



Lab 8: File I/O - Store Management System

CST8132 Object-Oriented Programming

Lab 8: File I/O & Exception - Store Management System

Due Date: As shown on **Brightspace Calendar** (Each lab has its own due date).

Marks: 10 marks (worth 4% of term mark)

Demo: Demo your code and output to your lab professor during your own lab hours.

Recommended Reading: Chapters 9-11, 15 of Deitel and Deitel, Java How to Program book **Exercise**

Update Lab 7 by adding reading from files option. A file named **employees.txt** is provided with this file in Brightspace. Update your files so that you will have 4 options in the main method – read info from the user, read info from files, print info, and Quit. Write corresponding methods in classes by following inheritance, polymorphism, and encapsulation. Check sample output before you start coding. The format of each line of the file is:

- a char – either r or c – r represents Regular employee, c represents Contractor
- an int – Employee Number
- a string – First Name
- a string – Last Name
- a string – Email
- a long – Phone Number
- for Regular employees, ○ a double – salary
- for Contractors, ○ a double – hourly rate
- a double – number of hours

Also, you need to add two methods to check whether array is empty and array is full. Read options should check whether array is full or not. Print option should check whether array is empty. (See output)

Update test plan and Javadoc. Test plan should include test cases related to files.

Name your zip folder containing source files, test plan and Javadoc as **Lab8_Fname_Lname** and submit via this link or through **Activities => Assignments => Lab8 File I/O**

If the Lab is not submitted on Brightspace before the deadline - a grade of 0 is automatically assigned as per CSI. If anything is not clear - please ask - an email is fastest way to get a response.

Grading Scheme

Item	Marks
Person, Employee, Regular, Contractor, Store & Lab 7 classes	4
Exception Handling	2
Javadoc - in code and web files	2
Test plan	2

Submission

Demonstrate your work to your lab professor.

Expected Output (user input in blue)

```

Enter name of the store: Quality

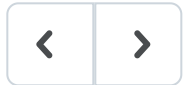
How many employees do you have?4
1. Read Employee Details from the User
2. Read Details from the File
3. Print Employee Details
4. Quit
Enter your option: 3

***** No elements in the array *****

1. Read Employee Details from the User
2. Read Details from the File
3. Print Employee Details
4. Quit
Enter your option: 2
1. Read Employee Details from the User
2. Read Details from the File
3. Print Employee Details
4. Quit
Enter your option: 3
=====
                        Quality Store Management System
=====
Emp# |           Name |           Email |           Phone |           Salary|
=====
1020 |           John Doe |       doe@test.com |         123456 |         7083.33 |
1100 |       Tom William |       tom@test.com |         321456 |        1000.00 |
1024 |       Matt James |       matt@test.com |         213546 |         6545.83 |
1. Read Employee Details from the User
2. Read Details from the File
3. Print Employee Details
4. Quit
Enter your option: 1
Enter details of employee 4
1. Regular
2. Contractor
Enter type of employee: 1
Enter Employee Number: 1026
Enter first name: Sam
Enter last name: Thomas
Enter email: sam@test.com
Enter phone number: 521365
Enter annual salary: 98550
1. Read Employee Details from the User
2. Read Details from the File
3. Print Employee Details
4. Quit
Enter your option: 3
=====
                        Quality Store Management System
=====
Emp# |           Name |           Email |           Phone |           Salary|
=====
1020 |           John Doe |       doe@test.com |         123456 |         7083.33 |
1100 |       Tom William |       tom@test.com |         321456 |        1000.00 |
1024 |       Matt James |       matt@test.com |         213546 |         6545.83 |
1026 |       Sam Thomas |       sam@test.com |         521365 |         8212.50 |
1. Read Employee Details from the User
2. Read Details from the File
3. Print Employee Details
4. Quit
Enter your option: 1

***** Array is full. cannot add more elements *****

```

[Download](#)[Print](#)

Activity Details

You have viewed this topic

Due March 28 at 11:59 PM

Starts Mar 21, 2021 12:01 AM

Ends Mar 28, 2021 11:59 PM

Last Visited Mar 25, 2021 10:26 AM