
Software Requirements Specification

for

Cyber Café Management

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

Cyber Café Management is a complete package developed for management of systems in a cyber Café. It is not a part of any other application. This document will give the entire requirements and features of the project.

In this document, the 'Times' font has been used for the subtitles, with font-size '14'. For the content under the subheadings, 'Ariel' font has been used with size '11' and it has been italicized.

1.2 Intended Audience and Reading Suggestions

The product is intended to be used by the Cyber Café managers (admins) and the customers.

1.3 Product Scope

This project is intended to be used in a Cyber Café. All cyber cafes have some basic needs likeable to control the systems that are being rented to the customers and are charged on timely basis. This project has a server part which runs on the Admin system. And the Client part which runs on all other systems which are to be rented. The Admin should have control over the usage of the client system.

1.4 References

This document uses the format provided by IEEE.

https://web.cs.dal.ca/~hawkey/3130/srs_template-ieee.doc

2. Overall Description

2.1 Product Perspective

This is a new, self-contained product. The product is independent, and is not a part of a larger system. The cyber café management system stores the following information.

- ***Customer description:***
It includes the customer name, address and phone number. This information may be used for keeping the records of the customer for any emergency or for any other kind of information.
- ***Billing description:***
The bill will be generated automatically when the customer logs out in accordance with the time spent by the customer.

2.2 Product Functions

Functions of the Server:

- *Create / Manage Users*
- *Receive Connection requests from Clients*
- *Receive a predefined set of requests from the Client*
- *Billing.*

Functions of the Client:

- *Connection with the Server*
- *Request for terminals and connections.*

2.3 User Classes and Characteristics

This project basically contains two types of users: the server user and the client user.

The Server user is the administrator of the Server machine. He will have the rights to remotely login or logout the client user.

The Client user can login to the client system and start browsing if he knows his username and password otherwise the Admin user can log him in remotely.

2.4 Operating Environment

The product can be used in any regular PC on Windows 7 and above.

2.5 Design and Implementation Constraints

This project will ideally run on Windows 7 Operating system, and it should be able to run on most other windows operating systems without any problem as it runs on .Net Framework which is Independent of all Windows Operating Systems.

.Net Framework is required to be setup before installing the Product, Also SQL SERVER 2015 database server should be setup on the system for the working of this product.

2.6 User Documentation

The product is accompanied with the manual and tutorials for Admin.

2.7 Assumptions and Dependencies

This project runs on Windows 7 operating system. It is assumed that the Cyber Café should have all the systems connected on a LAN network, and the Admin has a separate system from which he will be able to control all other systems.

3. External Interface Requirements

3.1 User Interfaces

The user interface is designed using the windows components of the Visual Studio .Net. Some of the components are: Windows Forms, Textboxes, Labels, Frames, Images, List View etc. The SQL SERVER connections are made through ADO.NET feature of the .Net Framework. The Network connections are made using Winsock component of the Visual Studio.

3.2 Hardware Interfaces

The product does not require any additional hardware. A regular PC is enough.

3.3 Software Interfaces

*This project runs on .Net framework therefore this framework should be installed before the product could be installed.
SQL SERVER 2015 is required for the backend operations. This software should be installed separately.
Visual Basic 16.0 is mandatory to be installed in the system.*

3.4 Communications Interfaces

Communications between the server and the client component is made through the winsock component. Winsock creates a socket based connection between the systems. Sockets uses TCP/IP based protocols which provide connection oriented network services.

4. System Features

<This template illustrates organizing the functional requirements for the product by system features, the major services provided by the product. You may prefer to organize this section by use case, mode of operation, user class, object class, functional hierarchy, or combinations of these, whatever makes the most logical sense for your product.>

4.1 System Feature 1

4.1.1 Description and Priority

The Cyber Café management system maintains information of the internet usage, customer details, personal preferences and prices.

4.1.2 Stimulus/Response Sequences

- Search for available terminal.

- Displays a detailed list of available terminals and make a “Reservation” or on a particular system.
- Cancel an existing Reservation.

4.1.3 Functional Requirements

DISTRIBUTED DATABASE:

Distributed database implies that a single application should be able to operate transparently on data that is spread across a variety of different databases and connected by a communication network.

CLIENT/SERVER SYSTEM:

The term client/server refers primarily to an architecture or logical division of responsibilities, the client is the application (also known as the front-end), and the server is the DBMS (also known as the back-end).

A client/server system is a distributed system in which,

- Some sites are client sites and others are server sites.
- All the data resides at the server sites.
- All applications execute at the client sites.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

This System can run on an average configuration System. The performance requirements are not very high. The performance could be affected if there are network related problems and due to low memory.

5.2 Safety Requirements

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

5.3 Security Requirements

Security systems need database storage just like many other applications. However, the special requirements of the security market mean that vendors must choose their database partner carefully.

5.4 Software Quality Attributes

- **AVAILABILITY:** The terminal should be available on the specified time when the customer requests.
- **CORRECTNESS:** The time should start when the customer logs in and should end when the customer logs out.
- **MAINTAINABILITY:** The admin should maintain correct records of customers.