

# Project

Before attempting this project, be sure you have completed all of the reading assignments, non-graded exercises, discussions, and assignments to date.

**Write a Java program that displays a menu to allow the user the following functionality:**

1. **Load customers' data** - prompt user for the number of customers to be loaded and then prompts for each customer's name, customer id (5 digit number), and total sales
2. **Add new customer** - prompts the user for customer data: customer name, customer id, and total sales
3. **Display all customers** - displays each customer's data to the console, one customer per line
4. **Retrieve specific customer's data** - prompts the user for the customer id and displays the corresponding customer's data: customer id, customer name, and total sales
5. **Retrieve customers with total sales based on the range** - prompts the user for the lowest and highest total sales and displays all customers with total sales in that range. Display each customer on a separate line with all information – Customer Name, Customer ID, and Total Sales
6. **Exit**

**Design and implementation notes:**

- Each menu selection should be implemented as a separate method
- Customers' data should be saved in arrays, you can allocate for a maximum of 100 elements
- After completion of each selection, the program should display the menu again to allow the user another selection until they select Exit

Make sure your Java program is using the recommended style such as:

- Javadoc comment upfront with your name as author, date, and brief purpose of the program
- Comments for variables and blocks of code to describe major functionality
- Meaningful variable names and prompts
- Identifiers are written in upper CamelCase
- Class name starts with upper case letter and variables in lower case letter
- Constants are written in All Capitals
- Use proper spacing and empty lines to make code human-readable

**Capture execution:**

You should capture and label screen capture associated with compiling your code and running a test case. There should be a screenshot for the execution of each menu selection

**Submission requirements**

Deliverables include a Java program (.java) and a single Word (or PDF) document. The Java and Word/PDF files should be named appropriately for the assignment (as indicated in the Submission Requirements document).

The word (or PDF) document should include screen captures showing the successful compiling and running of each of the test cases. Each screen capture should be properly labeled clearly indicate what the screen capture represents.

Submit your files to the Project dropbox submission area no later than the due date listed in the online classroom.

### **Grading Rubric:**

The following grading rubric will be used to determine your grade:

<b>Attribute</b>	<b>Level (10-6 points)</b>	<b>Level (6-2 points)</b>	<b>Level 0 (0 - 2 points)</b>
Arrays	Correct or one incorrect prompt and captured input in arrays	Two mistakes in prompts and/or capture of input and/or arrays	Three or more missing elements in user input and/or use of arrays
Methods	Correct or one mistake in use of methods	Two mistakes in implementation of methods	Missing all or some methods
Menu	Correct or one mistake in menu implementation	Two mistakes in menu implementation	Three or more mistakes or missing menu
Load data functionality	Correct or one mistake in design and/or implementation	Two mistakes in design or implementation	Missing or significantly incorrect design and/or implementation to provide the required functionality
Add employee data functionality	Correct or one mistake in design and/or implementation	Two mistakes in design or implementation	Missing or significantly incorrect design and/or implementation to provide the required functionality
Display all data functionality	Correct or one mistake in design and/or implementation	Two mistakes in design or implementation	Missing or significantly incorrect design and/or implementation to provide the required functionality
Retrieve employee data	Correct or one mistake in design and/or implementation	Two mistakes in design or implementation	Missing or significantly incorrect design and/or implementation to provide the required functionality
Retrieve employees with salary in range functionality	Correct or one mistake in design and/or implementation	Two mistakes in design or implementation	Missing or significantly incorrect design and/or implementation to provide the required functionality

Screenshots	Correct or one mistake in test execution	Two mistakes or incomplete execution	Missing or significantly incorrect execution
Program documentation and style	Correct or one mistake in program comments, and identifiers	Two mistakes or incomplete documentation and/or style	Missing or significantly incorrect documentation and/or style