CPRG256

FINAL PROJECT

DUE DATE: 18:00 APRIL 9, 2020. NO LATE SUBMISSIONS WILL BE ACCEPTED. ONLY PROJECTS THAT HAVE BEEN SUBMITTED BY THE DUE DATE WILL BE GRADED. THIS IS AN INDIVIDUAL ASSIGNMENT SUBMISSION

Create a directory ‘cprg256/finalproject’. Create the required subdirectories for the following applications.

Part 1: 20 Marks

Create the following web application in the ‘part1’ directory.

You are to create a web page that will search for an employee. You are to use the ‘dataset.xml’ file that contains ‘employee’ data. Your application will do the following:

* You can search for an employee on these fields: ‘last\_name’, ‘id’ and ‘job\_title’.
* Each of these search fields must be connected to a unique Event Listener that is set to call a function when the ‘keyup’ or ‘onkeyup’ event occurs. As data is typed into the search field, the search function will display all employee records that start with that search string.
* Example: If you are searching by ‘last\_name’ and you enter ‘B’, all the records with a last\_name’ that starts with ‘B’ will be displayed. When you type ‘Br’ all the records with a last\_name’ that starts with ‘Br’ are displayed.
* Example: If you are searching by ‘id’ and you enter ‘2’ all the records with ‘id’ starting with ‘2’ will be displayed. If you enter ‘25’ all the records with ‘id’ starting with ‘25’ will be displayed.

Part 2: 20 Marks

Create the following web application in the ‘part2’ directory.

You are to create a web page that will display a quiz and create the necessary JavaScript to complete the following:

* Process the ‘finalquiz.xml’ file to display the multiple choice questions within the index.html page. Each question has 4 possible answers.
* Create a function that will grade the quiz and display the grade out of 5. Within ‘finalquiz.xml’ is an element ‘rightanswers’ that has a comma delimited string with the correct answers. Use CSS to create an appropriate interface.

Here is an example of what the page could look like:

Question 1:

In a switch statement, the \_\_\_\_\_\_\_\_ case clause is used to process exceptional conditions and is usually listed last.

* A) break
* B) default
* C) else
* D) then

At the end of the quiz, create a button ‘Grade Quiz’ that will display the number of correct answers out of five. E.g. ‘Grade 3/5’

Part 3: 20 Marks

Create the following web application under the ‘part3’ directory. Your application will require ‘rentalclients.json’.

Your task is to create the Web Application for ‘Dodgy Brakes Car Rental’. The index.html page will have a ‘header’ and ‘footer’ that will display a company logo and the current date and time. Include a suitable background photo for the page and a link to ‘rental.html’.

The ‘rental.html’ page, has the following functionality:

Your page will include a ‘search’ field and a ‘car rental’ form. The ‘car rental’ form will be un-editable until a client is found and selected.

The ‘search’ field will search ‘rentalclient.json’ by last name. As you enter letters, the search function will find and display all the clients whose last names start with those letters.

Example: If you enter ‘B’, all the clients with a last name’ that starts with ‘B’ will be displayed. When you type ‘Br’ all the clients with a last name’ that starts with ‘Br’ are displayed.

NOTE: Only display the Last and First Names of the clients.

You can then select a client from the list. This ‘event’ will make the ‘car rental’ form editable.

After a client is selected, the client information will be displayed in the ‘car rental’ form. E.g. last name, first name, address, state/prov, email and phone.

The client can then choose to rent a vehicle. The rental choices are:

Compact $15/day

Mid-size $20/day

Luxury $35/day

Van/Truck $40/day

Note: Include a picture of a vehicle next to each of the rental choices.

Options: Roof Rack or Bicycle Rack extra $5/day

GPS extra $10

Child Seat free

The client can rent from 1 to 30 days.

After this information is selected, the total of the rental is calculated and the complete client and rental information will be displayed on the page. This can appear on the page or in an ‘alert’ field.

PROJECT REQUIREMENTS

You must use JavaScript to implement your programming solutions. NOTE: If you plan to use an Third Party Applications (eg. Bootstrap), you must consult your instructor in advance.

You are required to use CSS/Styling to create pleasing and useful interfaces for your applications.

30% of the grade of any of these applications will be allocated to the User Interface. Your interfaces must be useful and adhere to good design.

‘Zip’ ALL of your project files and upload them to the Brightspace site under Assignments/Final Project.