**SYSTEM ANALYSIS**

**1. 1 Software Requirements Specification (SRS)**

This is also known as requirements engineering and is defined as the identification of the requirements of the system and the limitations within which the system will operate, develop or can evolve. This stage ensures that the software meets all the users' expectations. It ensures the delivery of quality software to the user at the end of the production process. On completion of the software specification, a requirements document will be produced and validated by all parties.

**1.2 Draw backs of Existing system**

Identifying the drawbacks of the existing system will lead to propose an efficient system and the drawbacks could be listed as below with respect to a manual file system maintenance.

* Possible human errors
* Overhead of manual labor for file maintenance
* Unsecured data
* Redundant and inconsistent data can exist
* Modifying the details can be cumbersome
* Maintaining the files is difficult.

**1.3 Analysis of proposed system**

This proposal is aimed at developing an application software for the purpose of easiness of handling the entire process of system by facilitating many of the advantageous features as mentioned below.

* A system with no human errors
* Strength and strain of manual labor can be reduced
* High security
* Data redundancy can be avoided to some extent
* Data consistency
* Easy to handle
* Easy data updating
* Easy record keeping
* Backup data can be easily generated

**1.4. Feasibility study**

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company.

For feasibility analysis, some understanding of the major requirements for the system is essential.

Three key considerations involved in the feasibility analysis are

* Operational Feasibility
* Economical Feasibility
* Motivational Feasibility
* Schedule Feasibility

**1.4.1. Operational Feasibility**

Operational feasibility is the ability to utilize, support and perform the necessary tasks of a system or program. It includes everyone who creates, operates or uses the system. To be operationally feasible, the system must fulfill a need required by the business.

**1.4.2. Economical Feasibility**

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget and this was achieved because most of thetechnologies used are freely available. Only the customized products had to be purchased.

**1.4.3. Motivational Feasibility**

Motivation has been identified as a crucial factor in software productivity and software failure. However previous work suggests that conventional approaches to motivation which are based on reward and recognition are not appropriate for software engineering. The evidence suggests that the technical context of software engineers' work is important to their motivation (e.g. the technical challenge and complexity of their work and the development tools they use).

**1.4.4. Schedule Feasibility**

Schedule Feasibility is defined as the probability of a project to be completed within its scheduled time limits, by a planned due date. If a project has a high probability to be completed on-time, then its schedule feasibility is appraised as high. If a work to be accomplished at a project does not fit the timeframes demanded by its customers, then a schedule is unfeasible.

**1.5 General Requirements**

A SRS (Software Requirements Specification) is a complete description of the behavior of the system to be developed. It includes a set of general requirements that forms the use cases which describe all of the interactions that the users will have with the software. Use cases are also known as functional requirements. In addition to use cases, the SRS also contains non-functional (or supplementary) requirements. Non-functional requirements are requirements which impose constraints on the design or implementation (such as performance engineering requirements, quality standards, or design constraints).

**1.6. Functional Requirements**

**Add details here which i have given in synopsis (modules)**

**1.7 Non-Functional Requirements**

Non-functional requirements as the name itself suggests, are those requirements which are not directly concerned with specific functions delivered by the system.

The key non-functional requirements are as follows:

* **Portability:** This project can be installed on all necessary platforms, and the platforms on which it is expected to run.
* **Efficiency:** This project utilizes scarce resources like CPU cycles, disk space, memory, bandwidth, etc.
* **Reliability:** This project has the capability to maintain its performance over time.
* **Scalability:** This Software is scalable which has the ability to handle a wide variety of system configuration sizes.
* **Usability:** Base-of-use requirements address the factors that constitute the capacity of the project lo be understood, learned, and used by its intended users.
* **Integrity:** This project has the integrity requirement which defines the security attributes of the system, restricting access to features or data to certain users and protecting the privacy of data entered into the software.
* **Performance:** This project specifies the performance constraints i.e the timing characteristics of the software.

**1.8 Hardware Requirement**

Processor Dual core

Processor Speed 2.2 GHZ

Hard Disk 80 GB

Main Memory 2 GB

Display Type SVGA Color Monitor

**1.9 Software Requirement**

Development Tool (IDE) Microsoft Visual Studio 2012 (.Net)

Language C#.NET

Server Side Script (Front end) ASP.NET

Database (Back End) MS-SQL SEVER

Web Server IIS (Internet Information Services)

Operating System Windows 7 ,8 , 10

Web browser Internet Explorer, Chrome etc.