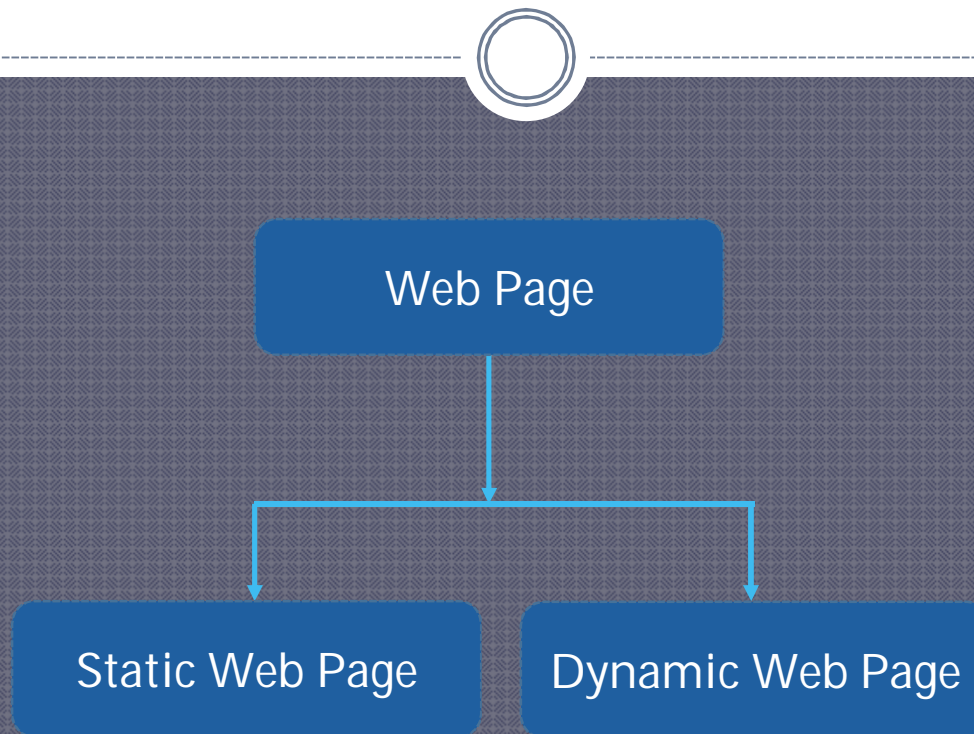# .NET Web Application

For Developing .NET Web Application We need to know following things:-

- ❖ HTML
- ❖ C# .NET
- ❖ ASP.NET Web Controls
- ❖ SQL Server
- ❖ ADO.NET
- ❖ ASP.NET Data Controls
- ❖ AJAX
- ❖ Implementation of J-Query/Java Script

Introduction to Web Application

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                    ┌──────────────┐
                    │   Web Page   │
                    └──────┬───────┘
                           │
             ┌─────────────┴─────────────┐
             ▼                           ▼
   ┌──────────────────┐        ┌────────────────────┐
   │ Static Web Page  │        │ Dynamic Web Page   │
   └──────────────────┘        └────────────────────┘
```

Static Web Page

Static Web Pages are usually simple HTML files that are stored on the web server, when a browser request a static web page the web server simply retrieve the file from the disc and send it back to the browser. Static web pages usually have file extension of .HTM or .HTML.

Dynamic Web Page

A dynamic web pages is a HTML document i.e. generated by a web application , often the web page changes according to information that is send to the web application. When server receive request for a dynamic web page the server passes the request to an application server , then the application server execute the web application which generate a HTML document.

HTML Page

What is an HTML File?

- HTML stands for **H**yper **T**ext **M**arkup **L**anguage
- An HTML file is a text file containing small **markup tags**
- HTML tags are surrounded by the **two characters < and >**
- The markup tags tell the Web browser **how to display** the page
- An HTML file must have an **.htm** or **.html** file extension
- An HTML file can be created using a **simple text editor or Dreamweaver**

HTML Web Page Creation

For creating pure HTML Page we need two things

1.) HTML Tags
2.) CSS(Cascading Styling Sheet)
a.) External CSS
b.) Internal CSS
c.) Inline CSS
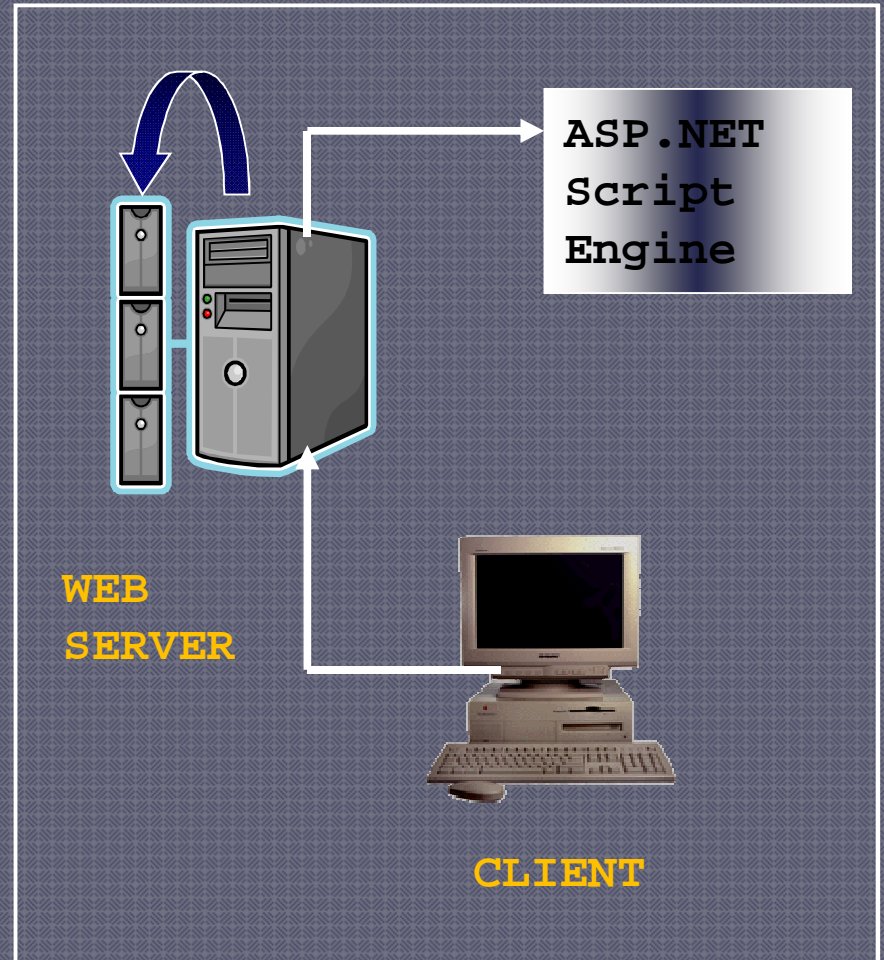
ASP .NET

With C#

Six Important Facts about ASP .NET

1. It is Integrated with .NET Framework
2. It is Compiled not Interpreted
3. It is Multilanguage
4. It is Object Oriented
5. It is Multi-Device and Multi-Browser
6. It is Easy to Deploy and Configure

Working of an ASP .NET Application

To execute an ASP.NET file, the following steps are followed:

1. A web browser sends a request for an ASP.NET file to the web server by using a URL.

2. The web server receives the request and retrieves the appropriate ASP.NET file from the disk or memory.

3. The web server forwards the file to the ASP.NET script engine for processing.

ASP.NET Script Engine

WEB SERVER

CLIENT

Working of an ASP .NET Application

4. The ASP.NET script engine reads the file from top to bottom and executes it.

5. The processed ASP.NET file is generated as an HTML document and the ASP.NET script engine sends the HTML page to the Web server.

6. The Web server then sends the HTML code to the client which interprets the output and displays it.

ASP.NET Script Engine

WEB SERVER

CLIENT