Software Requirements Specification
(SRS)

for

BOOK_YOUR_SHOW

< Online Movie Ticket Booking System >

Prepared By :

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction:

1.1   Document Purpose

The purpose of the application is to deliver updated information of various train running across India. It should be available for even the most novice of computer users and <u>run on small Spec computers</u>. The application itself is a complete piece of software with few dependencies on other aspects of the environment. The application is a new website which will be given a release number of 1.0 subject to further updating. Future release numbers will follow the common number convention.

1.2   Product Scope

The application should be able to run on any system regardless of the operating system or hardware; within reason. It can be accessed using a simple internet connection on a home users desktop computer or laptop. The application is designed <u>for all types of users regardless of their age</u> or experience to perform various transactions. It must function effectively and maintain an efficient level of service.

1.3   Definitions and Acronyms

- User- A registered individual who visits the website and owns an account in bank.
- SQL- Abbreviation of structured query language. SQL is a standardized query language for requesting information from a database.
- RAM- acronym for random access memory, a type of computer memory that can be accessed randomly; that is, any byte of memory can be accessed without touching the preceding bytes. RAM is synonymous with main memory, the memory available to programs.
- UserId- UserId must be unique and minimum 8 characters and maximum of 15 characters.
- Password-Unique word given to each user as a secret code
- IRCTC-An authority in India that manages all about train running everyday.

1.4   Document Conventions

Throughout the document (<u>formatted in MS Office '03)</u> font used for:

1.4.1   Topics are Times New Roman formatted in 'Heading 2' style. Font size for headings is 18
1.4.2   Sub topics are Times New Roman formatted in 'Heading 2' style. Font size for sub-topics is also 14
1.4.3   Text is Times New Roman formatted in 'Normal' style. Font size for text is 12
1.4.4   Italics have been used for laying special emphasis on certain information.
1.4.5   All references to the websites used are hyperlinked in Times New Roman, Normal + Times style and size 12.

1.5   References and Acknowledgements

- http://www.irctc.com
- https://in.bookmyshow.com
- [https://**www**.easemytrip**.com/flights**](https://www.easemytrip.com/flights)

2.   Overall Description:

2.1   Product Description

The <u>product is intended to be an improvement on a previously developed system trying to strengthen the weakness of existing online bus reservation system</u>**.** Therefore, although some features of the product will be common to existing software, others will be unique. Speed and compatibility are two of the intended areas to be improved allowing the application to run on computers with small amounts of memory.

2.2   Product Functionalities

2.2.1   The application shall allow the user to lawfully and freely access his account & perform transactions.

2.2.2   The application should inform the user which devices are connected to the system at any one time.

2.2.3   The application will finally incorporate facilities to make it easier for the user to access their accounts.

2.2.4   This is to provide online train information with their arrival and departure time free of charge to anyone with internet access.

2.3   Users

The user should have basic knowledge of internet usage.

Operating Environment

Railway Information System shall be designed to be platform independent. The system will be mainly designed to be used within the home, cyber cafes and users are allowed to access all necessary tools at one place. The system will also provide the functionality to allow the user to search a train and all its details; therefore users should be able to be plugged into the hardware on which the system is running. It will be supported <u>in any web browser like Internet Explorer 5 and above</u>.

2.4   Design and Implementation Constraints

<u>The database cannot be shared or passed on electronically</u>. All rights are reserved. Only registered users allowed. HTML, JavaScript, severs are used. The website has been designed in English language

2.5   Assumptions and Dependencies

The application depends upon the user having a connection to the internet in which he/she can Perform search for train information. When using the application it will assume that there is enough hard disk space for the file to be saved. Full working of railway is dependent on the availability of Internet connection.

3.   Specific Requirements:

3.1   External Interface Requirements

3.1.1   Hardware Interfaces

The system must allow compatible hardware devices to be connected to the system.
The system shall allow transaction to be performed using some output device. This may be through credit card, debit cards etc..

3.1.2   Software Interfaces

The system shall be compatible with all soft wares. This will allow the user of the system to perform searching of train legally. The system shall allow database files to be transferred to and from other applications. Thus, the system shall incorporate a simple file transfer mechanism.

3.1.3   Communications Interfaces

The system shall have an Internet connection. This will enable to perform searching . In addition, users shall be able to use a web browser. Therefore, both the system and devices shall use a common networking protocol. The system shall communicate with distribution devices via a connection. This could be a wired connection or optionally a wireless connection.

3.2   Functional requirements

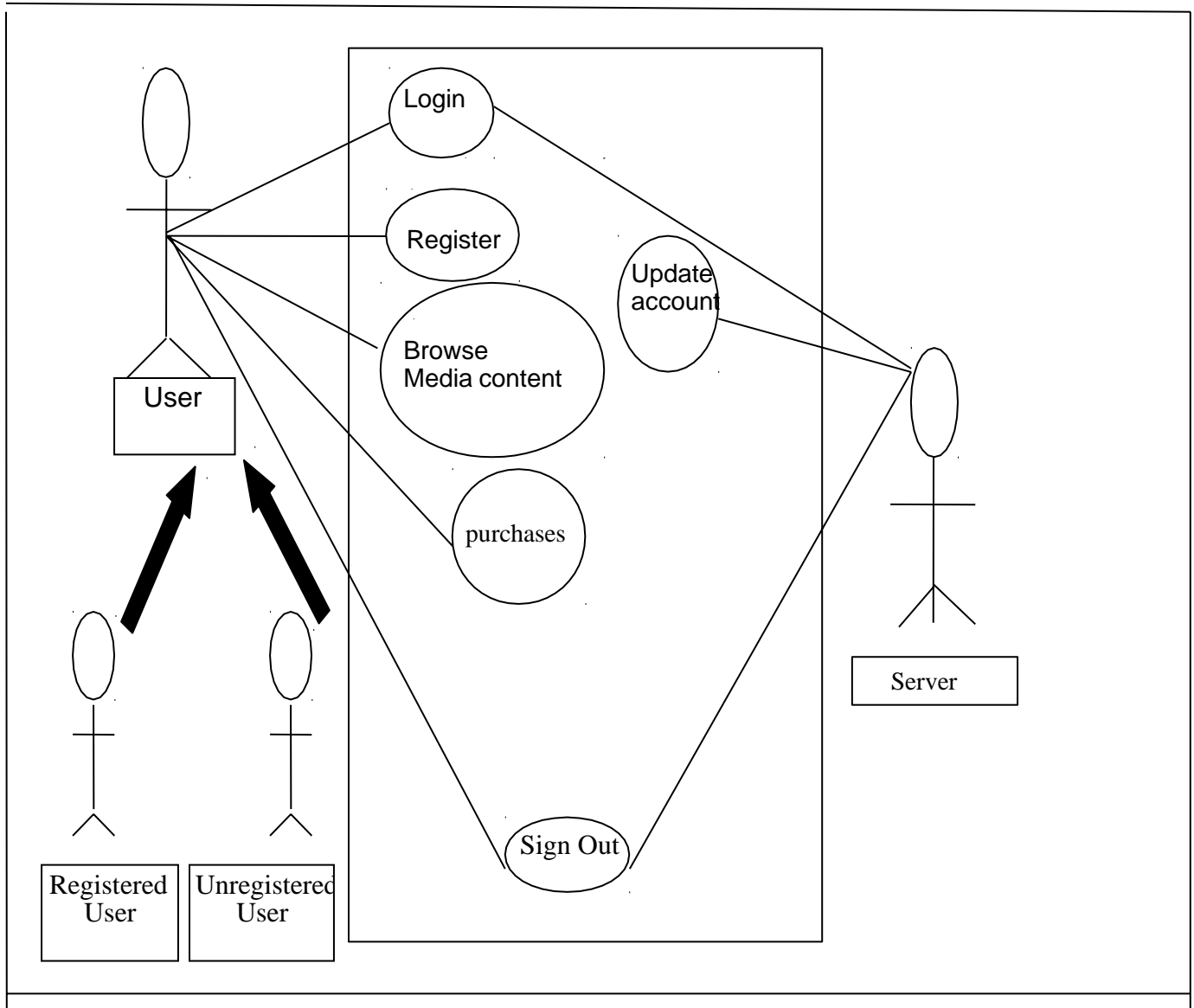| Use Case Name:	Register
Actors:	User and Administrator.
Pre Condition	The new user should not have a previously owned account.
Post Condition:	The user will have registered successfully.
Scenario:	1. The User clicks on sign up. 2. The system provides the User with the registration form. 3. The User has to fill the correct details in the form. 4. If the information is valid, User is successfully registered.
Exception:	Occurs when the user has input an invalid entry into the form. Can also occur if the user has chosen a ID already owned by an existing user.

Use Case Name:	Login
Actors:	User and Adminstator.
Pre Condition:	The actor should be a registered user.
Post Condition:	The user shall be shown the railways home page.
Scenario:	1. The User clicks on the link to Sign In. 2. The User enters username and password. 3. The username and password are validated by the Account Manager. 4. If the username and password are valid then the User is taken to his/her account.
Exception:	When the user has input ID and password that do not match.

Use Case Name:	Update account
Actors:	User
Pre Condition:	Before the updation of the account, the user must perform the Login.
Post Condition:	The account will be updated successfully..
Scenario:	1. The user signs in.. 2. The User updates the account.
Exception:	Server is down
Use Case Name:	Browse

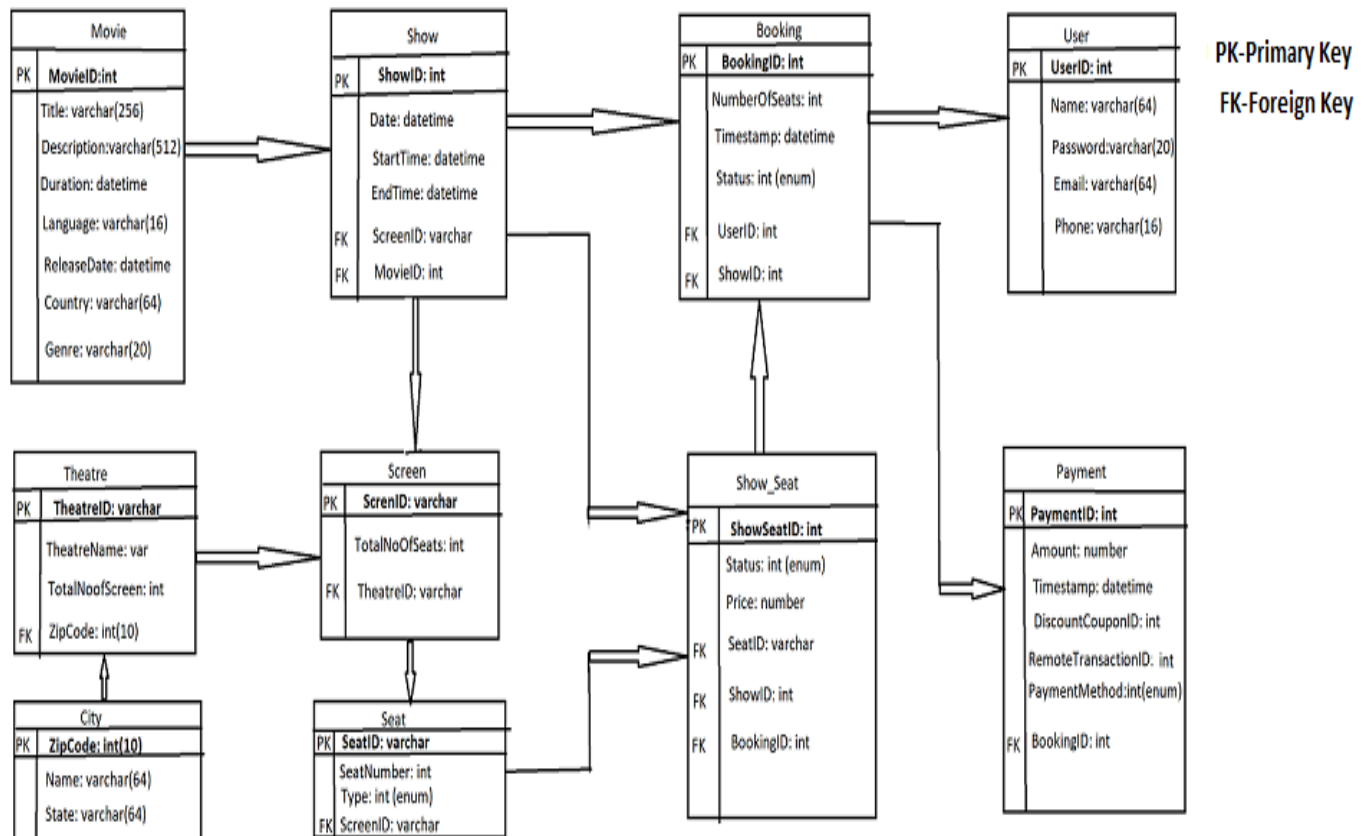| Actors:	User, Administrator
Pre Condition	The User should be visiting the website
Post Condition:	The User returns to the homepage of the website
Scenario:	1. Links will be provided on the home page for the user to navigate to any part of the website. 2. The User can also browse using the link of 'sitemap'.
Exception:	Server is down.

Use Case Name:	Sign Out
Actors:	User, Bank
Pre Condition	The User should be signed in to his/her account
Post Condition:	The User returns to the homepage of the website
Scenario:	1. User/Bank clicks on the 'Sign Out' link. 2. After successfully signing out user is taken to the home page.
Exception:	Server is down or login session has expired

4. User Case Diagram (Requirements):

5. Functional Flow Diagram:

- **Pk = Primary Key**
- **Fk = Foreign Key**

6. Other Nonfunctional Requirements:

6.1 Performance Requirements

The application must have a minimum processor speed so that there are some restrictions on what type of computer can use it. However this will be as small as possible to enable a broad range of clients to use the application. From studies it can be seen that speed was a common issue while distributing and performing transaction. The system must also aim to use minimum hard disk space yet keep the quality of the available facility as high as possible.

6.2 Safety and security Requirements

Information of users such as IP addresses will be kept private so that third parties cannot gain access to this personal information in order to keep within the Data Protection Act.

6.3 Software Quality Attributes

These are a variety of constraints that might affect the user or system. This is to enable that reliability is always at a high level; sometimes users could not connected to the internet due to firewalls.. Another interoperability requirement is that the system should allow any storage device to connect to the system and enable the distribution of banking facility. The usability requirement is that there should be a help guide within the new system so that the time that new users can soon understand the system; however the system will be simple and therefore self-explanatory. The system should remember the last transaction on the system so that users can manipulate the program easily and efficiently.aqq

Appendix A: Glossary

(an alphabetical list of terms)

1. Connoisseur-A person with expert knowledge or training.

2. Compatibility-Capable of orderly, efficient integration and operation with other elements in a system with no modification or conversion required.

3. HTML-A markup language used to structure text and multimedia documents and to set up hypertext links between documents, used extensively on the World Wide Web.

4. Interface- The point of interaction or communication between a computer and any other entity, such as a printer or human operator.

5. Java scripts-JavaScript is a scripting language most often used for client-side web development. It is a dynamic, weakly typed, prototype-based language with first-class functions. It is easier for non-programmers to work with. The language is best known for its use in websites (as client-side JavaScript).

6. Novice-a person who is new to the circumstances, work, etc., in which he or she is placed; beginner.

7. Protocol- A set of standardized procedures for transmitting or storing data, especially those used in regulating data transmission between computers or peripherals.

8. Sophisticated- Having acquired worldly knowledge or refinement, complex and using advanced technology

9. SRS-System Resource/Requirement Specification.

Appendix B: Data dictionary

A data dictionary is a collection of descriptions of the data objects or items in a data model for the benefit of programmers and others who need to refer to them

User entity

Attribute	Type	Description	Constraint
Username	Alphanumeric	Name of user	Primary Key
Password	Alphanumeric	Password set by the user for login	Not less than six characters
Email Address	Char	Address of valid email account of user	
Age	Number	Age of the user	18 years and above
Name	Char	Full name of the user	Less than 30 characters

Store entity

Attribute	Type	Description	Constraint
Username	Alphanumeric	Name Store	Primary Key
Password	Alphanumeric	Password set	Not less than six characters
Email Address	Char	Internet address	
Age	Number	Age of the Store	18 years and above
Name	Char	Full name of the Store	Less than 30 characters