will also describe the information products being sold.

* Software Interfaces:

Dev-C++ is working tool for Stock Management software. It provides some of the library functions which are used. String manipulation functions are used. Dev-C++ is a developing tool of this software, so this Dev-C++ is a required component to run that software properly.

3.2 FUNCTIONAL REQUIREMENTS:

* GoodsIn function requirement: This function will put the given items into stock. So the number of items that should be inserted in the range of stock or should not exceed maximum limit. Item’s user ID that is a primary key to decide should be from given item list, otherwise item would not be inserted.
* GoodsOut functions: This function would display the information of sold items. Number of items taken out from the stock should not cross the minimum quantity. User ID of item inserted should be in integer form.
* Authentication Function Requirement: This function checks whether the user trying to access software is authorized or unauthorized. In user ID and password case, user should insert the printable characters from keyboard. If both user ID and password entered by user matches the correct user ID and password, then only this function allow to access the other functionality of stock management software.

4.) OTHER NON FUNCTIONAL REQUIREMENTS

4.1 PERFORMANCE REQUIREMENTS:

The interruption due to processing should not be noticed by user and should get the output as quick as possible. Software should get proper space on system to run properly.

4.2 SAFETY AND SECURITY REQUIREMENTS:

For authentication, User ID and Password both should be correct. Data security is little concern as software uses global data. Power supply is a major requirement because power loss during accessing of software cause loss of data.

4.3 SOFTWARE QUALITY ATTRIBUTES:

* Portability:

This software can be run on multiple systems without changing the source code of the software program. This feature helps a user when user wants to run same software on multiple systems or more than one system then user don’t need to change source code of software for each individual system.

* Correctness:

This software will be able to provide correct and desired output. This software is sure to provide correct output if user provide correct input. It does not provide Ambiguous output.

* Security:

This software provides Authentication to prevent unauthorized access. This is perfectly secure from outside world. No other user can access to this software. There I only one user for this software so it reduce the possibility of password leaking.

* Availability:

This software will execute till system is working. Software will stop working if power supply is off. So availability of software depends on system functioning.