**ASSIGNMENT NO. 4**

**TITLE:**

HTML, Java Script

**OBJECTIVES:**

1. Understand about basic concepts of JavaScript.

2. Use JavaScript for validation of data.

**PROBLEM STATEMENT:**

Write a program to design registration form for students by using HTML, CSS& Java Script and perform following validations: all fields mandatory, phone number and email address validation.

**OUTCOMES:**

1. Design static webpage using HTML.

2. Apply JavaScript to HTML pages for validation of data.

**SOFTWARE & HARDWARE REQUIREMENTS:**

**Software’s:** Notepad/any text editor, Any Browser

**THEORY:**

JavaScript is a programming language of HTML as well web. It is preferred for creating network-centric applications.It is integrated and complimentary with Java. As JavaScript is integrated with HTML it is very easy to implement. It is open as well as cross-platform.

**Advantages**: The advantages of using JavaScript are −

-It requires less server interaction

-Immediate feedback to the visitors

-Increased interactivity

-Richer interfaces

**Validation**:

When client enters the all necessary data and press the submit button form validation is done at server side If data entered by a client is incorrect or missing,the server needs to send all data back to the client and request for resubmission of form with correct information. This is really a lengthy process which puts a lot of load (burden) on the server. So, JavaScript provides a way to validate form's data on the client's side itself before sending it to the web server. Form validation performs two functions-

1. **Basic Validation** – First of all, the form must be checked to make sure all the mandatory fields are filled in. It would require just a loop through each field in the form and check for the data.

2. **Data Format Validation** − Secondly, the data that is entered must be checked for correct format and its value. The code must include appropriate logic to test correctness of data.

**TECHNOLOGY/TOOL**

JavaScript can be implemented using JavaScript statements that are placed within the <script>. You can place the <script> tags, containing your JavaScript, anywhere within your web page, but it is normally recommended that you should keep it within the <head> tags.

The script tag takes two important attributes:

- **Language** − this attribute specifies what scripting language you are using. Typically, its value will be JavaScript. Although recent versions of HTML (and XHTML, its successor) have phased out the use of this attribute.

- **Type** − this attribute is what is now recommended to indicate the scripting language in use and its value should be set to "text/javascript".

**DESIGN/EXECUTION STEPS:**

Following steps are used to Create and Execute web applications,

1. Write an HTML code in notepad/text editor and save with .html extension.

2. Write the function for validation of email id and phone no and enclose

this function in script.

3. Call this function on ‘onClick’ event of submit button.

4. Open HTML page in the browser.

**CONCLUSION/ANALYSIS:**

Hence, we applied validate the data using JavaScript.

**ORAL QUESTIONS**

1. Name some Java Script features.

2. How to define anonymous function?

3. What is callback?

4. What is the difference between undefined and not-defined in JavaScript?

5. What is ‘closure’ in JavaScript?

6. What are JavaScript data types?

7. What are all the types of Pop up boxes available in JavaScript?