

VISA Java Batch Lab Assessment:

Note: Upload the all the solutions in a zip file having your name. Example “Shilpa-part-2-lab-assessment.zip”

Part 2 has to be uploaded by 29-OCT-2023 5:00 PM.

Part 1 can be uploaded by 3-OCT-2023

Part 1: Java

Question 1: Word Count

Given a sentence find the number of characters, words and lines in the sentence. Write a method that counts the no. of Characters, Words and Lines in a file and returns the count in a Map<String, Integer> .

Input: A sentence

Output: A Map returning the Character count, Word count and Line Count.

Test Case	Input	Output
1	All our dreams can come true, if we have the courage to pursue them	Character count :53 Word count :14 Line count :1
2	Great works are performed, not by strength, but by perseverance	Character count :52 Word count :10 Line count :2

Question 2: Movie and Actors.

The project should have:

- Entity classes “Movie” and “Actor” with association between them to represent the details as listed below.
- MovieActorClient.java for console/standalone client.

Given data as listed below:

Movie and actor details			
Title	Studio	YEAR	Actors
Skyfall	MGM	2012	Daniel Craig, Javier Bardem, Ralph Fiennes
Schindler's List	Universal Pictures	1993	Liam Neeson, Ben Kingsley
Staying Alive	Paramount Pictures	1983	John Travolta
The Dark Knight Rises	Warner Bros	2012	Christian Bale, Michael Caine, Morgan Freeman
<u>The Taking of Pelham 123</u>	Columbia Pictures	2009	Denzel Washington, John Travolta

Octopussy	United Artists	1983	Roger Moore, Maud Adams
Jurassic Park	Universal Pictures	1993	Sam Neill, Laura Dern, Jeff Goldblum

Use appropriate java collection classes for storing and fetching movie/actor details as listed below.

The application has to do the following:

- Store the above details using appropriate data structures provided by java collection framework.
- Display movies details and actor names **sorted based on release year**, if there are many movies released in a year they should be sorted alphabetically as shown below:

Input:

Year: 1983

Output:

Movie: Octopussy

Studio: United Artists

Actors:

Roger Moore

Maud Adams

Movie: Staying Alive

Studio: Paramount Pictures

Actors:

John Travolta

Input:

Year: 1993

Output:

Movie: Jurassic Park

Studio: Universal Pictures

Actors:

Sam Neill

Laura Dern

Jeff Goldblum

Movie: Schindler's List

Studio: Universal Pictures

Actors:

Liam Neeson

Ben Kingsley

Input:

Year: 2009

Output:

Movie: The Taking of Pelham 123

Studio: Columbia Pictures

Actors:

Denzel Washington

John Travolta

etc...

c) Display Movies acted by a given actor. Example is shown below:

i) Input: John Travolta

Movies:

Staying Alive

The Taking of Pelham 123

ii) Input: Ben Kingsley

Movies:

Schindler's List

Part 2: RESTful Webservices

Hotel reservation application allows hotel administrator to view, update and delete reservations.

For this application we do not need authentication/ authorization.

Create a table for storing “Registered Users” information in database. Provide DDL and DML scripts for the same.

What to implement:

Screen 1:

This page displays hotel reservations which are present in the database. The page should not display only future reservations [i.e., Reservations done for today’s date and any future dates].

Reservations list

Below you can see all the reservations and enquiries made.
Click on any of them to view and edit it.
Using the buttons you can filter the reservation by their status.

<div>All Confirmed Pending Cancelled Enquiry</div>				
From Date/time	Name	Email	Status	
28-06-2014, 10:00	Sunil	sunil007@gmail.com	Confirmed ▼	Edit Delete
28-06-2014, 10:00	Peter	peter@hotmail.com	Enquiry ▼	Edit Delete
27-06-2014, 15:00	Rebecca	rebecca@yahoo.com	Pending ▼	Edit Delete
27-06-2014, 15:00	Rekha	rekha@yahoo.com	Confirmed ▼	Edit Delete

Components included on this page are described as follows:

- Buttons “All”, “Confirmed”, “Pending”, “Cancelled” and “Enquiry”. These buttons are used to filter the reservation based on status. Example: Clicking on “Confirmed” button should display only reservations which are confirmed.
- Table displaying “Booked from date/time”, “Name of the person who has booked”, “Email address of the person who has booked”, “Status of reservation. Status can be [Confirmed, Pending, Cancelled or enquiry”].
- Reservation status can be updated by changing the option from “select drop-down”.
- For every reservation there is a “Edit” and “Delete” hyperlink.
 - Reservation can be deleted on clicking “Delete” hyperlink.
 - Clicking on “Edit” hyperlink will allow editing of reservation [see Screen2]

Screen 2:

User will be redirected to this page on clicking “Edit” hyperlink in Screen 1.

This form will be pre-populated with existing details and allows you to edit/modify the reservation details.

Update reservation

Update reservation details

Unique ID	<input type="text" value="1403853828"/>
From date/time	<input type="text" value="28-06-2014 10:30"/>
To date/time	<input type="text" value="30-06-2014 17:00"/>
Status	<input type="text" value="Confirmed"/>
Deposit fee	Rs. <input type="text" value="5400"/>
Deposit paid	<input type="radio"/> No <input checked="" type="radio"/> Yes
People	<input type="text" value="2"/>
<input type="button" value="Cancel"/>	<input type="button" value="Update"/>

Components included on this page are described as follows:

- Unique ID: Read-only text displaying the generated Unique ID
- From date/time: From when the reservation is done [DD-MM-YYYY HH:MM]
- To date/time: Until when the reservation is done [DD-MM-YYYY HH:MM]
- Status: Status of reservation.
- Deposit fee: The amount deposited by customer who has done reservation
- Radio buttons “YES” and “NO” for [Is the amount already paid?]
- People: For how many persons is the reservation done
- “Update”: button to submit the modified reservation.
- Cancel: Returns you to the reservations list page without submitting any unapplied changes.