

# MOBILE OSs, DEVELOPMENT ENVIRONMENTS, IOS AND ANDROID

## Lesson 03

### Development Tools and Emulators

# DEVELOPMENT TOOLS

- Tools are required for the mobile client webpage design at the server and for the design of page rendering to the mobile
- Mobile client and mobile device server need special development tools.

# DEVELOPMENT TOOLS

- VisualStudio.Net is part of the .NET framework
- Microsoft ASP.NET 5.2 new features and more than new controls to ASP.NET
- Three models for app development: WebPages, model-view controller (MVC), and WebForms in Visual Basic (VB), C#, and Java

# DEVELOPMENT TOOLS

- JavaScript-based popular client-side Web framework is MVC
- AngularJS is a JavaScript-based popular client-side MVC (Model, View and Controller)

# MODEL

- A model represents an application core—for example, a list of database records
- Model is the part of the application
- Handles the logic for the application data
- Model objects retrieve database records for client-side DataStore

# VIEW

- View means display the data, for example, the database records
- An MVC has library for navigation bars (navbars), sidebars, tabs, and accordions for the UIs
- An accordion— widget for expandable and collapsible content holder (container)

# CONTROLLER

- A controller handles the input (to the database records) and the UI
- Reads data from view
- Controls user input
- Sends input data to the model (application core)

# JAVA-BASED MOBILE DEVICES

- J2ME wireless toolkit
- MetroWorks CodeWarrior
- JBuilder Mobile



# DEVICES OS SPECIFIC DEVELOPMENT TOOLS

- Software development kit/Integrated development environment (SDK/IDE)-based emulator
- Remote debug options also provisioned by the device manufacturers to the app developers; The options enable the developer to make live changes to the Web page on an emulated mobile device.

# DEVICE EMULATOR

- Creates a mirror image of the device with user inputs as used in the real device
- Emulator enables live connectivity with the server at the Web and enables the developer to make live changes

# IOS AND ANDROID EMULATORS

- The iOS and Android devices emulators provided by the websites for their App developers
- Used for app developments and testing

# SUMMARY

- Development Tools
- MVC
- Devices and OS specific emulators
- iOS and Android Emulators

## End of Lesson 03

# Development Tools and Emulators