

Introduction to Internet Programming

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CSE686 – Internet Programming

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Scope of Course

- Programming models for client and server
 - Windows platform, using Visual Studio or VS Code
- Twelve labs – one due each week
 - Develop web pages and applications based on current lecture
- Final Project
 - Build a web site compliant with one of several project specifications
 - Will include Asp.Net MVC, Javascript, CSS, database programming, and development of a web service.

Things to absorb

- **Programming Languages**

- **HTML5** - HyperText Markup Language
 - Semantic structure
- **CSS3** - Cascading Style Sheets
 - Presentation with style formatting
- **Javascript6**
 - Behavior – responses to events (mouse clicks, hover, ...)
- **C# Programming Language**
 - A Java like language in the C/C++ family
 - Server-side programs that control how pages are generated.
- **SQL and Linq** - Structured Query Languages
 - Used to manage data in Relational Databases like SQL Server

More Things to Absorb

- **Flow model**
 - Determines how a browser renders HTML
- **Box model**
 - Cascading styles manipulate properties of boxes around HTML elements
- **DOM – Document Object Model**
 - Browsers construct an internal parse tree when a page is loaded
 - Each node in tree corresponds to an HTML element, attribute, or text
 - The DOM provides an interface to the parse tree to support programming with Javascript and CSS
- **ASP.Net Page and Control model**
 - How Asp generates HTML to satisfy a browser request
- **ASP.Net MVC**
 - Model-View-Controller structure supports building complex websites that use loose coupling to gracefully support change
- **Server-side object models**
 - Request, Response, Session, Application, ...
- **Relational data model**
 - Used to design data tables and relationships between tables

Structure of Course

- Class meets twice each week
 - Lectures occupy about half that time
 - The rest you devote to labs
 - Labs are checked at the end of each class
 - Late fees levied if you don't finish
 - On the last day of classes you will demonstrate your web site, web service, and web service client, a culmination of everything you've learned in CSE686

End of Presentation