

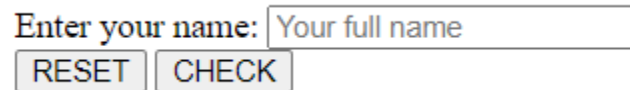
Question 1:

(2.0 points)

You are given a NetBeans template project.

Your tasks

- Edit index.html to create a web page



The screenshot shows a web form with the label "Enter your name:" followed by a text input field containing the placeholder text "Your full name". Below the input field are two buttons: "RESET" and "CHECK".

Your tasks: Assume that users fill your full name into the textfield

1. When users click “RESET” button, set value of textfield is empty. **(0.5 point)**
2. When users click CHECK” button, the browser makes a request to **/check** using Post method (The Servlet is configured in web.xml) **(0.5 point)**:
 - a. If the user enters the name format incorrectly (each word is separated by 1 space, the first letter is capitalized, there is no space at the beginning or end of the string), the error message "You entered incorrectly" will be displayed on the servlet. If not, make a request
 - b. **(0.5 point)**
 - b. Count the number of 'a' characters in the string and display the number of 'a' characters on the web. **(0.5 point)**

Question 2:

(3 Points)

You are given a database script contains [Student] table. Your tasks:

- User can access **/search** to search for students. The system displays as following: **(0.5 point)**



The screenshot shows a search form with the label "Name" followed by a text input field. To the right of the input field is a button labeled "Search".

- User can click [Search] button
 - If [Name] contains no character → system displays all students **(1 point)**

id	name	dob	gender
1	Anna	1976-04-03	False
2	Michel	1988-11-13	True
3	Alex	1985-07-06	True
4	Kim	1986-09-22	False

- If [Name] contains some characters → system displays the students who have name start with [Name] **(1.5 point)**. Example:

Name

System displays:

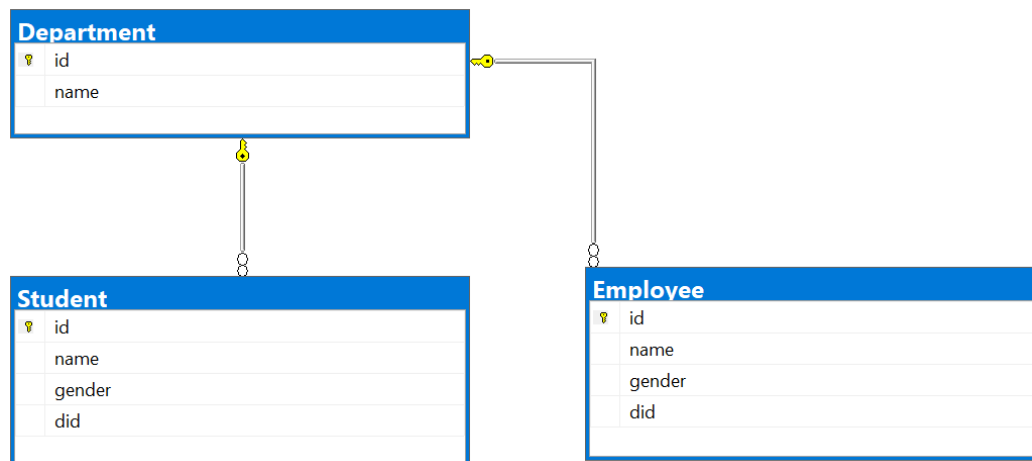
id	name	dob	gender
1	Anna	1976-04-03	False
3	Alex	1985-07-06	True

Question 3:

IMPORTANT – before you start doing your solution, **MUST** do the following steps:

1. Create your MS SQL database named **Workshop2** by running code in script **Workshop2.sql**.
2. **You MUST use DbContext.java for your all database connection.**

You are given a database script, execute the script to get the database as shown in below figure:



Note: Use given DbContext class to access the database, **ONLY MODIFY** the url, username, and password inside the DbContext. **0 will be given to the work that tries to restructured the DbContext.**

Your task is to create a web page to allow users adding new Students:

- Url to access your page: /add (**0 given for a wrong URL**)
- The page should be displayed as follows:

Add new Student:

ID:

Name:

Gender: ☒ Male ☐ Female

Department:

ID	Name	Gender	Department
1	Mr A	true	Information Technology
2	Ms B	false	Business Administration
3	MrC	true	Data Science
4	mr D	true	Business Administration

New student info

Existing students

- Departments are loaded from [Department] table (**1 point**)
- All existing Student are loaded to the table (**1.5 points**)
- When a user clicks [add] button, if the user enters to all field of new student info, the system inserts new student to the database (**1.5 points**)
- If new student added to database successful, it immediately is shown to the table (current page still be kept, DO NOT CHANGE PAGE URL) (**1 point**)