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Report of Assignment2

DATABASE PGM USING JAVA - ITC-5201-RIA

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Table of Contents

1.	Insert Customer Information	2	
2.	Update	4	
3.	Search	5	
4.	Display All	6	
Tak	ole of Figures		
Figu	re 1 Library System Application UI	2	
Figu	Figure 2 Validation Error for Add New/Update3		
Figu	Figure 3 Trying to add customer whose info already exists		
Figu	re 4 Success on Add New	4	
Figu	re 5 File or Customer Doesn't Exist for Update	4	
Figu	re 6 Success on Update	5	
Figu	re 7 A record is successfully searched	5	

Functions	Description
Data Validation (Default)	To check if the input data is valid
Add New	To add new customer's information to the binary file
Update	To update the existing customer's information in the binary file
Search	To search customer's information by "Customer ID"
Display All	To show the information of all customers existing in the file

1. Insert Customer Information:

- The user can add the customer information in the library system application by using the "Add New" button. Valid information should be entered in the given fields and then "Add New" button is to be clicked.
 - No field accepts null values.
 - o The customer id should be a five-digit integer.
 - The Name field accepts the first and the last name each starting with capital letter but trailing with lower case letters, with space in between. (Example: Sherlock Holmes)
 - o The Phone field accepts 10-digit integer.
 - The email field only accepts valid email whereas the Postal Code accepts input in upper case.

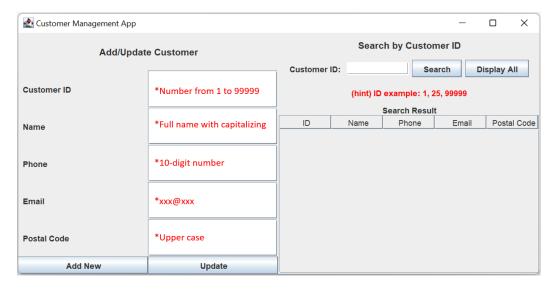


Figure 1 Library System Application UI

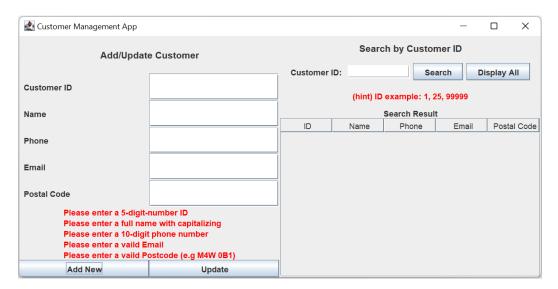


Figure 2 Validation Error for Add New/Update

• If a record with the same Customer ID already exists in the binary file, then the application prompts the user to use the "Update" button instead.

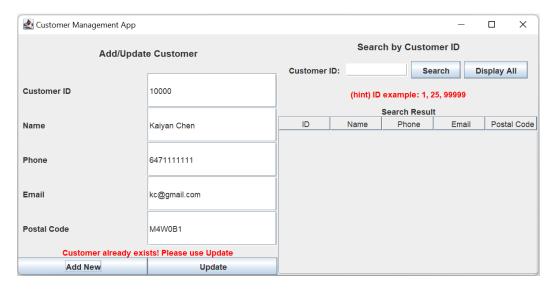


Figure 3 Trying to add customer whose info already exists

• On successful addition of the customer information on the binary file, a success message will be seen.

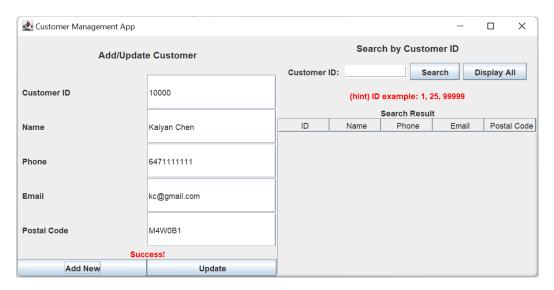


Figure 4 Success on Add New

2. Update:

- The user should use the "Update" button to update an existing record.
- An existing record can be found if the Customer id is known.
- If a record with the entered Customer Id is not found or if the binary file is not found (when update command is used before the first ever "Add New" command press), then the application prompts to use the "Add" button instead.

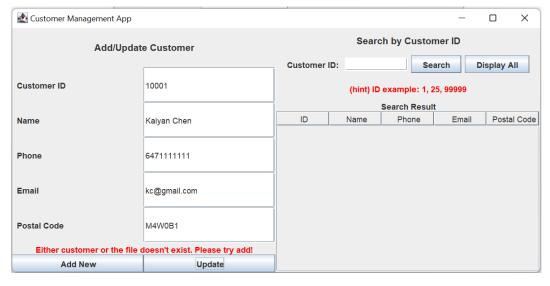


Figure 5 File or Customer Doesn't Exist for Update

 A success message is displayed on successful update operation of the customer record.

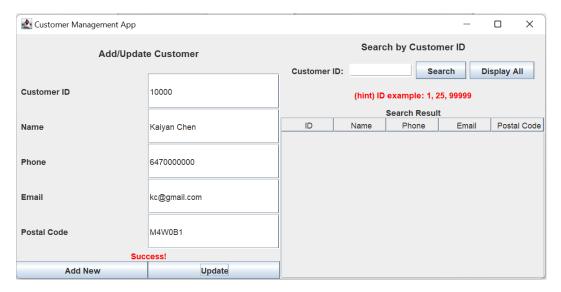


Figure 6 Success on Update

3. Search:

- The user can search for the customer whose information exists in the file using the "Search by Customer Id" section.
- To search for an existing record, the user must enter the customer id in the "Customer ID" text field and click the "Search" button.
- If a record exits, then it is displayed in the "Search Result" table otherwise empty record is seen.

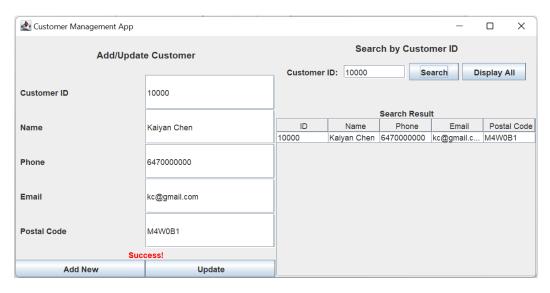


Figure 7 A record is successfully searched

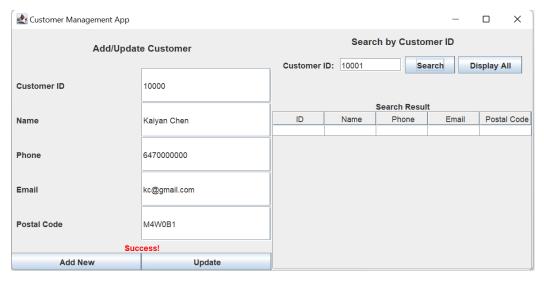


Figure 8 No record is found on search

4. Display All:

• The "Display All" button is used to display all the customer information from the binary file.

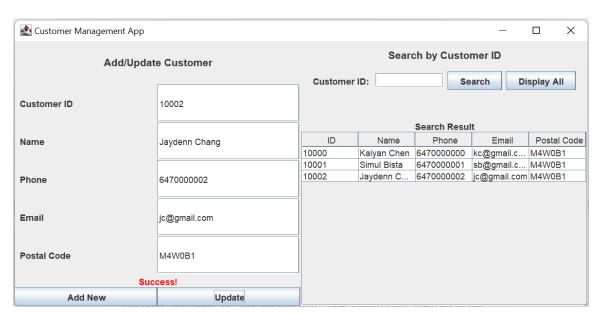


Figure 9 Display all the records in the UI