

Data Centric Web Applications

Lab 7 ExpressJS II EJS

Question 1

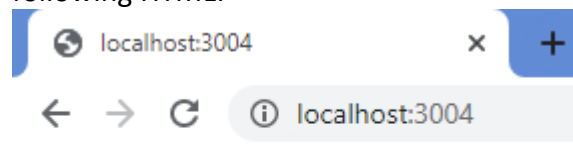
Write an Express JS application that handles HTTP GET requests on 2 routes:

- /
- /employees

and stores the following array of employees:

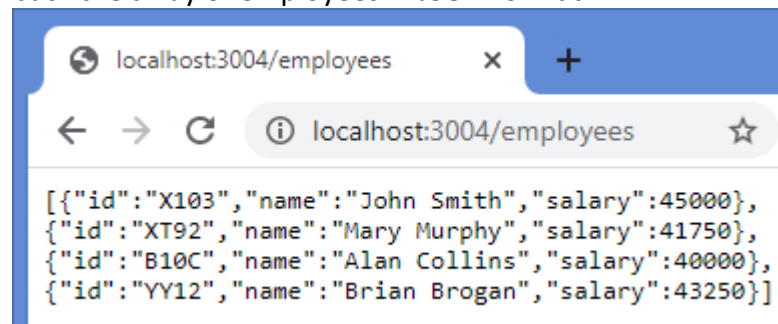
```
[{ id: "X103", name: "John Smith", salary: 45000 },  
 { id: "XT92", name: "Mary Murphy", salary: 41750 },  
 { id: "B10C", name: "Alan Collins", salary: 40000 },  
 { id: "YY12", name: "Brian Brogan", salary: 43250 }]
```

When a HTTP GET request is received on the / route, the application should send back the following HTML:



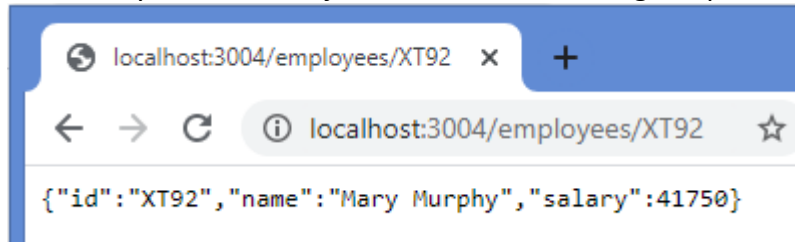
This is Question 1

When a HTTP GET request is received on the **/employees** route, the application should send back the array of employees in JSON format:

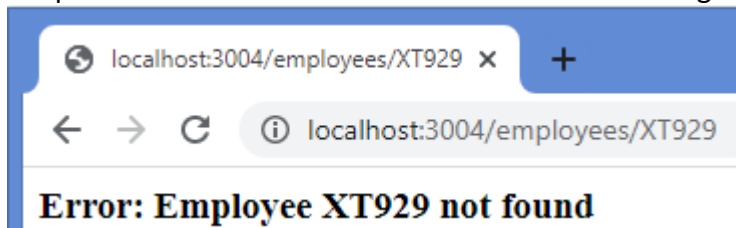


Question 2

Update question 1 so that if a specific employee ID is sent as a parameter to the /employees route, only that JSON object with the id matching the parameter will be returned:



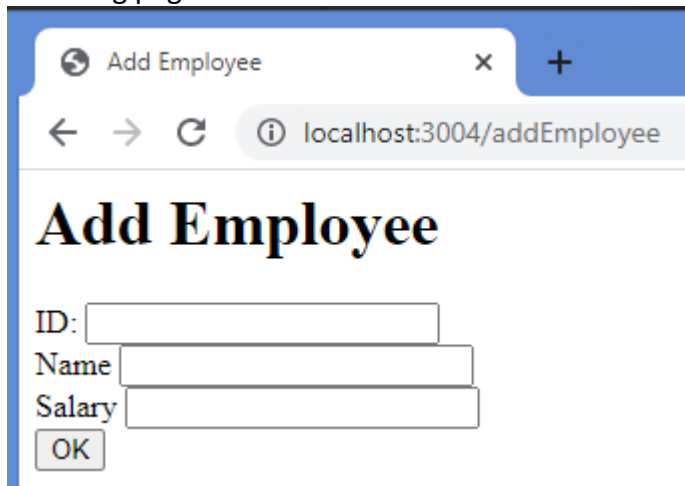
If a parameter is sent that matches no id the following error message is sent:



Question 3

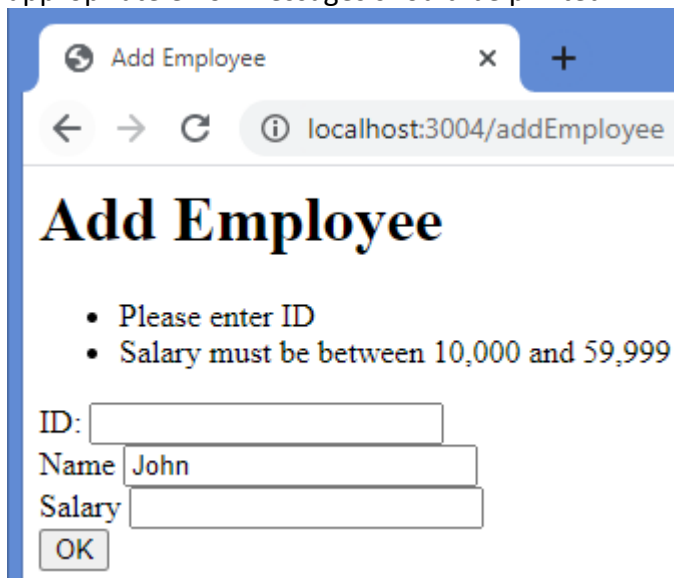
Update question 2 so that when the user navigates to `/` he or she is automatically redirected to `/employees`.

When the user navigates to `/addEmployee` he or she should be presented with the following page:



A screenshot of a web browser window showing a form titled "Add Employee". The browser's address bar displays "localhost:3004/addEmployee". The form contains three input fields labeled "ID:", "Name", and "Salary", each followed by a text input box. Below the "Salary" field is an "OK" button.

An ID should be entered, and the salary should be between 10,000 and 59,999, otherwise appropriate error messages should be printed:

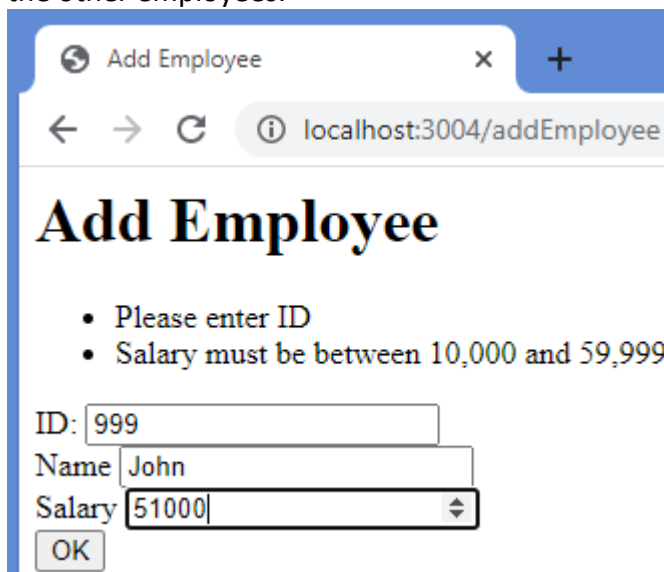


A screenshot of the same "Add Employee" form, but now it displays two error messages in a bulleted list:

- Please enter ID
- Salary must be between 10,000 and 59,999

The "Name" field now contains the text "John". The "ID:" and "Salary" fields are empty. The "OK" button remains at the bottom.

When ID and Salary (and potentially Name) fields have been successfully entered the user should be redirected back to /employees, where the newly added employee is listed with the other employees.



The screenshot shows a web browser window with the title 'Add Employee' and the URL 'localhost:3004/addEmployee'. The page has a blue header bar. Below the header, the title 'Add Employee' is displayed in a large, bold, black serif font. Underneath the title, there are two bullet points: 'Please enter ID' and 'Salary must be between 10,000 and 59,999'. Below these instructions, there are three input fields: 'ID' with the value '999', 'Name' with the value 'John', and 'Salary' with a dropdown menu showing '51000'. An 'OK' button is located at the bottom left of the form area.

Add Employee

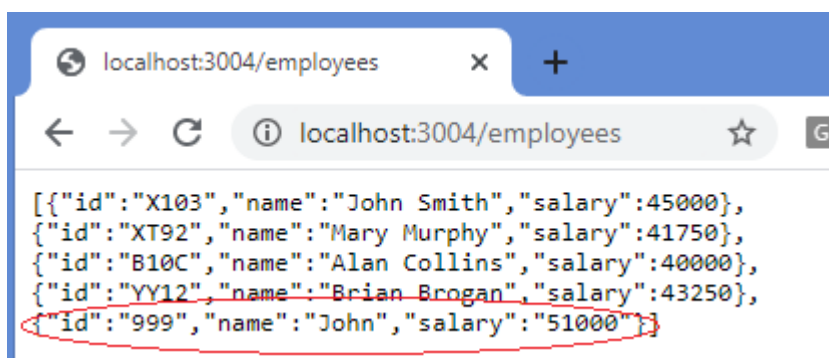
- Please enter ID
- Salary must be between 10,000 and 59,999

ID: 999

Name John

Salary 51000

OK



The screenshot shows a web browser window with the title 'localhost:3004/employees' and the URL 'localhost:3004/employees'. The page displays a JSON array of employee objects. The last object in the array, representing the newly added employee, is circled in red. The JSON array contains five objects, each with 'id', 'name', and 'salary' properties.

```
[{"id": "X103", "name": "John Smith", "salary": 45000}, {"id": "XT92", "name": "Mary Murphy", "salary": 41750}, {"id": "B10C", "name": "Alan Collins", "salary": 40000}, {"id": "YY12", "name": "Brian Brogan", "salary": 43250}, {"id": "999", "name": "John", "salary": 51000}]
```