Assignments

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Introduction to HTML

Assignment Question
Ebuzz mart is a famous departmental store in Vienna. Currently, the web site of Ebuzz mart displays only information regarding the products, costs, and discounts. The mart has received suggestions from many customers to enable the site with online shopping facility. Therefore, it has decided to include the shopping facility on their Web site and that the Web site must be made accessible to people with physical disabilities too.   NetCiti Solutions is a Web site development company in Vienna. The company has owned a contract from Ebuzz mart to convert the mart's static Web site into a dynamic Web site.   Assume that you are one of the Web site developers of the NetCiti solutions. You need to explain Ebuzz mart why a dynamic web site is a solution to the demands from Ebuzz customers.

Working with HTML Elements

Assignment Question
Vincent school is a school that has been recently opened in New Jersey. The school management wants to create a Web site which would be accessible world wide. The Web site will provide information related to the various courses being offered, fees structure, and the admission process. Assume that you are one of the developers appointed by the school and have to perform the following tasks: • Create a Home page, which will describe about the school in detail. Present the content in a proper structure using the text and formatting elements. • Insert the school logo and school building images on the Home page. • Create three Web pages for the site. One Web page will provide the information about courses, second on the fee structure, and the third on the admission process. • Create links for the three pages on the home page. • The links when clicked should always open in a new window. Test the output by running the Web pages in the Internet Explorer.

Using Lists and Tables

Assignment Question

Technomatics solutions is a small-scale well-known IT company in San Francisco. The total number of employees in the company is 20 and the company has three departments, Development and Testing. Each department consists of 8 people. The company wants to develop a Web site, which will provide information about the company, its achievements, career growth, and its various departments. The information on various departments will only be accessed by the employees of the company. One of the utility of the Web site is to display different types of programmers, graphics artist, and testers according to their skills in the Web page, which will have the information related to the departments.
 	
Assume you are one of the developers at Technomatics solutions and have to perform the following tasks:
    • Create a Web page that will lists different types of programmers, graphics artist, and testers.
    • Display the information of employees belonging to a particular department in a table. The table should display the name of the employees, qualification, experience in years, the joining date, and the contact number.
 	
Test the output by running the Web pages in the Internet Explorer.

Working with Forms and Frames

Assignment Question
BlueDiamond is a financial company in Los Angeles. The company wants to create a Web site to provide financial services to their clients. They also want to allow their clients to register on their Web site via Internet. Therefore, they decide to create an Online Registration Form that can be filled by their clients. The form should also be vertically divided into two panes, wherein one pane allows the clients to navigate through the different sections of the Web site. The company also decides to promote their services by creating various advertisements. Assume you are one of the developers at BlueDiamond and have been asked to do the following: - Create a form and include the necessary controls for taking inputs from the clients.   - Create a frame to vertically divide the browser window into two panes.   - Create an inline frame to display advertisements.   Test the output by running the Web pages in the Internet Explorer.

Introduction to Cascading Style Sheets

Assignment Question
TechWide Inc. is an IT firm in Vienna providing e-learning solutions worldwide. The firm's technical authors create documentations regarding the latest technologies. The Web designers use these documents to create HTML pages to publish information about the latest technologies on the firm's Web site. The company has decided to separate the formatting options from the HTML pages by creating a cascading style sheet. Assume that you are one of the Web designers and have to perform the following tasks: • Create an external style sheet that will define the styles for the `P`, `H1`, `H2`, `H3`, `SPAN`, and `DIV` elements. • Create appropriate selectors to specify the styles. • Specify the font as `Times New Roman`, font size as `14pt`, font style as bold text decoration as `underline` for technical terms. Specify the technical terms within the `SPAN` element. Explain the terms with their descriptions in a definition list. • Specify the font as `Arial`, font size as `12pt`, text alignment as justified for the paragraphs. • Specify the font of `H1` as `Times New Roman`, `H2` as `Arial`, and `H3` as `Verdana`. • Specify the word spacing for the contents of the `DIV` element as `2px`. Test the output by running the Web pages in the Internet Explorer.

CSS Color and Layout Properties

Assignment Question
Infosmart Technologies is a leading IT firm in Nashville that consists of different branches across the world. The company wants to create a Web site that provides information about their organization. They want to insert their company logo in their Web site. They also want to enclose their different braches in a box. Also, they wish to highlight their company policies in different colors. The management of the company decides to separate the formatting options of the Web site from the HTML pages.   Assume that you are one of the developers who have been assigned this task and have to perform the following tasks: • Apply a logo of the company in the background.   • Specify that the company logo must be fixed and not scroll with the content of Web page.   • Specify a border that encloses the different branches of the organization.   • Specify padding to the content displayed.   • Apply colors to highlight the different company policies.   Test the output by running the Web pages in the Internet Explorer.

Advanced CSS Properties

Assignment Question
WizPro Inc. is a prominent firm in Romania providing IT enabled services across Europe. Foodyland is a hotel having its base in Romania with its branches spread across the World. Foodyland has given the contract to WizPro Inc. for developing a Web site that will display the restaurant details. This site will include links for placing orders and accepting feedbacks from users. Assume that you are one of the Web designers and have to perform the following tasks: • Create a Web page that displays the hotel name at the top and an image of the main branch at the center of the page. Below this image, display the information about the hotel. • The page must include various links that allows the users to view details regarding the various cuisines, gymnasium, and room reservations. • By default, the font color of the links must be green. When the mouse pointer is hovered over it, the color of the link must be changed to yellow. When the users click the link, the color must be changed to pink. The already visited links must appear brown in color. • The page should consist of a section at the bottom that allows the users to provide feedback. • The scroll bar should appear in different colors. Test the output by running the Web pages in the Internet Explorer.

Introduction to JavaScript

Assignment Question
Emerald Bank is a commercial bank in Kansas that has its own Web site. This Web site allows its customer to open a bank account, enroll for various IPOs, and view the new schemes on loans. This will attract more customers to invest funds, as it will simplify the process of investment by saving time and effort. In addition, it will allow quick publishing of various new schemes easily, which will reach the masses. Assume that you are one of the Web designers and have to perform the following tasks: • Create a Web page that will take all the details to open a back account, which include customer name, address, phone, email, type of account, and the date of opening the account. • Verify that the customer leaves none of the fields empty. • Display thanks giving message with the customer name on the new page as soon as the customer provides all the details. Test the output by running the Web pages in the Internet Explorer.

Operators and Statements

Assignment Question
Elexmedia is a small-scale software company in California. The company provides personal loan to their employees. The loan details of employees are currently being maintained in registers. The management team has observed many human errors such as calculation mistakes, which has made the register system unreliable. The management has decided to automate the process of maintaining the loan details by creating a dynamic Web page. This Web page will allow calculating the total interest and loan amount payable by the employees. Assume that you are one of the Web developers and have to perform the following tasks: • Create a Web page that will accept the employee ID, name, address, designation, loan amount, date of loan taken, interest, and maturity date. • Check that the employee's ID must be of minimum four characters and must include the letter E in the beginning. • Calculate and display the loan amount and interest payable based on the designation of the employee. Test the output by running the Web pages in the Internet Explorer.

Loops and Arrays

Assignment Question

Herald University is a well-known university in Las Vegas. The university offers different types of courses to their students. The management of the university has noticed that the number of students enrolling for their university is increasing. Also, they are having students who are enrolling from different parts of the world. Thus, to simplify this process they plan to create a Web site that allows their students to enroll online.
 	
Assume that you are one of the developers and have to perform the following tasks:
    • Create a Web page that accepts the student details such as name, address, contact information, qualification, and so on for registration. When a student enters these details and clicks **Submit**, a Web page should appear that ask the student to confirm the entered data.
    • Use 2-dimensional arrays and loops to display the student's details in a Web page in a tabular format.
 	
Test the output by running the Web pages in the Internet Explorer.

Functions and Objects

Assignment Question

BioAnalysis Scientific Systems is a well-known research centre is California The staff of this centre collects data on various environmental elements and natural phenomena. The staff then analyzes this data, researches on the found data, and performs scientific calculations on it. This will help them to study natural changes in the environment, which they can publish in journals and papers to spread awareness among masses. The management has decided to perform all these calculations on their Web site using HTML and JavaScript.
 	
Assume that you are one of the researchers at BioAnalysis and have to perform the following tasks:
 	
  ➤ Create a login Web page with proper validations.
  ➤ Create a Web page that will take appropriate inputs, perform calculations, and will display:
      o Minimum, maximum, and average temperatures of any locality in the world at a specified date and time
      o Population of any town and state in the world
      o Average literacy percentage of any city in the world
      o Average qualifications of the population (Graduate/Postgraduate and so on)
  ➤ Use appropriate built-in objects and create custom objects to store and manipulate information.
 	
Test the output by running the Web pages in the Internet Explorer.

JavaScript Objects

Assignment Question
HearMe is an online music gallery that allows their customers to listen music over the Internet. Presently, the Web site enables their customers to listen and download songs. Now, they are planning to set up an online store to allow their customers to buy music and movie CDs and DVDs over the Internet. To achieve this, the development team is planning to create a Web page that allows their customers to shop online for their favorite CDs and DVDs. For online shopping, they plan to accept the credit card details from the customer. These credit card details should be validated before allowing the customers to proceed further. To fulfill these requirements, the development team of the HearMe decides to use the DOM objects.   Assume that you are one of the developers and have to perform the following tasks: • Create a Web page that consists of a form that contains appropriate controls to allow their customers to input their credit card number.   • Check the credit card details. If the credit card details do not match, an alert box must be displayed stating the same.   • Allow the customers to navigate through the Web site by providing the **Next**, **Previous**, **Top**, and **Bottom** buttons.   • Allow the customers to maintain the history of URLs visited in a browser window.   Test the output by running the Web pages in the Internet Explorer.

Introduction to DHTML

Assignment Question
FunGames is an online game services company that is been recently established in Berlin. They want their users to play totally free bike and car games over the Internet. Presently, they are developing a bike racing game They are keen in making the users use the keyboard keys for riding the bike. The development team of FunGames is planning to provide the different controls using DHTML. Assume that you are one of the Web developers and have to perform the following tasks: • Create a form that provides controls to enter player's name and provide **Start** and **Exit** buttons. By default, the focus should be on the control that accepts the player's name. • Declare an event to change the focus by using the different arrow keys. • Declare an event to change the font color of **Start** and **Exit** button when the player moves the mouse pointer to these buttons. • Declare an event to start the race or exit it when the player presses the **ENTER** key while having focus on **Start** and **Exit** buttons respectively. • Declare an event to use the **Right** and **Left** arrow keys to control the direction of bike. • Declare an event to use the **Down** arrow to apply brakes. Test the output by running the Web pages in the Internet Explorer.

DHTML Filters

Assignment Question
FaceMake Inc is a well-known cosmetic company that manufactures cosmetic items in Florida. The company has observed that customers across the globe are appreciating their products and that their marketing strategies are attracting more customers. One of frequent feedbacks from their customers is to provide the facility of shopping the cosmetic products online. Therefore, the management team has decided to create and deploy a Web site. This Web site will provide the facility of shopping products and browsing through their existing and latest products on the Internet. Assume that you are one of the Web designers and have to perform the following tasks: • Create a home page that will have an image of the company building, its logo and a short paragraph on the company's progress. The page will also provide links to browse through their products and shop them. Apply suitable filters to these links. • Create a Web page that will display a slide show of the latest products. • Create a Web page that will show all the existing products. The user can view each product by pressing the previous and next button. Apply suitable transitions to these images. Test the output by running the Web pages in the Internet Explorer.

Data Binding

Assignment Question
CityHigh is one of the popular hospital in Chicago. The hospital maintains a huge amount of records of their hospital members, medicines, and their patients in multiple delimited text files. One of the rules of the hospital that the team has to follow is to conduct a quarterly meeting, where the doctors need to submit their quarterly reports. These reports include details on total number of patients admitted, total number of new medicines bought and how many are in stock, and how many human resource do the hospital require. To compute these details, the dean of the hospital has decided to create dynamic Web pages that will be added to their current Web site. However, these Web pages will only be accessible by the doctors and the dean of the hospital. This will minimize their effort to compute the required values and allow quick and easy view of various records on demand.   Assume that you are one of the developers and have to perform the following tasks: • Create three Web pages that will access the respective delimited text files and will display the details from them in a table.   • Filter the data taking into account the quarter period and count the total number patients, medicines brought, and staff available in that quarter.   • Provide navigational buttons on each of these Web pages.   Test the output by running the Web pages in the Internet Explorer.

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