Naresh Information Technologies

.net
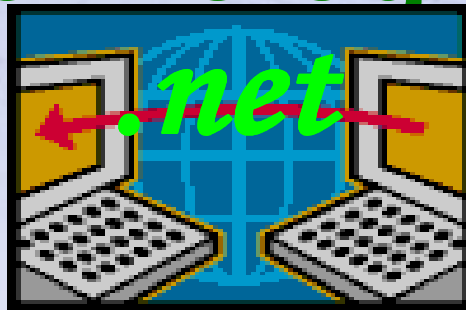
Microsoft ASP.net

ASP.NET **Web Forms & Web Services**	**Windows Form:** **Windows User Interface**
ADO.NET: Data & XML	
.NET Framework Base Class Library	
Common Language Runtime	

.net

.NET Framework

VB	C++	C#	JScript	J#

Common Language Specification

ASP.NET
Web Forms   **Web Service**
Mobile Forms

Windows Forms

ADO.NET and XML

Base Class Library

Common Language Runtime

**Operating System**

Visual Studio.NET

Prerequisites for Web Applications

- Web Applications & Desktop Applications

- Web Server with Web Applications

- Web Server Role, about IIS

- Web Browsers, Web Support Languages

- Scripting

- Client-Side & Server-Side Scripting

- State Management

WebForms & WinForms

- In .NET, GUI-based web applications are called "*WebForms*"
  - vs. "*WinForms*", which are GUI-based Windows desktop applications
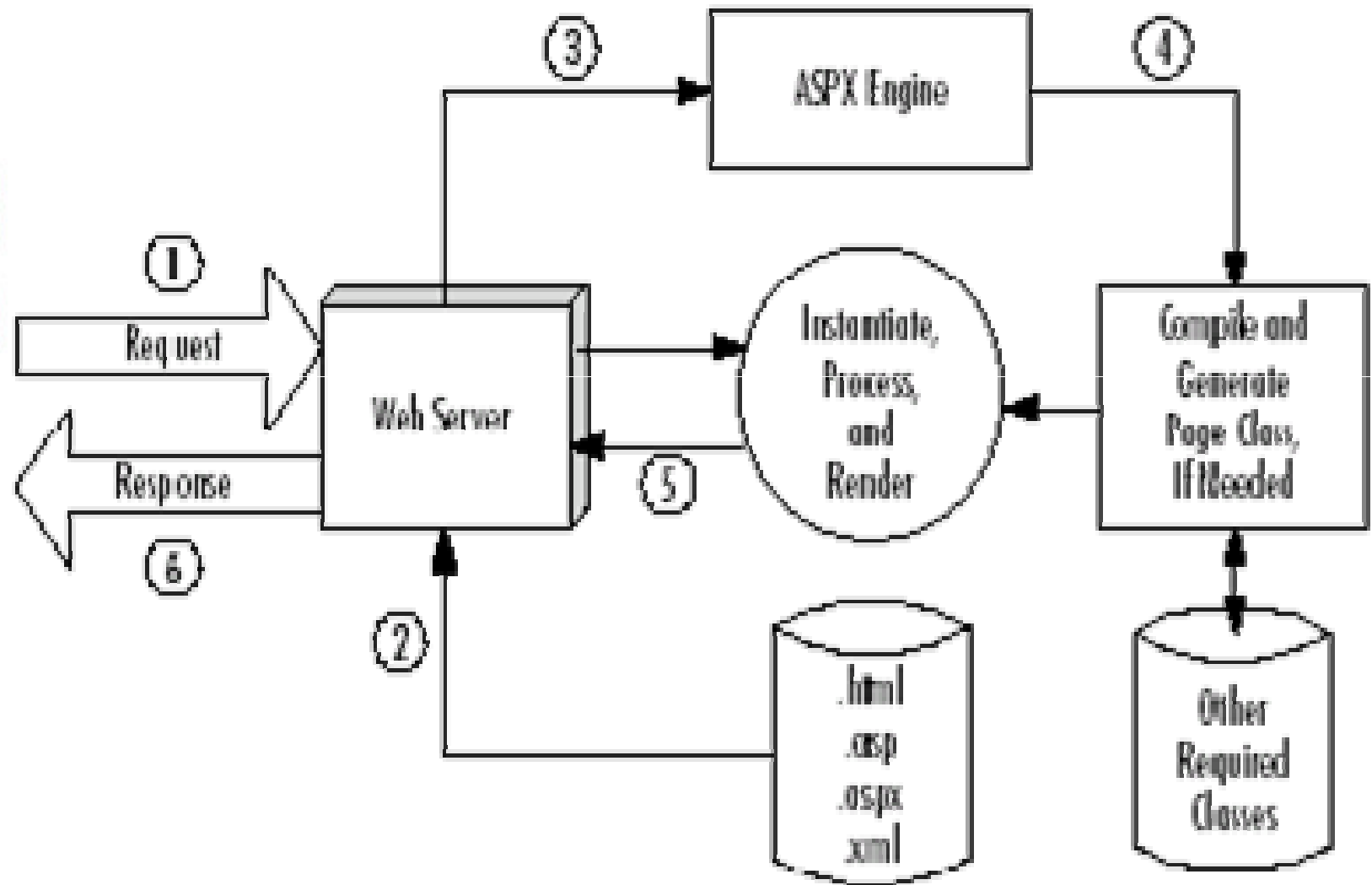- Example: a simple web-based Calculator
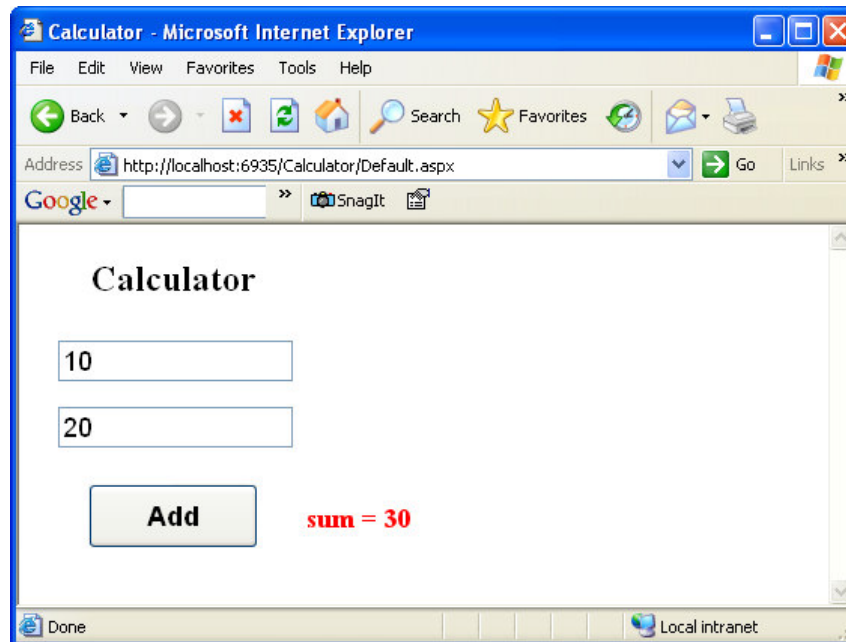
ASP.NET Features

- **Simplified**
- **Better Performance**
- **Strong typed Language**
- **Event Driven Model**
- **Separation of Code & Design**
- **Security**
- **Easier Deployment & Configuration**
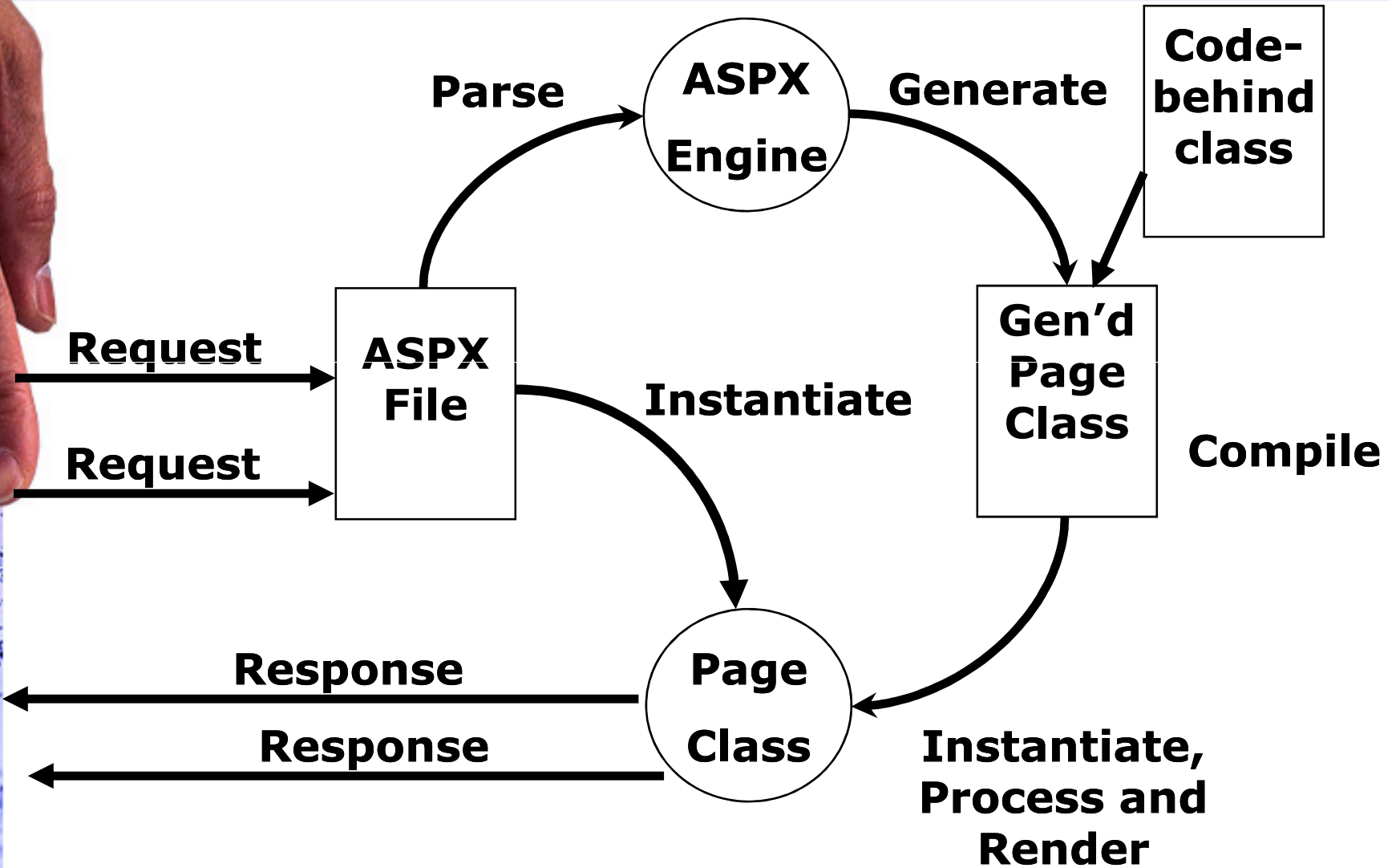- **Debugging**
- **Better State Management**

Web Forms

- **Compiled**

- **Support for VB Language**

- **Built-In Designers**

- **Server-Side Controls**

- **Intelligent Forms**
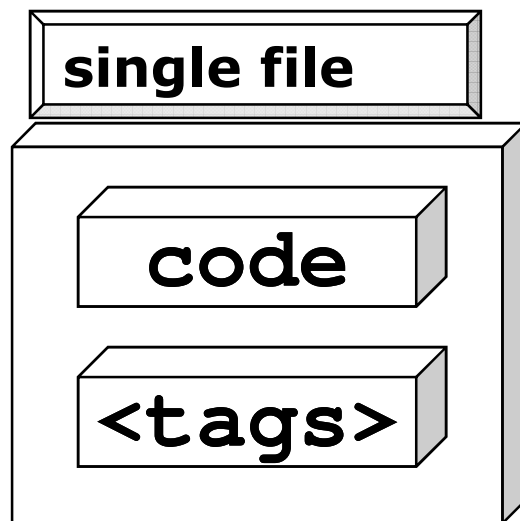
ASP.Net Execution Scenario

Runtime Compilation

Parse

ASPX Engine

Generate

Code-behind class

Request

ASPX File

Request

Instantiate

Gen'd Page Class

Compile

Response

Page Class

Response

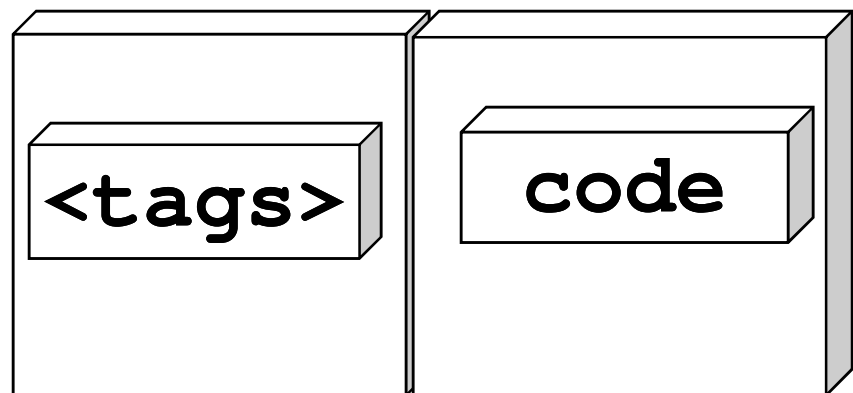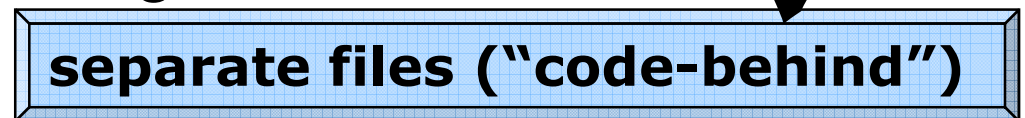**Instantiate, Process and Render**

ASP.NET Pages: Part Declarative, Part Code

- Combines declarative tags (HTML, ASPX directives, server controls tags, and static text) with code in a single file or in separate files.

- Unlike ASP, good separation provided between code and tags

single file

```
code
```

```
<tags>
```

Form1.aspx

separate files ("code-behind") ✓

```
<tags>
```

```
code
```

Form1.aspx Form1.aspx.vb