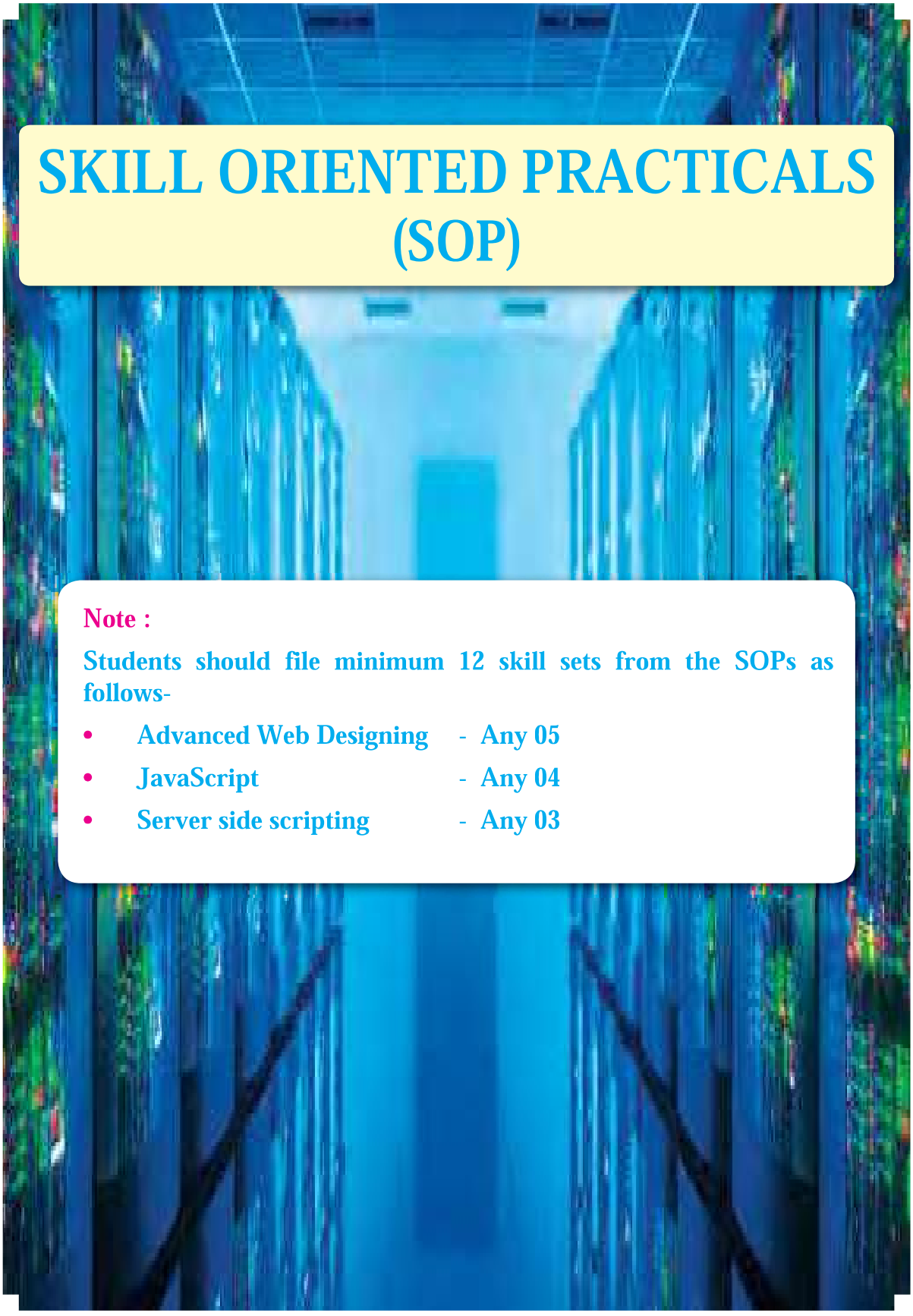


SKILL ORIENTED PRACTICALS (SOP)

Note :

Students should file minimum 12 skill sets from the SOPs as follows-

- **Advanced Web Designing - Any 05**
- **JavaScript - Any 04**
- **Server side scripting - Any 03**

1. Advanced Web Designing

SOP 1 : Creation of website using HTML5

Create a website using HTML5 and CSS using any 4 CSS properties. Write a code for 2 separate pages having different file names such as first page as Index. html and second page as page2.html. Use any theme such as college profile or company profile etc. Every page must contain proper Meta information and design web page as follows-

1) The index page must contain a heading which is highest among other text on pages and must be at centre of the page. There must be a paragraph which introduces general information about the theme chosen. It must have at least 3 physical style tags and one image with alternate text. This page must be connected to other page with proper navigational links.

2) The 2nd page must contain the feedback or enrolment form related with theme chosen with features of HTML5. The form must contain text element and email address of the company or person. Include the submit button.

SOP 2 : Create a webpage using HTML and CSS code to design a web page as the layout displayed below.

The top section will display the heading , 'Tourist places' in header. The section on the left has list of cities. The right hand side displays tourist places of any one of the city .

Use Inline style sheet in the top section to display background color for the text 'Tourist places'. Use internal stylesheet for the left and right section with background color and font styles.

<table>
<tr><td colspan="2">Tourist places</td></tr>
<tr><td>City
1. Pune
2. Banglore
3. Hyderabad
4. Delhi</td><td>Tourist places in Pune
• Shanivarwada
• Kelkar Museum
• Sinhgad fort</td></tr>
</table>

SOP 3 : Create a website using HTML and CSS code to design webpages as follows -

The first webpage will accept the name of the traveller, date of travel , telephone number . It also has submit button as an image .

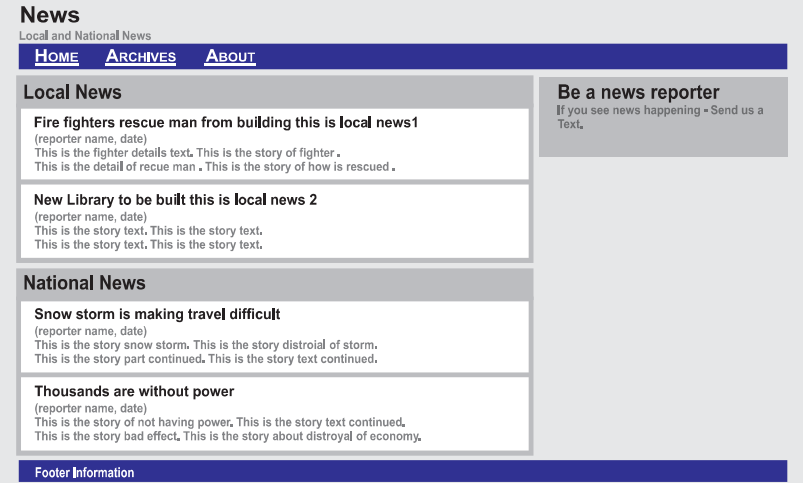
The second webpage has information about the name of transporter, time , seat no and destination displayed one below the other in the form of unordered list as

Name of transporter – Air Asia
Time - 09:30 am
Seat no – B39
Destination - Delhi

Both pages should be interlinked. Create external stylesheet with relevant tags.

SOP 4 : Creation of website using HTML5 and CSS.

Create a webpage as given layout use <nav>,<header>,<footer>,<aside>, <article> with CSS.



SOP 5 : Use of Audio on web pages using HTML5.

Create a webpage named audio.html to set an audio file in web page with controls such that it uses HTML5 elements. The audio file must play as soon as the webpage loads in browser and it will start over again, every time when it is completed.

Create another webpage named audio1.html which provides multiple source file formats for the same audio file that plays a sound with controls. The code must incorporate the list of sound files formats (like wav, MP3 or ogg etc).

SOP 6 : Use of video on web pages using html5.

Create a webpage named video.HTML to display a video file on web page and plays automatically. The dimension of video area should be 150 * 150 pixels.

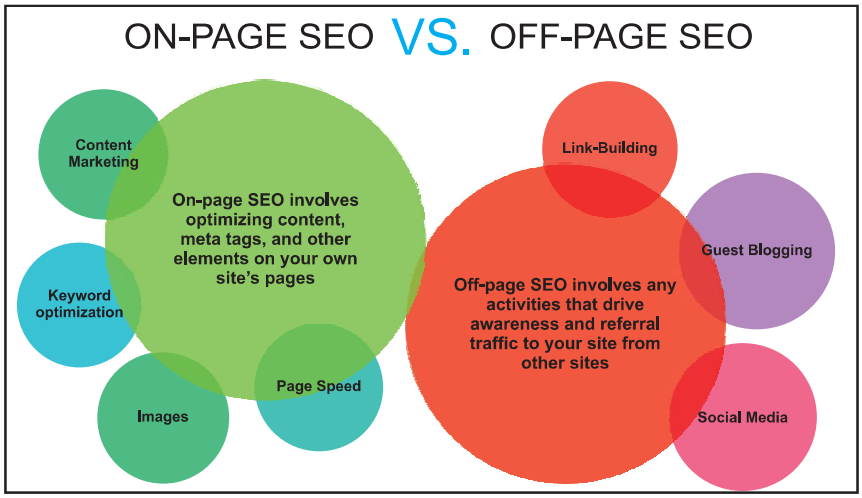
Create another webpage which video provide multiple source file formats for the same video file that plays a video with controls. The dimension of video area should be 300*300 pixels. The code must incorporate the list of video files formats (like webM, MP4 or ogg etc).

SOP 7 : Navigation on an image using Client side image Mapping in web page using html 5.

- Create a webpage named imagemap. html with an inserted image having jpeg, png or gif extension. Create 3 different shapes (like rectangle, circle and polygon) which do not overlap. Note down the co-ordinates making use of Ms-Paint/GIMP/IrfanView/Pinta. Each shape should be mapped or navigate with a different URL, one of the clickable area should navigate to a local webpage.

SOP 8 : Use of SEO methodology to improvise the website.

- Select a website.
- Use an appropriate SEO software and list out the page optimization requirements.
- Write down at least 4 suggestions to optimise the web pages.
- Write importance of SEO.



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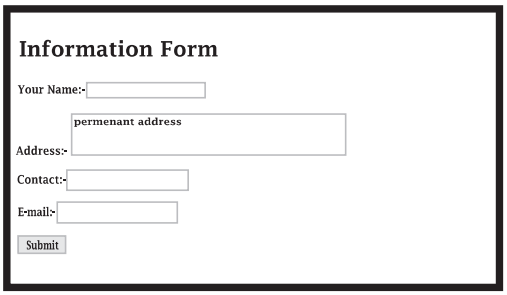
2. Javascript

SOP 1 : Create a web page in HTML having a white background and one Button Object. Write code using JavaScript such that when the mouse is placed over the first button object without clicking, the color of the background of the page should change after every __ seconds. There should be at least 7 different and visibly distinct background colors excluding the default color.

Create another web page using JavaScript where the background color changes automatically after every ___ seconds. This event must be triggered automatically after the page gets loaded in the browser. There should be at least 7 different and visibly distinct background colors.

SOP 2 : Create JavaScript program for the following form validations. Make use of HTML5 properties to do the following validations :

1) Name, address, contact number and email are required fields of the form.
2) Address field should show the hint value which will disappear when field gets focus or key press event.
3) Telephone number should be maximum 10 digit number only.
4) Email field should contain valid email address, @ should appear only once and not at the beginning or at end. It must contain at least one dot(.).
5) Make use of pattern attribute for email to accept lowercase, uppercase alphabets, digits and specified symbols.



SOP 3 : Create event driven JavaScript program for the following. Make use of appropriate variables, JavaScript inbuilt string functions and control structures.

- To accept string from user and count number of vowels in the given string.

SOP 4 : Create event driven JavaScript program for the following. Make use of appropriate variables, JavaScript inbuilt string functions and control structures.

- To accept string from user and reverse the given string and check whether it is palindrome or not.

SOP 5 : Create event driven JavaScript program to convert temperature to and from Celsius, Fahrenheit.

Formula: c/5= (f-32)/9

[where c=Temperature in Celsius and f=Temperature in Fahrenheit.]

Output format : 40 Celsius=104 Fahrenheit

45 Fahrenheit = 7.22222222 Celsius

SOP 6 : Create JavaScript program which computes the average marks of students. Accept six subject marks of student from user. Calculate average marks of student which is used to determine the corresponding grades.

Range	Grade
35 to 60	F
61 to 70	D
71 to 80	C
81 to 90	B
91 to 100	A

SOP 7 : Write a JavaScript function to get difference between two dates in days. Create a page in HTML that contains input box to accept date from user. The input boxes should be used by users to enter their date of birth in the format dd-mm-yyyy. Do not make use of any dropdown boxes.

Example :

```
date_diff_indays('04/02/2019', '11/04/2019');
date_diff_indays('01/01/2020', '31/01/2019');
```

Output :

```
66
-30
```

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3. Server-Side Scripting (PHP)

SOP 1 : Write a PHP program to check if a person is eligible to vote or not. The program should include the following-

- Minimum age required for vote is 18.
- Use PHP functions.
- Use Decision making statement.

SOP 2 : Write a PHP function to count the total number of vowels (a,e,i,o,u) from the string. Accept a string by using HTML form.

SOP 3 : Write a PHP program to perform the following operations on an associative array.

- Display elements of an array along with their keys.
- Display the size of an array.
- Delete an element from an array from the given index.

SOP 4 : Write a PHP program to save marks of English, Hindi, Marathi, Maths and Information Technology in an array. Display marks of individual subject along with total marks and percentage.

SOP 5 : Write a PHP program to save marks of English, Hindi, Marathi, Maths and information technology in an array for 5 students and display total marks and percentage of each students using 'foreach'.

SOP 6 : Write a program using PHP to calculate Electricity bill by accepting the limits.

- For first 100 units - Rs. 4
- For next 100 units - Rs. 5
- For next all units - Rs. 6

SOP 7 : Write a PHP Program to insert a roll number and student name in a database (use postgresql data to create database). Accept roll number and name from the user.

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