

Customer Relationship Management App

Overview

The application is a web-application that enables an end user to maintain his customers' record. It has basic features wherein the user can see a list of all customers, add and delete a customer. Also, end user can update record of a customer.

Software Components Utilized for Development

- Java 17
- Spring Framework 5.3.9
- Hibernate 5.6.5
- Apache Tomcat 9.0.64
- MySQL 8.0.28

Application Features

See all customers

The home page of the application displays a list of all customers. It displays **No record found!** If there's no customer available. It features **Add Customer** button to add a new customer.

The first screenshot shows the application's home page with a green header bar containing the text "CUSTOMER RELATIONSHIP MANAGEMENT". Below the header is a button labeled "Add Customer". Underneath the button is a table with four columns: "First Name", "Last Name", "Email", and "Action". The table contains two rows of customer data.

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Tanuj	Paraste	tanuj@gmail.com	Update Delete

The second screenshot shows the same application interface, but the table is replaced by a light green message box that says "No record found!".

Adding a new customer

Press **Add Customer** button on the home page to display the **Save Customer** window as shown below.

Save Customer x +

localhost:8080/assignment5-customer-management-app/customer/add

CUSTOMER RELATIONSHIP MANAGEMENT

Save customer

First Name:

Last Name:

Email:

Save

[Back to List](#)

Enter customer details in the respective fields. Refer the screenshot below.

Save Customer x +

localhost:8080/assignment5-customer-management-app/customer/add

CUSTOMER RELATIONSHIP MANAGEMENT

Save customer

First Name:

Last Name:

Email:

Save

[Back to List](#)

Press **Save** to save the record. You will be redirected to the home page that displays list of all customers.

Customer Management Console x +

localhost:8080/assignment5-customer-management-app/customer/list

CUSTOMER RELATIONSHIP MANAGEMENT

Add Customer

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Tanuj	Paraste	tanuj@gmail.com	Update Delete
Mahendra Singh	Dhoni	msdhoni@gmail.com	Update Delete

A new record with First Name Mahendra Singh has been added in the list as shown above.

From this window, you can add a new customer again by following steps described [Adding a new customer](#) section, update or delete a customer record.

[Back to List on Save Customer window](#)

Visit this link to navigate to home page anytime in case you don't want to save a record.

Click on **Add Customer** button on the home page. Enter customer details.

Save Customer x +

localhost:8080/assignment5-customer-management-app/customer/add

CUSTOMER RELATIONSHIP MANAGEMENT

Save customer

First Name:

Last Name:

Email:

[Back to List](#)

Press **Back to List** to see the list of all customers. No new record will be saved.

Customer Management Console x +

localhost:8080/assignment5-customer-management-app/customer/list

CUSTOMER RELATIONSHIP MANAGEMENT

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Tanuj	Paraste	tanuj@gmail.com	Update Delete
Mahendra Singh	Dhoni	msdhoni@gmail.com	Update Delete

No new record got added.

Note on Save Customer window

The **Save Customer** form requires that all fields are filled with some data. Partial filling of the form is not accepted. If you partially fill the form then you might need to enter all data from the beginning again.

Click **Add Customer** button on the home page and enter partial data in the form as shown below.

Save Customer x +

localhost:8080/assignment5-customer-management-app/customer/add

CUSTOMER RELATIONSHIP MANAGEMENT

Save customer

First Name:

Last Name:

Email:

[Back to List](#)

Press Save.

Save Customer

localhost:8080/assignment5-customer-management-app/customer/add

CUSTOMER RELATIONSHIP MANAGEMENT

Save customer

First Name:

Last Name:

Email:

Save

[Back to List](#)

See all the entered data got deleted. 🐛😬

Updating an existing customer detail

If the customer list has at least one record then you see **Update** hyperlink in the **Action** column of the respective record.

Click Update link to update that customer's record.

Customer Management Console

localhost:8080/assignment5-customer-management-app/customer/list

CUSTOMER RELATIONSHIP MANAGEMENT

Add Customer

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Tanuj	Paraste	tanuj@gmail.com	Update Delete
Mahendra Singh	Dhoni	msdhoni@gmail.com	Update Delete

Clicking Update link for Mahendra Singh. A **Save Customer** window will be opened with prefilled data for the respective customer.

Save Customer

localhost:8080/assignment5-customer-management-app/customer/update?id=27

CUSTOMER RELATIONSHIP MANAGEMENT

Save customer

First Name:

Mahendra Singh

Last Name:

Dhoni

Email:

msdhoni@gmail.com

Save

[Back to List](#)

Updating Email field as shown below.

Save Customer

localhost:8080/assignment5-customer-management-app/customer/update?id=27

CUSTOMER RELATIONSHIP MANAGEMENT

Save customer

First Name: Mahendra Singh

Last Name: Dhoni

Email: mahi@gmail.com

Save

[Back to List](#)

Press **Save** to see the customer list with updated data.

Customer Management Console

localhost:8080/assignment5-customer-management-app/customer/list

CUSTOMER RELATIONSHIP MANAGEMENT

Add Customer

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Tanuj	Paraste	tanuj@gmail.com	Update Delete
Mahendra Singh	Dhoni	mahi@gmail.com	Update Delete

Updated Email from msdhoni@gmail.com to mahi@gmail.com

Deleting a customer

If the customer list has at least one record then you see **Delete** hyperlink in the **Action** column of the respective record. Click Delete link to remove that customer's record. A confirmation pop-up window will be displayed when you click on Delete link.

Click Delete for a record.

Customer Management Console

localhost:8080/assignment5-customer-management-app/customer/list

CUSTOMER RELATIONSHIP MANAGEMENT

localhost:8080 says
Are you sure you want to delete Tanuj Paraste?

OKCancel

Add Customer

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Tanuj	Paraste	tanuj@gmail.com	Update Delete
Mahendra Singh	Dhoni	mahi@gmail.com	Update Delete

Click OK to remove the record.

Customer Management Console x +

localhost:8080/assignment5-customer-management-app/customer/list

CUSTOMER RELATIONSHIP MANAGEMENT

Add Customer

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Mahendra Singh	Dhoni	mahi@gmail.com	Update Delete

Records for Tanuj has been removed as shown above.

Cancelling deletion

When you click on **Delete** link for a customer record, a pop-up window is displayed with **OK** and **Cancel** buttons. Press Cancel to abort the deletion operation.

Press on Delete link.

Customer Management Console x +

localhost:8080/assignment5-customer-management-app/customer/list

CUSTOMER RELATIONSHIP MANAGEMENT

localhost:8080 says
Are you sure you want to delete Mahendra Singh Dhoni?

OK Cancel

Add Customer

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Mahendra Singh	Dhoni	mahi@gmail.com	Update Delete

Pressing Delete link for Mahendra Singh record.

Press Cancel.

Customer Management Console x +

localhost:8080/assignment5-customer-management-app/customer/list

CUSTOMER RELATIONSHIP MANAGEMENT

Add Customer

First Name	Last Name	Email	Action
Harshit	Choudhary	harshit@glearning.com	Update Delete
Mahendra Singh	Dhoni	mahi@gmail.com	Update Delete

Mahendra Singh was not deleted from the record.