SOFTWARE REQUIREMENTS SPECIFICATION

SCORE MANAGEMENT SYSTEM

1. INTRODUCTION :

The Software product to be developed is the Score Management System(SMS).

1.1 PURPOSE :

- The purpose of the document is to outline the requirements of the system both functional and non-functional also to present a detailed description of score management system.
- The document acts as a medium between the stakeholders and developers.
- The document lists all the functionalities of the system, interface requirements etc.
- The system developed eventually will adhere to all the requirements mentioned in the document.

1.2 SCOPE :

- The software developed is a score management system.
- In any school / college, report card is to be obtained from office while this software generates report card of a student online , which can be printed.
- The software is designed so that professors could upload student marks and students can view their marks. Students can calculate the percentage obtained.
- Workload of administration will reduce to some extent after development of this system. All data is secured in binary data files,

thus enabling adminstration for anytime view result of a particular student.

1.3 OVERVIEW :

- Definitions of some terms used in the document has been mentioned.
- The document is divided into three sections viz. Introduction,General Description and Specific Requirements.
- General description section gives a general overview of the system before moving into the technical details of the system.
- Specific requirements section include functional, non- functional and external requirements of the system.
- All needs of the system were properly analyzed before preparing this document.

1.4 DEFINITIONS :

- **DATABASE** : Collection of information, organixed in such a way that it can be easily accessed,managed and updated.
- **USER INTERFACE :** The means by which the user and system interacts in particular the use of input devices and software.

2. GENERAL DESCRIPTION :

2.1 PRODUCT PERSPECTIVE :

- SMS will be a C++ interface based system and will replace the existing paper based system.
- Teachers update the scores of student which gets added into the database and students can generate their report card.

2.2 PRODUCT DESCRIPTION :

- SMS maintains users at three levels viz. Teacher, Student and Admin.

- Teacher level user can upload student marks.
- Student level user can generate their report card which mentions marks obtained in all subjects and percentage obtained.
- Admin can add teachers and students.
- All data is secured in the database and teachers need to update marks incase of any change.

2.3 USER CHARACTERISTICS :

- User should be internet literate i.e must have basic knowledge of using computer and internet.
- User must have teacher id/roll number to login to the system.
- User must have access to the data files.

2.4 ABBREVIATIONS :

- **SMS** : Score Management System.
- **OS** : Operating System.
- **RAM** : Random Access Memory.
- **viz** : which is
- **i.e.** : that is

3. SPECIFIC REQUIREMENTS :

3.1 FUNCTIONAL REQUIREMENTS :

3.1.1 ADD USERS

INTRODUCTION : This module is used at the admin level

INPUT: Type, Name of user, Teacher/Student number and their details

PROCESSING: On submission, data is stored in the database

OUTPUT: Success status of entry is displayed

3.1.2 UPDATE MARKS:

INTRODUCTION : This module is used by the user at teacher level.

INPUT : All student marks obtained will be taken as input.

PROCESSING : On submit button click, database is opened and marks is updated.

OUTPUT : Message is shown indicating success or failure.

3.1.3 CHECK MARKS:

INTRODUCTION : This module is used by the user at student level.

INPUT : No input required.

PROCESSING : Percentage of marks is calculated.

OUTPUT : Marks obtained in all subjects is displayed alongwith the percentage.

3.2 EXTERNAL INTERFACE:

3.2.1 USER INTERFACE :

- The software provides a very intuitive and easy to use interface which can be used by anyone having basic computer knowledge.

3.2.2 HARDWARE INTERFACE:

- OS : Windows/Linux.
- RAM : 2 GB minimum
- Hard disk : 1 GB for database.

3.2.3 SOFTWARE INTERFACE:

- C++ application with g++ compiler pre-installed
- Database: C++ binary data files

3.2.4 COMMUNICATION :

- Access to data files must be available 24 X 7.

3.3 NON-FUNCTIONAL REQUIREMENTS :

3.3.1 PERFORMANCE :

- Time taken by the system in accessing or updating database shall be less than 2 seconds.

3.3.2 RELIABILITY :

- SMS will be 24 X 7 available.
- Software will be frequently updated.
- Backup of database is available thereby securing data.