4.SYSTEM SPECIFICATION

**4.1 ABOUT THE FRONT END**

The system has been developed in Visual Basic 6.0 as front end.

**VISUAL BASIC 6.0**

MicroSoft Visual Basic 6.0 is the newest of the popular programming language. Visual Basic is even stronger contender in the application development areas than ever before.

The Visual Basic environment is for great creating almost any type of locations we can think of. We can develop robust stand-alone applications, games and utilities is less time than in order languages. We can also use Active X technology to create internet enabled application that is limited only by our imagination.

Visual Basic 6.0 is an addition to VB products. It allows Windows application and easy learning which enables us to create programs quickly for PC without being an expert in C++ or other programming language.

Visual Basic provides a graphical environment where we usually design the forms and control that our application uses. Visual Basic support many useful tools that are more productive. This includes but is not limited to project, forms, objects and templates. Custom controls, add-ins and data manager. We can use these tools together to create applications in months, weeks, or everyday, when compared too much longer development time when we use other languages. Version 6 of Visual Basic is specifically designed to utilize the Internet. It becomes with several controls that allows to create web-based application.

**4.2 ABOUT THE BACK END**

The system has been developed in Microsoft SQL Server 2008 as back end.

**SQL Server2008**

SQL Server2008 includes support for structured and semi-structured data, including digital media formats for pictures, audio, video and other multimedia data. In current versions, such multimedia data can be stored as BLOBs (binary large objects), but they are generic bit streams. Intrinsic awareness of multimedia data will allow specialized functions to be performed on them. According to Paul Flessner, senior Vice President, Server Applications, Microsoft Corp., SQLServer2008 can be a data storage backend for different varieties of data: XML, email, time/calendar, file, document, spatial, etc as well as perform search, query, analysis, sharing, and synchronization across all data types.

The most important aspects of SQL Server are:

* SQL Server is easy to use.
* SQL Server scales from a mobile laptop to symmetric multiprocessor systems.
* SQL Server provides data warehousing features that until now have only been available in Oracle and other more expensive DBMS.

**A database system must provide the following features:**

* Data integrity
* Concurrency control
* Physical data independence
* Logical data independence
* Query optimization
* Backup and recovery
* Security and authentication

When creating a database, the main concept is to know how the database is structured in SQL.SQL stands for Structured Query Language. It is a language that enables us to create and operate on relational database, which are sets of related information stored in tables.

There are two types of SQLs-interactive and embedded. Interactive SQL is used to operate directly on a database to produce output for human consumption. Embedded SQL consists of SQL commands put inside of programs that are mostly written in some other languages such as COBOL, Pascal, and C etc. This can make programs more powerful and efficient. The functional categories of SQL commands consist of DDL and DML.

**4.3 ABOUT THE OS**

The OS used is Windows Operating System.

**WINDOWS OS**

The advent of Microsoft plus has cured whatever faults were there in the original WINDOWS XP version and made it and useful tool to work with the memory resident programs of it, make the reloading of WINDOWS XP easier, it plug and play connectivity for input output devices makes a new dimension towards the use of computer system. Connectivity to the information networks like Internet through modems makes it overstate software. Almost all new software have their windows version also. The programmer and file manager facilities of it had made a leap way towards giving a new dimension towards the operation of computer systems.

**4.4 HARDWARE SPECIFICATION**

Selection of hardware configuration is very important task related to the software development. The processor should be powerful to handle all the operations . The hard disk should have the sufficient capacity to solve the database and the application.

**Minimum hardware requirements**

Processor : Pentium IV

RAM : 256 MB

HDD : 500 MB free space

Monitor : SVGA with 1024 by 768 resolutions

CD-R/W Drive : 52X CD/RW

Printer : Standard