System Requirements Specification Index

For

Loan Management Application

Version 1.0

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Contents

1 Business-Requirement:

1.1 Problem Statement:

The purpose of this application is to allow the company to manage all its allotted loans.

1.1.1 Loan Management:

The Loan Management allows you to:

1. Access home page**(must show option to add loan, search loan taker by first name or email and show list of loan takers with number of pages for pagination).**
2. Should be able to add a new loan.
3. It can have basic fields like Loan No, First Name, Last Name, Email, Amount, Interest, Term and Actions.
4. Should be able to get the list of loan takers **(should return data in pages and must have buttons as Asc and Desc in each column to sort list ascending or descending respectively)**.
5. Search any loan through first name or email **(should be implemented using custom query).**
6. Should be able to edit, delete or close any loan.

2 Template Code Structure:

2.1 Loan Controller

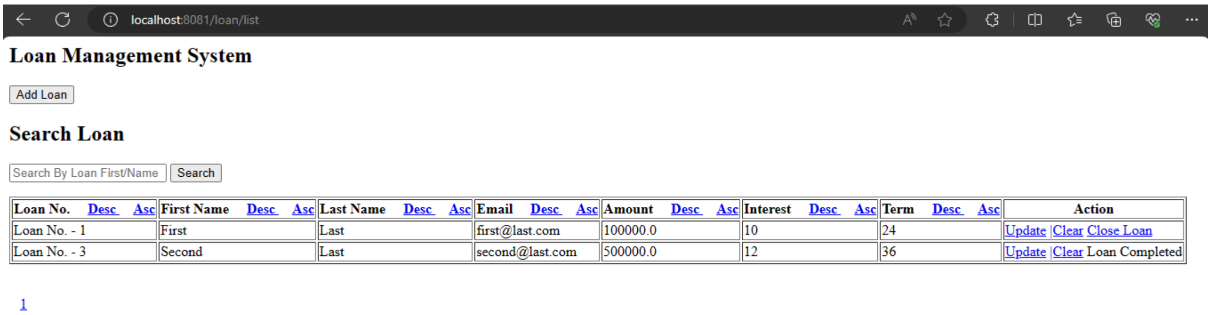
Method Exposed	Purpose
home()	Should return page “loan-list” with required data.
createLoanForm()	Should return page “loan-add”
saveLoan()	Should save loan and redirect “/loan/list” page.
showFormForUpdate()	Should open the “loan-add” page to edit the loan with required data..
showFormForDelete()	Should delete the loan and redirect to ‘/loan/list“ page.
updateStatus()	Should update the loan status to close and redirect to ‘/loan/list“ page

3 Resources AVAILABLE:

Description	View Pages Name	Remarks
Common UI		
Home Page	list-loan	Contains a homepage which shows a list of all loans along with options to add, edit and delete a loan. Also search for a loan and update the status of the loan to close it.
Loan Details	loan-add	
Edit a Loan	loan-add	
Create a Loan	loan-add	

4 SUGGESTED WIREFRAMES:

1. Homepage – Visitor Landing Page



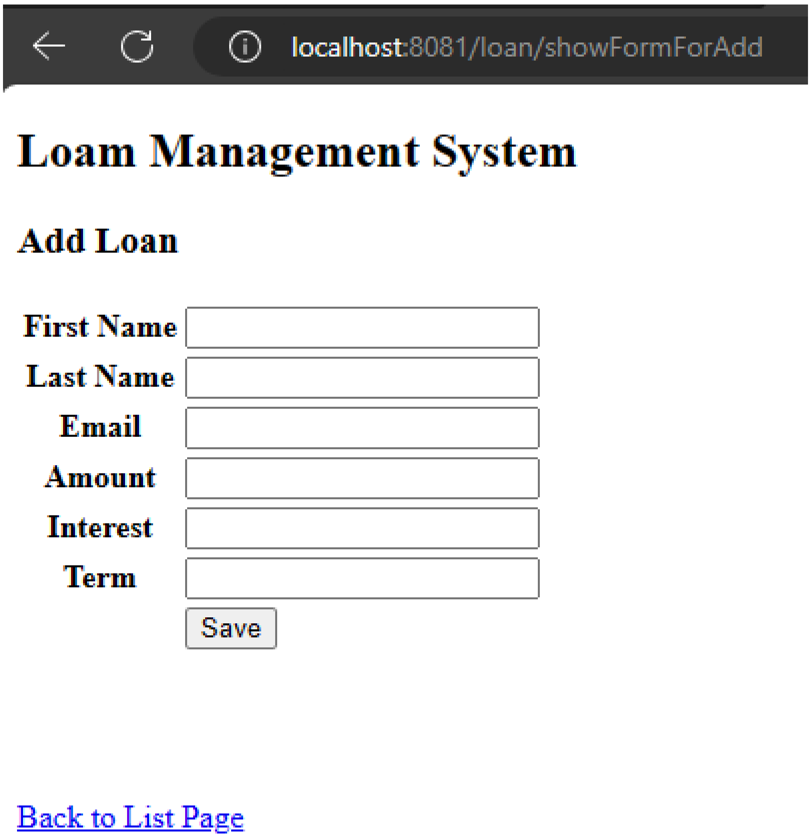
localhost:8081/loan/list

Loan Management System

Search Loan

Loan No. Desc Asc	First Name Desc Asc	Last Name Desc Asc	Email Desc Asc	Amount Desc Asc	Interest Desc Asc	Term Desc Asc	Action
Loan No. - 1	First	Last	first@last.com	100000.0	10	24	Update |Clear Close Loan
Loan No. - 3	Second	Last	second@last.com	500000.0	12	36	Update |Clear Loan Completed

2. Create a Loan



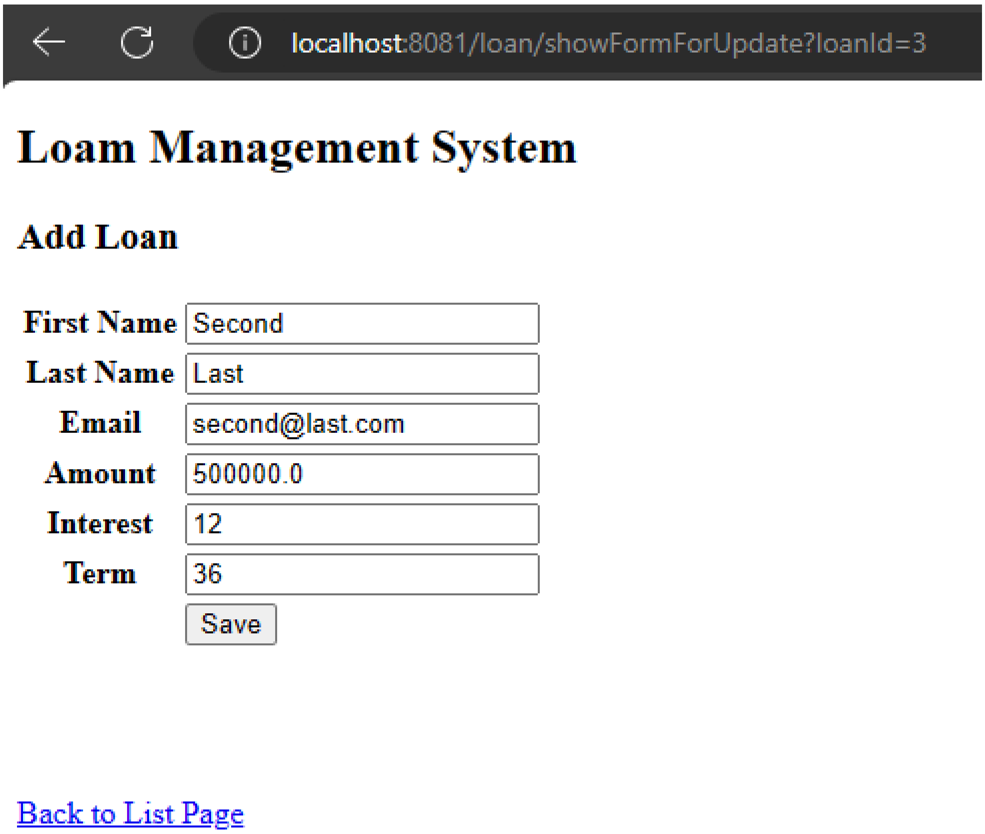
localhost:8081/loan/showFormForAdd

Loam Management System

Add Loan

First Name	
Last Name	
Email	
Amount	
Interest	
Term	

3. Edit a Loan



localhost:8081/loan/showFormForUpdate?loanId=3

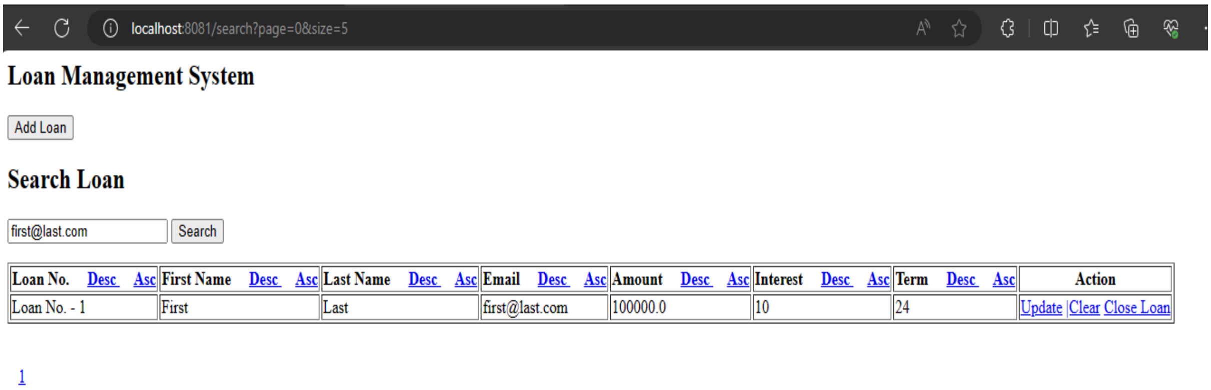
Loam Management System

Add Loan

First Name	Second
Last Name	Last
Email	second@last.com
Amount	500000.0
Interest	12
Term	36

Back to List Page

4. Search a Loan



localhost:8081/search?page=0&size=5

Loan Management System

Search Loan

first@last.com

Loan No. Desc Asc	First Name Desc Asc	Last Name Desc Asc	Email Desc Asc	Amount Desc Asc	Interest Desc Asc	Term Desc Asc	Action
Loan No. - 1	First	Last	first@last.com	100000.0	10	24	Update |Clear Close Loan

1

5 Business Validations

1. Id must be of type id.
2. FirstName value should not be blank and be min 3 and max 50 characters.
3. LastName value should not be blank and be min 3 and max 50 characters.
4. Email value should not be blank and must be of type email.
5. Amount value should not be null.
6. Interest value should not be null.
7. Term value should not be blank.

6 Considerations

The Code template already contains skeleton methods for service and controller layer. Please write your logic in it.

7 Execution Steps to Follow

1. **All actions like build, compile, running application, running test cases will be through Command Terminal.**
2. **To open the command terminal the test takers, need to go to Application menu (Three horizontal lines at left top) -> Terminal -> New Terminal**
3. **To build your project use command:**

   ```
   mvn clean package -Dmaven.test.skip
   ```

4. **To launch your application:**

   ```
   java -jar springboot-loanmanagement-service-0.0.1-SNAPSHOT.war
   ```

5. **This editor Auto Saves the code**
6. **If you want to exit(logout) and continue the coding later anytime (using Save & Exit option on Assessment Landing Page) then you need to use CTRL+Shift+B-command compulsorily on code IDE. This will push or save the updated contents in the internal git/repository. Else the code will not be available in the next login.**
7. **These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.**

8. **To test any Restful application, the last option on the left panel of IDE, you can find ThunderClient, which is the lightweight equivalent of POSTMAN.**

9. This is a web-based application, to run the application on a browser, use the internal browser in the workspace. Click on the second last option on the left panel of IDE, you can find Browser Preview, where you can launch the application.

   Note: The application will not run in the local browser

10. Default credentials for MySQL:
    a. Username: root
    b. Password: pass@word1
11. To login to mysql instance: Open new terminal and use following command:
    a. sudo systemctl enable mysql
    b. sudo systemctl start mysql

    NOTE: After typing the second sql command (sudo systemctl start mysql), you may encounter a warning message like :

    System has not been booted with systemd as init system (PID 1). Can't operate. Failed to connect to bus: Host is down

    >> Please note that this warning is expected and can be disregarded. Proceed to the next step.

    c. mysql -u root -p

    The last command will ask for password which is 'pass@word1'

12. Mandatory: Before final submission run the following command:

    mvn test

13. You need to use CTRL+Shift+B - command compulsorily on code IDE, before final submission as well. This will push or save the updated contents in the internal git/repository, and will be used to evaluate the code quality.