Software Requirements Specification

For

Online Student Clearance System

Prepared by:

Mujahid Ayaz (14304)

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1. Introduction

1.1 Purpose

As the number of students is increasing day by day, with the passage of time handling this largest scale information becomes increasingly difficult. To overcome these problems a computer-based system is required. Computerization means the automation of the system, which was previously working manually, was slow. After computerization is sophisticated and technical job and is to be required a comprehensive study of the system, so that the system analyst can understand the whole system, its weakness and drawbacks. Further this system provides information within seconds and the management enjoys this facility.

1.2 Document Conventions

The development in the field of science and technology has improved the efficiency of the data processing mechanisms. These mechanisms allow one man to do what previously required the time and effort the dozens. These mechanisms are developed for the ease and benefit of human begins. These mechanisms are not for specific fields or purpose. They are beneficial for men in many different ways. They impact every aspect of life.

1.3 Intended Audience and Reading Suggestions

The main purpose of gathering and analyzing the data is to be established the system requirements. The main emphasis is on the importance of accurate requirements because the new system will be based on these system requirements.

Computer based system will be designed keeping in mind all the problems being faced in the present manual system. The scope of this system is to provide automated flexible computerized information system. They will provide online information and will be capable of generating necessary reports. The scope of this system is to provide up-to-date consistent and reliable information.

1.4 Product Scope

The system should provide accurate and error free information. It should ensure efficient and accurate record keeping. Accuracy is very important and beneficial factor of proposing system. In the manual system the human can mistakes or forget any information. The computerized system helps us for out requirement accurately. In the retrieval or updating any record, the relational database can retrieve or update the record, accurately and error free information.

Data security is the protection of the database against accidental or intentional loss, destruction, or misuse. So, the data required for decision-making is highly sensitive and valuable. In proposed system, only authorized person should be able to modify or record of master file.

2. Overall Description

2.1 Product Perspective

The product is supposed to be an open source, under the GNU general Public License. It is a web-based system implementing client-server model.

The following are the main features that are included.

Cross platform support: Offers operating support for most of the known and commercial operating systems.

User account: The system allows the user to create their accounts in the system and provide features of updating and viewing profiles.

Number of users being supported by the system: Though the number is precisely not mentioned but the system is able to support a large number of online users at a time.

Search: search is simply local search engine based on key words.

Discussion Forum: Provides users with a platform to discuss and help each other with their problems

2.2 Product Functions

- Enable a user to view questions and their corresponding answers.
- Enable a logged in user to ask questions.
- Enable a logged in user to post answers.
- Enable a logged in user to upvote and downvote answers.
- Provide an interface for the admin to approve posts so that posts are not visible without admin approval
- Enable the admin to generate reports which contains all the posts and their corresponding replies.

2.3 User Classes and Characteristics

This product is a system for successful service of rental center. It should take into account all possible usage of this system such as resupply database of films, organizing all private date of clients into one database and providing user with needed information, initialization all clients, accomplish payments of accounts, inspecting of period of hiring process, execute orders, provide support for editing database, deduction of unreturned and damaged films. System works with your computer's RAM memory, and disappears upon reboot. No installs are necessary in any operating system.

2.4 Design and Implementation Constraints

The requirement gathering process is intensified and focused specially on software. To understand the nature of the programs to be built, the software engineer (analyst) must understand the information domain for the software as well as required function, behavior, performance, interface. Requirements for both system and the software are documented and reviewed with the customer.

2.5 User Documentation

User documentation refers to the documentation for a product or service provided to the end users. The user documentation is designed to assist end users to use the product or service. This is often referred to as user assistance. The user documentation is a part of the overall product delivered to the customer.

Traditionally user documentation was provided as a user guide, instruction manual or online help. However, user documentation is increasingly being delivered online today. This has enabled technical writers to be more imaginative in how they assist users.

2.6 Assumptions and Dependencies

The Primary objective of development are to translate the most promising design approach into a stable, interoperable, producible and cost-effective design, validate the manufacturing and production process and demonstrate system capabilities through testing.

Although much of the activities in the development address the computer program that make up the system, this phase also puts in the place the hardware, software and community's environment for the system and other important elements of the overall system. At the end of development, the system will be ready for activities of the integration and testing.

3. External Interface Requirements

3.1 User Interfaces

The user interface (UI), in the industrial design field of human-computer interaction, is the space where interactions between humans and machines occur. The goal of this interaction is to allow effective operation and control of the machine from the human

end, whilst the machine simultaneously feeds back information that aids the operators' decision-making process. Examples of this broad concept of user interfaces include the interactive aspects of computer operating systems, hand tools, heavy machinery operator controls, and process controls. The design considerations applicable when creating user interfaces are related to or involve such disciplines as ergonomics and psychology.

3.2 Hardware Interfaces

Hardware interface design (HID) is a cross-disciplinary design field that shapes the physical connection between people and technology in order to create new hardware interfaces that transform purely digital processes into analog methods of interaction. It employs a combination of filmmaking tools, software prototyping, and electronics breadboarding.

3.3 Software Interfaces

Software interfaces (programming interfaces) are the languages, codes and messages that programs use to communicate with each other and to the hardware. Examples are the Windows, Mac and Linux operating systems, SMTP email, IP network protocols and the software drivers that activate the peripheral devices.

3.4 Communications Interfaces

In communication studies, the notion of an interface in the work environment is used for a point of interaction between a number of systems or work groups. In the manufacturing environment, the coordination and interaction between several work groups is used to communicate plans and control production activity. This interaction can be schedules, human interactions, computer systems, or any other medium of communication. A physical interface is the interconnection between two items of hardware or machinery.