
Software Requirements Specification

For

A Web Application for a Book Store

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1. Introduction

1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the web application of a book store. It will illustrate the purpose and complete declaration for the of system including the features and functionalities. It will also explain system constraints, interface and interactions with other external applications.

1.2 Product Scope

This web-based application is intended to fulfill users to carry on registration and management of their profile for an online book store. This software will help people to register as users to the book store system and view their personal details and manage it. It also provides access to the owner of the system to view all the user details and the access to the admin of the system to view specific set of details of the registered users.

All the system information is maintained in a database.

1.3 Glossary

Term	Definition
User	<i>Someone who interacts with the web application</i>
Registered User	<i>Someone who is already registered their details to the book store app, who can access the web application.</i>
Owner	<i>The person who is given specific permission for viewing managing the system</i>
Admin	<i>The person who is given specific permission for viewing managing the system, but less permission than the owner.</i>

1.4 References

<http://www.studentstutorial.com/java-project/send-mail-in-java.php> [Accessed 2018 Mar]

<https://www.youtube.com/watch?v=bDHGnDirC14&t=15s> [Accessed 2018 Mar]

<https://www.youtube.com/watch?v=F51dZmaMCQc><https://www.youtube.com/watch?v=F51dZmaMCQc> [Accessed 2018 Mar]

<https://www.youtube.com/watch?v=WXmTxgDg52o> [Accessed 2018 Mar]

<https://stackoverflow.com/questions> [Accessed 2018 Mar]

<https://tutorialspoint.com> [Accessed 2018 Mar]

<https://www.w3schools.com/> [Accessed 2018 Mar]

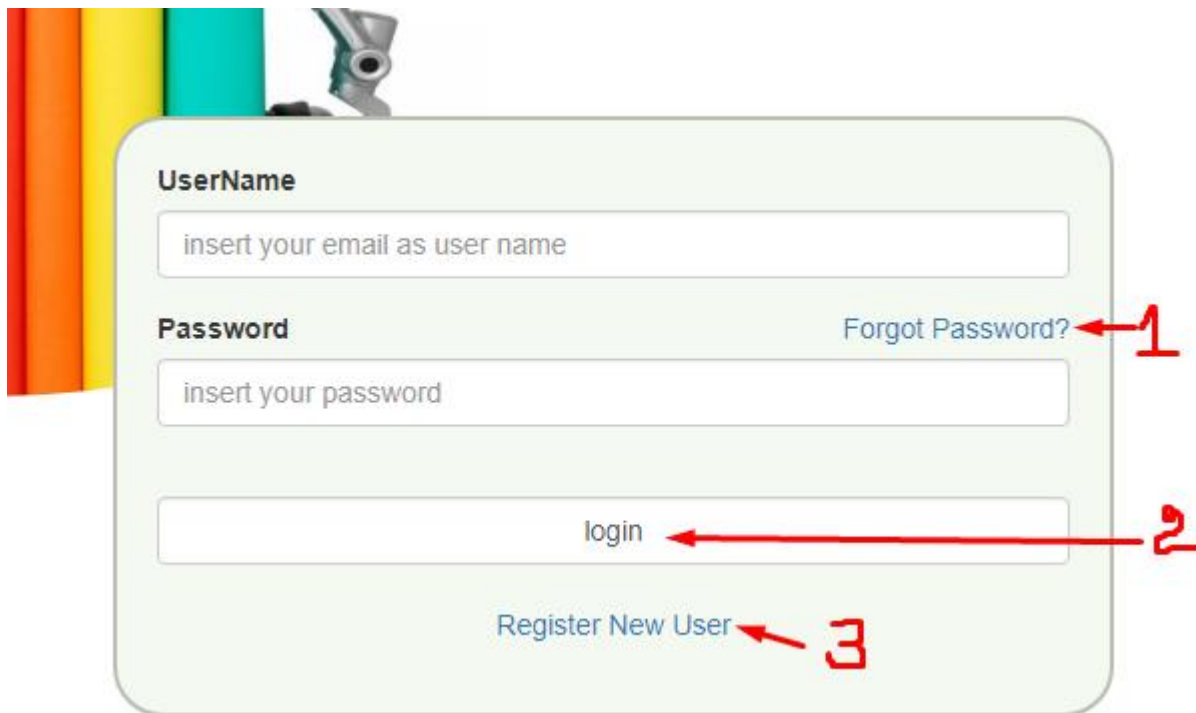
2. External Interface Requirements

2.1 User Interfaces

Front end software: HTML, CSS, Bootstrap, Java, JavaScript

Database: MySQL (Xampp)

- Here you can see the interface forms:



The image shows a web form for user authentication. It has a light green background with rounded corners. At the top left, there are four vertical bars in orange, yellow, and teal. The form contains the following elements:

- UserName**: A label above a text input field with the placeholder text "insert your email as user name".
- Password**: A label above a text input field with the placeholder text "insert your password".
- Forgot Password?**: A blue link text located to the right of the password field.
- login**: A blue link text located below the password field.
- Register New User**: A blue link text located at the bottom of the form.

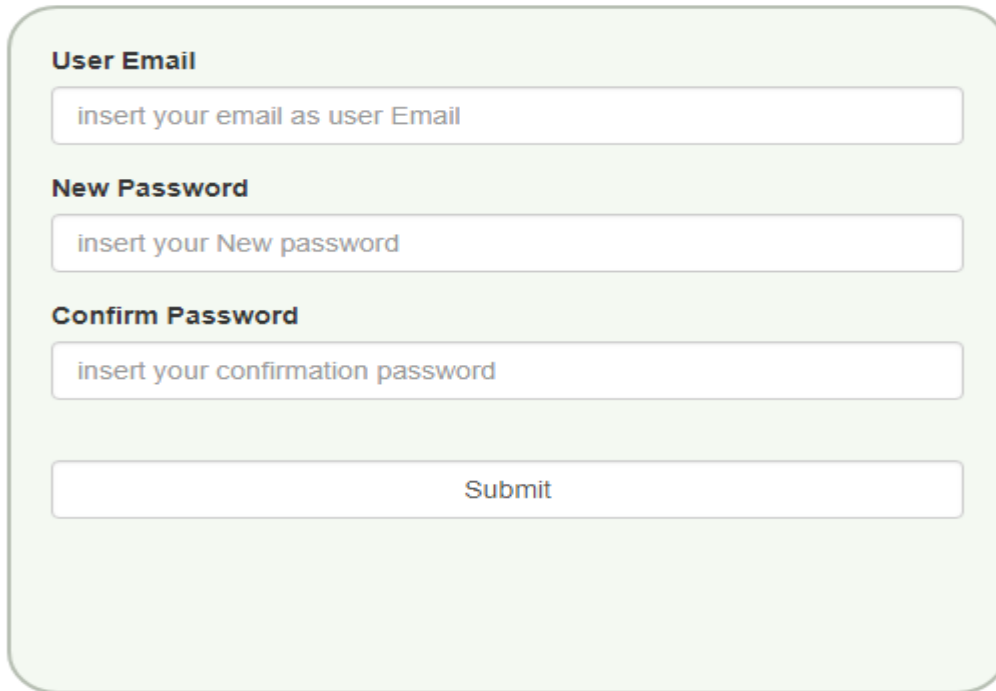
Three red arrows with numbers point to specific elements:

- Arrow 1 points to the "Forgot Password?" link.
- Arrow 2 points to the "login" link.
- Arrow 3 points to the "Register New User" link.

Figure 2.1.1

Buttons and functions

- 1) Redirects to ForgotPw.jsp page. (Can reset password. When reset finishes a conformation mail will be sent to the user)



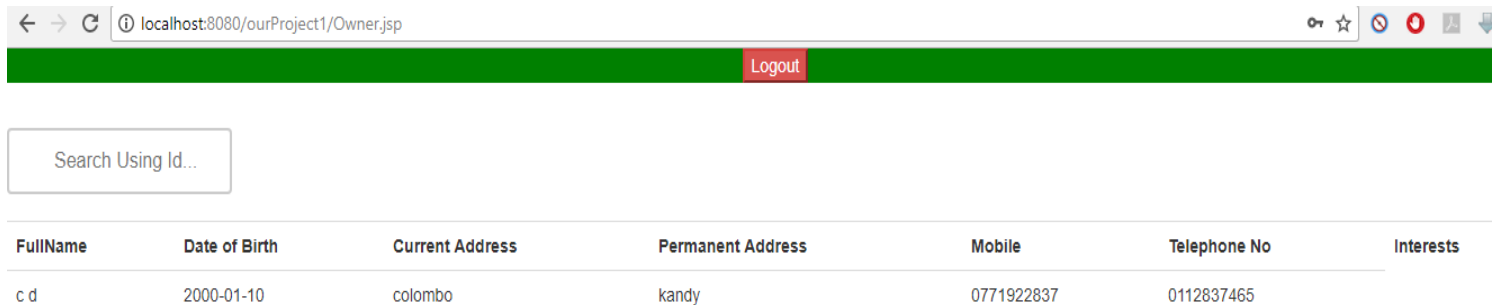
The image shows a web form for password reset. It is contained within a light green rounded rectangle. The form has three input fields, each with a label above it: 'User Email', 'New Password', and 'Confirm Password'. Each input field contains placeholder text: 'insert your email as user Email', 'insert your New password', and 'insert your confirmation password' respectively. Below these fields is a 'Submit' button.

Field Label	Placeholder Text
User Email	insert your email as user Email
New Password	insert your New password
Confirm Password	insert your confirmation password
Submit	

Figure 2.1.2 ForgotPw.jsp page

- 2) Redirects to UserView page. (According to the user permission the table will be displayed.)

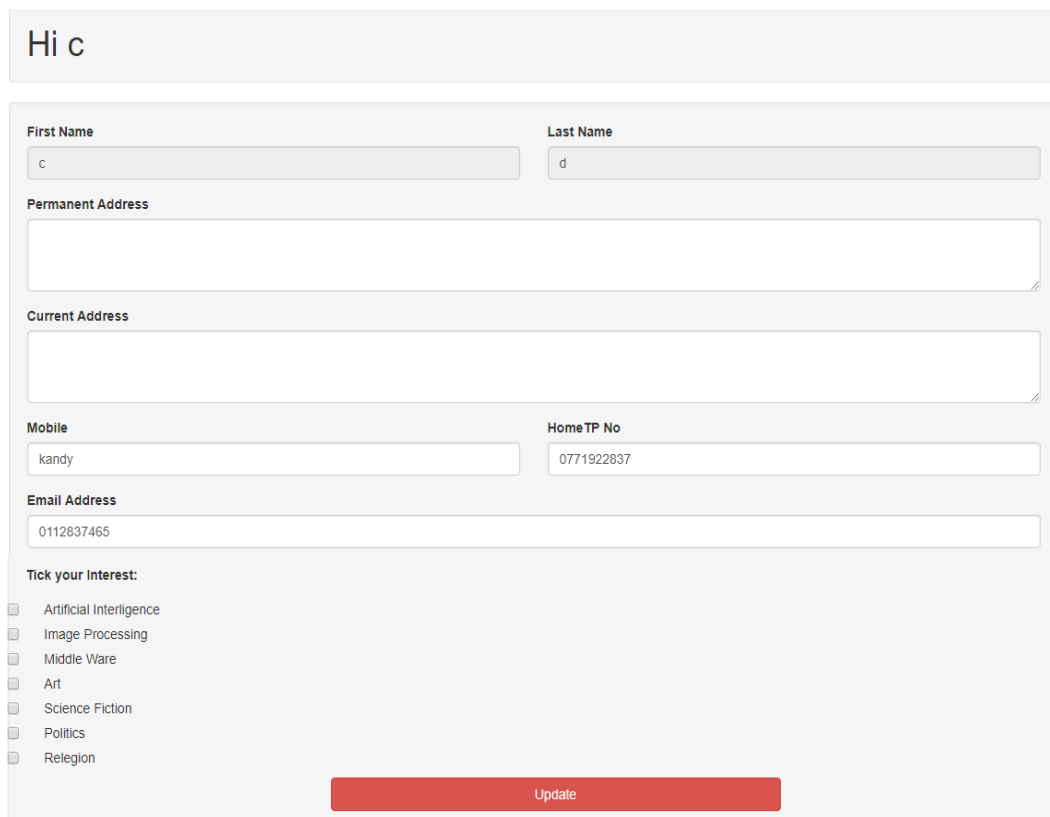
If Owner: The owner of the system can view all the user details.



FullName	Date of Birth	Current Address	Permanent Address	Mobile	Telephone No	Interests
c d	2000-01-10	colombo	kandy	0771922837	0112837465	

Figure 2.1.3 Owner.jsp pag

If Member: The members of the web application can view their account



Hi c

First Name: c Last Name: d

Permanent Address:

Current Address:

Mobile: kandy HomeTP No: 0771922837

Email Address: 0112837465

Tick your Interest:

- ☐ Artificial Intelligence
- ☐ Image Processing
- ☐ Middle Ware
- ☐ Art
- ☐ Science Fiction
- ☐ Politics
- ☐ Relegion

Update

Figure 2.1.4 UserView.jsp page

If admin: The admin of the system can view full name, permanent address, mobile number and interests of the member.

FullName	PermanentAddress	Mobile	Interests
c d	colombo	0771922837	

Figure 2.1.5 admin.jsp page

3) Redirects to Register.jsp page.

WelCome New User

Full Name

Permanent Address

Current Address

Mobile

HomeTP No

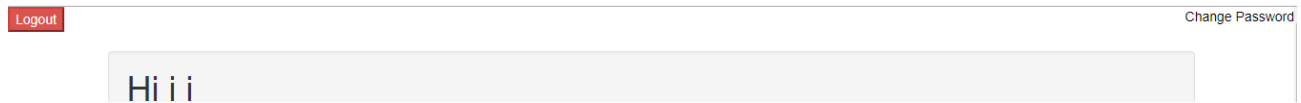
Email Address

Tick your Interest:

☐ Artificial Interligence
☐ Image Processing
☐ Middle Ware
☐ Art
☐ Science Fiction
☐ Politics
☐ Relegion

Figure 2.1.6 Register.jsp page

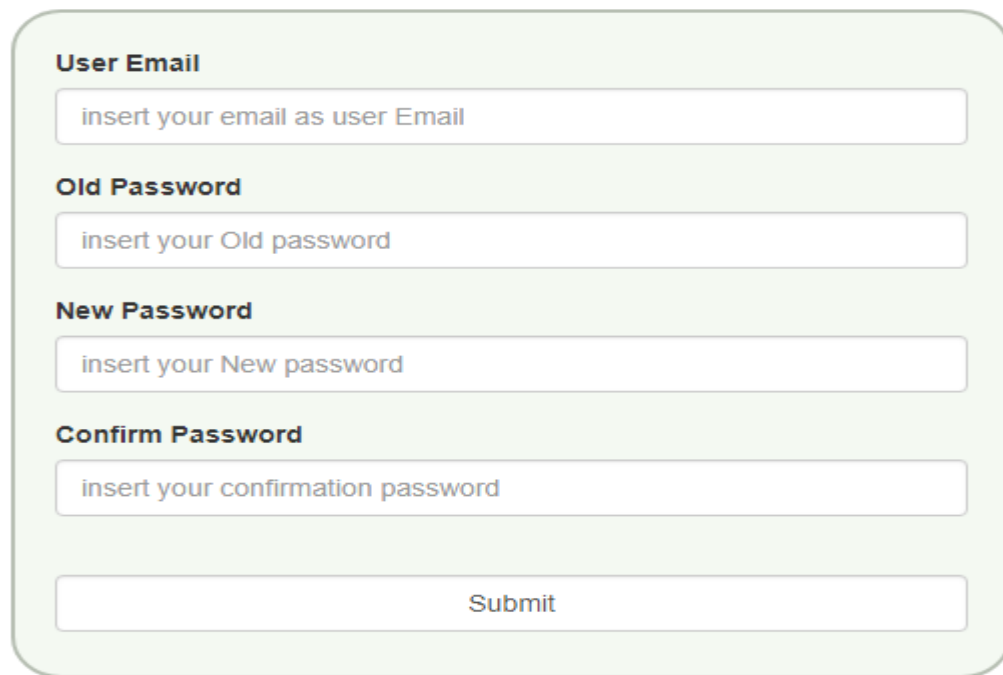
- Every user has change password and logout option after logging in.



Logout Change Password

Hi i i

- ✓ When user clicks change password option it will redirect to changePw.jsp page. If user wishes can change the password by confirming user existence in the web application.



User Email

insert your email as user Email

Old Password

insert your Old password

New Password

insert your New password

Confirm Password

insert your confirmation password

Submit

Figure 2.1.7 changePw.jsp page

- ✓ When user clicks the logout button the login page will be displayed. In that case we user can't access the previous page he/she accessed.

2.2 Hardware Interfaces

Since this project is web based, it is compatible with all the browsers and can be run on any operating system and processor.

2.3 Software Interfaces

Kali Linux Operating System

A browser which supports HTML, JavaScript

MySQL database

Java EE IDE-Eclipse

2.4 Communications Interfaces

The system will send automatic confirmation email to the user when resetting the password.

Http protocol is used in maintaining the session.

3. Functional Requirements

3.1 Use Case Diagram

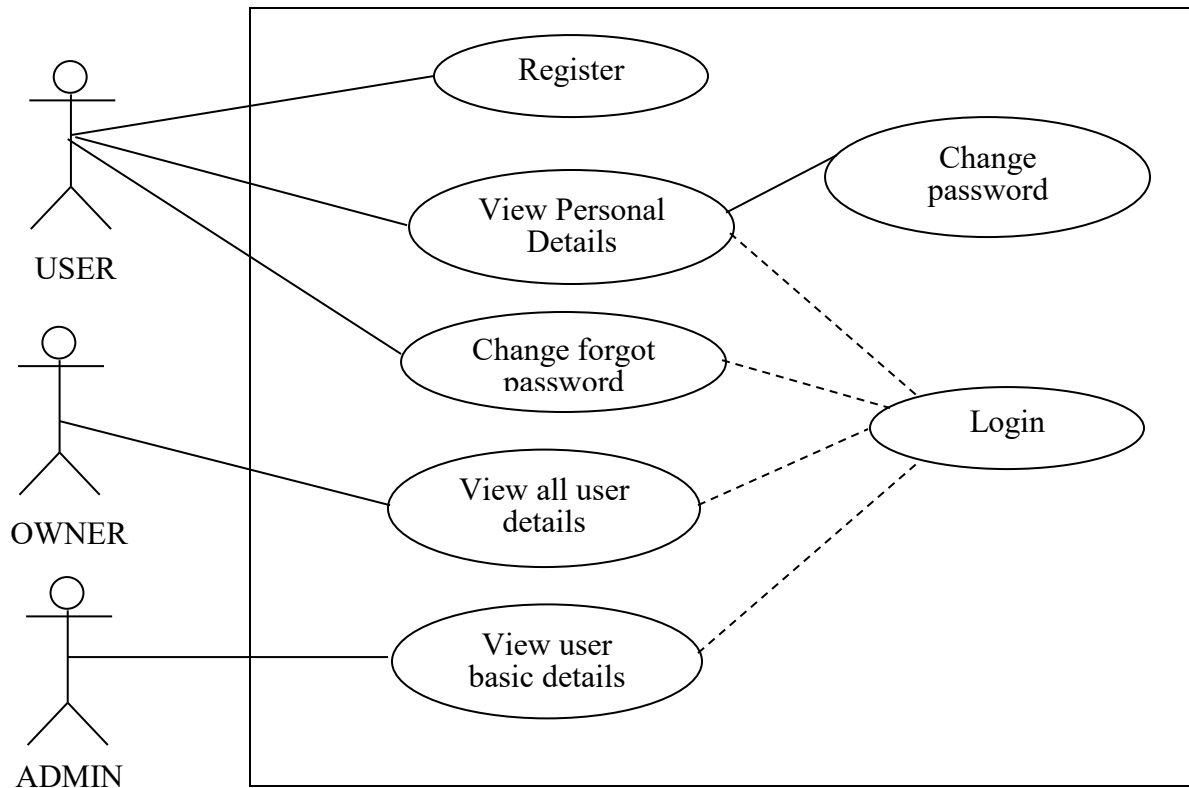


Figure 3.1.1

3.2 Use Case Scenarios

Use case name	Login to the system	
Preconditions	Load the login page successfully. Database details loaded to the system.	
Success End conditions	Successfully logged into the system.	
Actors	Admin / Owner / Registered User	
Main Flow	Step	Actions
	1.	Enter username and password
	2.	Login

Table 3.2.1

Use case name	View all details of registered users.
Preconditions	Successfully Logged into the system as an owner. Database details loaded to the system.
Success End conditions	View all details of all the registered users.
Actors	Owner

Table 3.2.2

Use case name	View basic details of registered users.
Preconditions	Successfully Logged into the system as an admin. Database details loaded to the system.
Success End conditions	View basic details of all the registered users.
Actors	Admin

Table 3.2.3

Use case name	View personal details
Preconditions	Successfully Logged into the system as a registered user. Database details loaded to the system.
Success End conditions	View all personal details.
Actors	Registered User

Table 3.2.4

Use case name	Update personal details
Preconditions	Successfully Logged into the system as a registered user and view all personal details. Database details loaded to the system.
Success End conditions	Successfully update personal details.
Actors	Registered User

Table 3.2.5

Use case name	Register as a new user	
Preconditions	Load the login page successfully. Database details loaded to the system.	
Success End conditions	Successfully register as a user.	
Actors	User	
Main Flow	Step	Actions
	1.	Enter all personal details.
	2.	Successfully register as a user.

Table 3.2.6

Use case name	Change password	
Preconditions	Load the user view page successfully. Database details loaded to the system.	
Success End conditions	Successfully password changed.	
Actors	Registered User	
Main Flow	Step	Actions
	1.	Enter email address.
	2.	Enter old password.
	3.	Enter new password.
	4.	Re-enter new password.
	5.	Confirm and change password successfully.

Table 3.2.7

Use case name	Forget password	
Preconditions	Load the login page successfully. Database details loaded to the system.	
Success End conditions	Successfully password changed.	
Actors	Registered User	
Main Flow	Step	Actions
	1.	Enter email address.
	2.	Enter new password.
	3.	Re-enter new password.
	4.	Confirm and change password successfully.

Table 3.2.8

4. Other Nonfunctional Requirements

4.1 Performance Requirements

Performance will not be an issue because all the queries have small data. There are no immediate delays in every action and response of the system. 95% of the transactions will be proceed in less than 2 second. In the case of searching it is done in the client side without from database. Therefore, it reduces the process time of searching. The system provides access to multiple users simultaneously.

4.2 Safety Requirements

The data in data base are recoverable if there is any break down in back end since we use MySQL server. This web app doesn't affect any internal components and data of the device where the web app is accessed.

4.3 Security Requirements

This program uses object-oriented concept to protect data. The user authentication provides secure access to the data according to the access permission. Session is maintained to prevent the access from others and maintain the user details. The passwords are stored in encrypted format. It provides security from hackers.

4.4 Software Quality Attributes

4.4.1 Reliability

The probability of system failure occurring is very less since it is a portion of a web app which contains only the views.

4.4.2 Availability

The application is available at any time except for integration period since it is a part of the software.

4.4.3 Maintainability

The document could be easier to the users who uses and maintains the application and the developers who wish to edit or develop further.

4.4.4 Portability

The application supports the new version of browsers, different platforms and operating system.

4.4.5 Usability

The interfaces are user friendly and easy to use by users from any technical background. The application is easy to handle with no delays. The interfaces are supportable for any devices are scalable.