Final Assessment Test – November 2018

VIT
Vellore Institute of Technology

Course: CSE3002 - Internet and Web Programming
Class NBR(s): 5782 / 5783 / 5784 / 5785 / 5820 / 5821 / 5822
Time: **Three Hours**

Slot: **E2**
Max. Marks: **100**

Answer any TEN Questions
(10 X 10 = 100 Marks)

1.
a) How domains are organised in internet? Discuss in detail. **[5]**

b) Elucidate world wide web with its security, privacy and blocking features. List out the possible ways to avoid e-mail viruses. **[5]**

2. Design a website for VIT University using HTML/CSS for displaying the details of different schools. The homepage should have separate links for each school like SCOPE, SCSE, SENSE and SELECT. Each link should contain faculty information, programme details of B.Tech and M.Tech, photo gallery of guest lectures, workshops organized and lab information. Organize the information in frames and tables wherever necessary.

3.
a) Differentiate class selector and id selector with suitable example. List the different types of selectors and how it is used to target rules to specific elements in an HTML document. **[5]**

b) Design a HTML form containing a heading and a paragraph. Add a confirm box to obtain "Yes" or "No" input from the user and accordingly call the DOM enabled script to perform the following. **[5]**
   if user clicked "Yes"
   - Change the background colour of the webpage
   - Repeat the background image horizontal wise.
   - Display the current date
   - Change the inner text of the heading tag if user clicked "NO"
   - Display an alert box with message "No changes in the web page".

4. Design a webpage in HTML for Pizza order in online by providing the user details (Name, Phone number, Address), type of Pizza (Veg/Non-Veg), size of the Pizza (Regular, Medium , Large) and the number of pizza required. The user should submit the form using POST method and following validations should be carried out before placing the order.
   (i) Check whether all the fields are entered without blank
   (ii) validate name (can contain only letters) and Phone number of 10 digits with no comma, no spaces, no punctuation and no + sign in front the number
The price list for Veg/Non-Veg Pizza is given below.
Generate the payment bill stating how much the user has to pay once the order is placed.

Type	Size	Amount
Veg	Regular	99
	Meduim	195
	Large	395
Non-Veg	Regular	165
	Meduim	305
	Large	495

The required output is as follows:
Hello Uersname !
Thank you for Choosing PizzaHut.
You have ordered (n) number of pizza of Size(x) and type (T)
Your bill amount is (amount) Rs/-

5. Create three different classes Personal_detatils, Allowances and Deductions inside the user defined package EMP. Import these classes into another package PROCESS to generate the salary slip of an employee in a company. The PROCESS package contains the class Salary_Slip to execute the appropriate methods and the required details are furnished below:

Personal Information	Allowances	Deduction
employee code	basic pay	pf
name	da	lic
gender	hra	tax
date of birth		
date of joining		

Calculate the monthly gross pay and Net pay of an Employee according to the specified conditions given below

basic pay	hra	da
<=20000	20% of basic pay	80% of basic pay
20001 to 40000	25% of basic pay	90% of basic pay
>=40001	30% of basic pay	95% of basic pay

Calculate grosspay= basic pay+hra+da.
Calculate netpay=grosspay-(pf+lic+tax)
Provident Fund (pf) is deducted at the rate of 10% of the gross pay(basic pay+da+hra)

6. a) How abstract class differs from interface in Java? Create a class to implement the subscription [5] details (Monthly, quarterly, yearly) of a customer for a cable TV connection using abstract class and interface.
   • Include interface containing the method personal () and subscription ().
   • Include abstract class containing the abstract method disp_details ().

   b) Write a servlet program to verify whether the user is new to the website. If he/she is a new user [5] display the message "New user welcome". If not, display the last accessed time of the page by the user and the number of visits done by the user.

7. Hamen's Automobiles provides a facility through which customers can reserve date and time slots for car servicing through online. The customers have to sign up for accessing the system. In the sign up form get the username, password, car type, car number and preferred time slot. Whenever the customer sign in to the system, the Servlet has to get input for the servicing date and verify whether his/her preferred time slot is available or not. If the Preferred time slot is free, reserve it, else the page has to display the complete list of free slots for that day. Implement this scenario using Servlet and database.

8. Write a JSP script to insert student Grade details: registration number, name, CGPA and semester into a database by reading the details from a HTML form.
   After insertion perform the following
   • Retrieve records sorted by CGPA
   • Retrieve record for a particular registration number.
   • Retrieve records of students for a given semester.

9. Define two php scripts that will allow the processing of data present in a text file associated with an app store. Each line of the text file has one of the following words: map, game or educ. Each line represents an app that was bought from the store. For this problem:

   a. Define a script called readData.php that will open the file specified via a text field. The script will read each line from the file and send that information (using sessions) to a second script called process.php. The script relies on the post method.

   b. Define a script called process.php that will retrieve the lines (using sessions) and will display a summary of how many apps of each kind (map, game and educ) were sold.

Consider the text file "data.txt" for processing with the content as follows:

```
map
map
educ
game
game
educ
educ
educ
```

Design the following form in readData.php and upload the text file to do the process.

Filename: data.txt

Submit

10. a) Differentiate Session and Cookie in PHP. Write PHP code to create cookie, set the life time of cookie for 30 days, read the values stored in the cookies and delete a cookie. [5]

   b) Demonstrate how to register a variable using session and how to link correctly to another page using SID. [5]

11. Develop XML document that will hold player (Like Cricket) collection with field for player-name, age, batting-average and highest score. Design suitable document type definition and schema for the XML.

12. List the technologies used by AJAX. Discuss the steps involved to show how AJAX enables JavaScript to communicate with server-side programs and files with necessary code.

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