

Dynamic vs Static Websites

Web Authoring and Design

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Outline

- What do we mean by static and dynamic websites?
- Summary
- Review/Discussion

Content, Style and Behavior

- HTML defines the structure and layout of a Web document by using a variety of tags and attributes. Since its initial introduction in late 1991, it came to encompass a wider variety of stylistic and dynamic behavior capabilities to meet the demands of web developers. When we examine the elements of a web page, we can find that, it can consist of up to three layers

Content

- Content or Structure is the base layer, we presented it through HTML (Hyper Text Markup Language) format and it describes text, graphics, and files containing other information are organized and linked together

Style

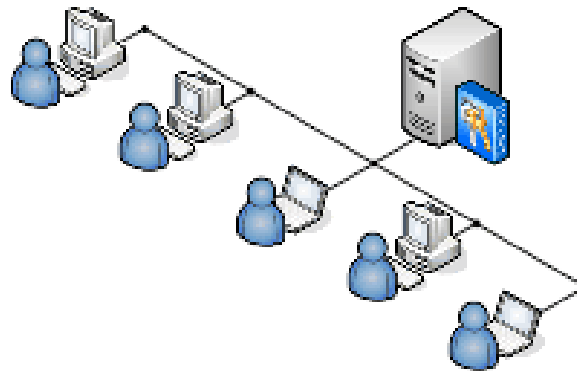
- Style or Presentation, we can focus on making the site look attractive, by adding a layer of presentation information using CSS (Cascading Style Sheet)

Behavior

- Behavior, we can use JavaScript to introduce an added layer of user interaction and dynamic behavior, which will make the site easier to use in browsers equipped with JavaScript

Client side vs Server side

- web programming, there are two different types of programming models: Client side programming and Server side programming



- Client side programming considers to scripts that run within your web browser and these scripts has no interaction with a web server in order for the scripts to run. Javascript is the most popular client side scripting language

- Server-side programming refers to programs that run on the web server, which then sends results to your web browser. PHP , Asp.net etc. are the popular Server side programming languages

Javascript

- Javascript programs runs only in the web browsers and these scripts are read and executed by an interpreter (or engine) inside the web browser
- The most common uses of JavaScript are interacting with clients, getting available information from them, and validating their actions

Javascript is Case-Sensitive

- First and most important thing regarding Javascript is that it is case sensitive
- Everything defined in the Javascript is case sensitive, that means a variable 'var' is different from a variable named 'Var'



Aa Bb
Cc Dd

Embedded in your HTML files

- Javascript between the `< script > ... < /script >` tags. When the browser encounters a `< script >` tag, it assumes that the script block is written in JavaScript. you can place these script blocks in the `< head >` or in the `< body >` section of HTML page or you can use both sections at the same time

Javascript at Head section

```
<!DOCTYPE html>
<html>
  <head>
    <script>
      alert("Javascript run at HEAD section");
    </script>
  </head>
  <body>
  </body>
</html>
```

Javascript at Body Section

```
<!DOCTYPE html>
<html>
  <head>
  </head>
  <body>
    <script>
      alert("Javascript run at BODY section");
    </script>
  </body>
</html>
```

External script File

- Either be embedded in your HTML files or placed in an external script file with a .js extension

```
<script src="scriptSource.js">....</script>
```

Simple First JavaScript Program

■ .html file and type the following code:

```
<!DOCTYPE html>
<html>
<body bgcolor="white">
  <p>First Javascript Program</p>
  <script type="text/javascript">
    alert("Click OK to change the background color !!!");
    document.bgColor = "red";
  </script>
</body>
</html>
```


- When you open the file in web browser, first you get a message box in a white background and then you press OK button you can see the background color is changed to RED color

This Week

- Review Slides

- Read Associated Chapters

- Weekly Tasks

 - ▷ Update GitHub Account/Webpage

- **Online Quizzes**

Summary

- Overview of Dynamic and Static Websites
- Getting started with scripting and Javascript
- Hands-On/Practical

Questions/Discussion

```
#ie {  
  break-inside: auto;  
}
```

