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PAPER ADVANCED JAVA AND WEB  
TECHNOLOGY

TOPIC - MODULE 1



1) Justify the following : HTTP is connectionless, stateless, media independent protocol.

Ans- HTTP is called connectionless because of the following reasons:

- Browser (clients) initiates an HTTP request.
- Client waits for the response.
- Server processes the request and sends response back after which client and server knows about each other during current request and response only.
- Further requests are made on new connection. like client and server are new to each other.

HTTP is called stateless because of the following:-

- Server and client are aware of each other only during a current request.
- Neither the client nor the browser can retain information between different requests across the web page.

HTTP is called media independent because of the following:-

- Any type of data can be sent by HTTP as long as both the client and the server knows how to handle the data content.
- It is required for the client as well as the server to specify the content type using appropriate MIME-type.



2. Why HTML is called "Hyper Text" and "Markup"?

Ans- Hypertext is a text which contains links to other text and pages. As in HTML page, by clicking the link in a page one can navigate to other page hence it is called hyper text.

A markup language is a computer language that uses tags to define elements within a document. It is a human readable, meaning markup file containing standard words rather than typical programming syntax.

3. What are the disadvantages of Frames?

Ans- The disadvantages of frames are:-

- a) Some smaller devices cannot cope with frames often because their screen is not big enough to be divided up.
- b) Sometimes your page will be displayed differently on different computers due to different screen resolution.
- c) The browser's back button might not as the user hopes.
- d) There are still few browsers that do not support frame technology.

4. Explain the various methods and its usage of string object.

Ans- The various ~~not~~ methods of string object are:-



- a) `s.substring()` - This function is used to extract a part of the string.
- b) ~~Sometimes your page will be displayed~~
- b) `s.length()` - This function is used to return the ~~ext~~ extract the length of a string.
- c) `s.charAt()` - This function returns a character from the given index.
- d) `s.indexOf()` - This function returns the index i.e. position number of the string.
- e) `s.startsWith()` - This function returns the index a boolean type value true, if a given string is used as a prefix to another string, false otherwise.
- f) `s.endsWith()` - This function is used to check whether a given string has a specified suffix or not. It returns a boolean type value true or false accordingly.
- g) `s.slice()` - Returns the last characters as per the index the index specified.
- h) `s.split()` - Splits the string.
- i) `s.includes()` - Includes the substring specified with the main string.
- j) `s.replace()` - This function is used to replace a character by another character or to replace a string by another string at all its occurrence in the given string.



5. Describe class selector and id selector with examples.

Ans. The class selector selects elements with a specific class attribute. To select elements with a specific class, write a period (.) character followed by the name of the class.

Example - For styling all <p> elements with class = "hometown".

```
p.hometown {  
    background-color: yellow;  
}
```

The id selector uses the id attribute of an HTML element to select a specific element. To select an element with a specific id, write a # character, followed by the id of the element.

Example - For styling all <p> elements with class = "hometown".

```
p.hometown {
```

The CSS rule below will be applied to the HTML element with id = "para1".

```
#para1 {
```

```
    text-align: center;
```

```
    color: red;
```

```
}
```

6. With the help of an example describe inline style sheet.

Ans. An inline style may be used to apply a unique style for a single element. To use inline style, add the style attribute. The example below shows how to change color and left margin of a <h1> element:



```
<h1 style = "color: blue; margin-left: 30px;">
```

this is a heading </h1>.

7. With the help of swing create a table of 3 rows and 4 columns and fill each cell by taking input from user.

Ans: ~~With the help of swing create a table of 3 rows and 4 columns or~~

```
import java.awt.swing.JFrame;  
import java.awt.swing.JScrollPane;  
import java.util.Scanner;  
class JTableExamples {
```

```
    JFrame f;  
    JTable j;  
    JTableExamples () {
```

```
        Scanner sc = new Scanner (System.in);  
        f = new JFrame ();  
        f.setTitle ("JTable Example");  
        String[] ColumnNames = new String [4];  
        System.out.println ("Enter the name of columns:");  
        for (int i = 0; i < 4; i++) {  
            ColumnNames[i] = sc.next ();
```

```
        }  
        String[][] data = new String [3][4];  
        System.out.println ("Enter the data:");  
        for (int i = 0; i < 3; i++) {  
            for (int j = 0; j < 4; j++) {  
                data[i][j] = sc.next ();
```

```
            }  
        }  
        j = new JTable (data, ColumnNames);  
        j.setBounds (30, 40, 200, 300);  
        JScrollPane sp = new JScrollPane (j);
```



```

f.add(sp);
f.setSize(500, 200);
f.setSize(true);
}

public static void main (String[] args)
{
    new JTableExamples();
}
}

```

8. Create a html page containing some paragraph. Some listing of items as follows.

- . Tea
  - . Black tea
  - . Green tea
- . coffee.

Create a CSS rule that makes all text in the paragraph 15 times larger than the base font of the system and colors of the text red and shifts all the list items right by 3 units and the nested item by 5 unit. Use inline style sheets.

```

<html>
<head>
<title> Assignment </title>
</head>
<body>
<p style = "font-size: 150%; color: red;">
    This is a sample list styled with inline
    css </p>
<ul style = "margin-left: 30px">
<li> Tea </li>
<ul style = "margin-left: 50px;">
<li> Tea Black Tea </li>
<li> Green Tea </li>

```

```
</ul>  
<li> coffee </li>  
</ul>  
</body>  
</html>
```