

Aim: Create Simple web page to design resume Using
HTML 5

Software :- Web Browser, Codepen

Theory:-

| | |
|---------------------------------------|---|
| <code><a></code> | Defines a hyperlink |
| <code><body></code> | Defines the document's body |
| <code> </code> | Produces a single line break. |
| <code><div></code> | Specifies a division or a section in document. |
| <code><h1> to <h6></code> | Defines HTML headings |
| <code><head></code> | Define the head position of document that contains info about document. |
| <code><header></code> | Represents the header of a doc. or section |
| <code><hr></code> | Produce a horizontal line |
| <code><html></code> | Defines the root of an HTML document |
| <code><nav></code> | Defines a section of a navigation links. |
| <code><p></code> | Defines a paragraph |
| <code><link></code> | Defines the relationship between current doc. and an external resource |
| <code><meta></code> | Provides structured metadata about the document content. |
| <code><title></code> | Defines a title for the document. |
| <code><button></code> | Creates a clickable button. |
| <code><form></code> | Defines an input control HTML form for user |
| <code><label></code> | Defines a label for an <code><input></code> control |
| <code><option></code> | Defines an option in selection list. |
| <code><select></code> | Defines a selection list within a form |

FOR EDUCATIONAL USE

| | |
|---------------------------|---|
| <code><u></code> | Obsolete Displays text with an underline. |
| <code><tt></code> | Display text in a teletype style |
| <code><sub></code> | Define subscripted text. |
| <code><sup></code> | Define superscripted text. |
| <code><dd></code> | Definition for a term in a definition list. |
| <code><dl></code> | Defines a definition list. |
| <code></code> | Defines a list item. |
| <code></code> | Defines an ordered list. |
| <code></code> | Defines an unordered list. |
| <code><td></code> | Defines a cell in table. |
| <code><th></code> | Defines a header cell in a table. |
| <code><tr></code> | Defines a row of cells in a table. |
| <code></code> | Displays an image. |
| <code><time></code> | Represents a time and / or date. |

CSS 3 modules:-

CSS3 is collaboration of CSS2 specifications we cancelled this collaboration in module. Some of modules are shown below.

Selectors.

Box Model.

Background

Text effects

2D Transformations.

3D Transformations.

Animations.

The CSS syntax is made up of 3 parts: a selector, a property and a value
`{ property : value }`

an underlined
style

definition :-

table.
a table

date

(when we
use some

part: a
Selector

To make the style definitions readable, you can describe one property on each line, like this:

p { text-align: center;
color: black;

font-family: Arial }

Types of CSS:-

A. External Style Sheet:-

<link rel="stylesheet" type="text/css" href="style.css">

B. Internal Style Sheet:-

<style type="text/css">

hr { color: sienna }

p { margin-left: 20px }

body { background-image: url("images/back-ho.jpg") }

</style>

C. Inline Style Sheet:-

<div style="color: red;"><p style="font-size: 12px">

css 3 has supported additional color properties:-

• RGB(A) colours • HCL colours • HSLA color.

Output analysis:-

It is easy to learn and easy to use also a platform independent also images, video and audio can be added to a web page.

HTML helps us to develop fundamentals about web programming. HTML can only create static web pages. For dynamic web pages, other languages have to be used.

Additional learning:- The HTML once it's in DOM, not the written markup itself. Also it's different thing than validation HTML for in it doesn't catch unclosed tags and such.

Conclusion: Thus we are able to create web pages using HTML tags and design. Resume, HTML5 & CSS3.



Aim:- Create page layouts and site designs using designing tools like Bootstrap.

Software Required:- Web Browser

Theory:-

Bootstrap is a sleek, intuitive, and powerful mobile first front end framework for faster and easier web development. It uses HTML, CSS & JavaScript

Bootstrap Package includes:-

Scaffolding: Bootstrap provides a basic structure with Grid System, link styles, background. This is covered in detail in the section Bootstrap Basic Structure.

CSS Bootstrap: comes with feature of global CSS settings, fundamental HTML elements styled and enhanced with extensible classes and an advanced grid system. This is covered in detail in the Bootstrap with CSS.

Components: Bootstrap contains over a dozen reusable components built to provide iconography, dropdowns, navigation, alerts, popovers and much more. This is covered in detail in the section Layout Components.

Java Script plugins: Bootstrap contains over a dozen custom jQuery plugins. You can easily include them all or one by one. This is covered in details in section Bootstrap plugins.

Customize it you can customize Bootstrap's components via variables and jQuery plugin to get your own very own version.

Output Analysis :- Row must be placed within container class for proper alignment and padding. Predefined grid classes, like row and col-xs-4 are available for quickly making grid layouts. LESS mixins can also be used for more sensible layouts. Columns create gutters.

Additional learning: The grid system helps you to create your layout and easily build a responsive website. There have not been any changes in the class names except the xs class which no longer exists in Bootstrap. The Grid is built with the flexbox system, so for alignment you have to use a flexbox property, e.g. we need to add a justify-content property and set it to flex-end for placing the new bar menu.

Conclusion:- Bootstrap is free, open-source front end library for designing websites and web applications. It contains HTML and CSS-based design templates for everything. Bootstrap concern itself with front-end development only.

(Top Left)
(Top Right)

Aim:- To design user registration form for your case study and apply client side validation using javascript and HTML 5.

Software Required: Web Browser.

Theory:- JavaScript is the world's most popular programming language. It is the language for HTML, for the Web, for servers (PC, laptops, tablets, phones and more).

- Java Script in HTML must be inserted between `<Script>` and `</Script>` tags.
- Java Scripts can be put in the `<body>` and in the `<head>` section of an HTML page.

The `<Script>` Tag:

To insert a javascript into an HTML page, use the `<Script>` tag.

The `<Script>` and `</Script>` tells where the javascript start and ends. The lines between the `<Script>` and `</Script>` contain the java script.

`<Script>`

`alert ("My First Javascript");`

`</Script>`

Java Script in `<body>`

Example.

`<!DOCTYPE HTML>`

`<html>`

```
<body>....  
<script>  
document.write("<h1>This is heading</h1>");  
document.write("<p>This is a paragraph</p>");  
</script>  
....</body>....  
</html>
```

JavaScript functions and Events.

- Javascript statements, in the example above, are executed while the page loads.
- More often, we want to execute code when an event occurs, like when user clicks a button.
- If we put Javascript code inside a function, we can call that function when an event occurs. JavaScript in <head> or <body>. You can place an unlimited no. of scripts in a HTML document.
- Scripts can be an unlimited no. of scripts in an HTML document. This way they are all in one place and do not interfere with page content.

Accessing object properties

Properties are the values associated with object name. Properly Name.

Javascript can be used to validate data in HTML forms before sending off the content to server. Form data that typically are checked by javascript could be:

has the user left required field empty?
has the user entered a valid email address?
has the user entered a valid date?
has the user entered text in a numerical field?

Required fields

The function below checks if a field has been left empty. If the field is blank, an alert box alerts a message, the function returns false, and the form will not be submitted.

function validateForm()

```
function validateForm () {  
    var x = document.forms["myform"]["fname"] [  
        if (x == null || x == "") {  
            alert ("First name must be filled out.");  
            return false;  
        }  
    }  
}
```

The function above could be called when a form is submitted.

Email Validation:-

The function below checks if the content has the general syntax of an email. This means that the input data must contain an @ sign and at least one dot (.). Also, the @ must not be first character of email address, and the last dot must be present after the @ sign, and min. 2. char before the end.

Bootstrap Source Code:

If you download the Bootstrap source code then the file structure would be as follows :

```
|- less /  
|- js /  
|- fonts /  
|   |- dist /  
|       |- CSS /  
|       |- JS /  
|       |- fonts /  
|- docs - assets /  
|- examples /  
*- .html
```

```
function Validation form () {  
    var x = document forms ("myForm") ["email"]  
    var atpos = x. index of ("@")  
    var dotpos = x. last index of (".")  
    if (atpos < 1 || dotpos < atpos + 2 || dotpos + 2 >  
        = x. length) {  
        alert ("Not a valid e-mail address!");  
        return false;  
    }  
}
```

Output Analysis :- In javascript, most things are objects from core javascript features like strings and arrays to the browser APIs built on top of Javascript.

Additional learning :- We can even create our own objects to encapsulate related functions and variables into efficient packages. The object oriented nature of Javascript is important to understand if you want to go further with your knowledge of language and write code more efficiently we have to provide external files. Scripts can also be placed in external files. External files often contain code to be used by several different web pages. External javascript files have the file extension .js.

Conclusion:- Everything in javascript is object. We were able to learn how to define document and window object, client side scripting, embed javascript code into HTML document using Scripting tag. Validation form; and javascript code was embedded into HTML document. The different fields of form can be validated using javascript.