# **Knowledge Point**

# **Console Applications**

- Introducing the .NET Platform
- Introducing the C# Language
- C# Language Essentials
- Expressions and Operators
- Data type and object
- Control flow of program
- Basics of exceptions and resource management
- Method
- Field, properties and indexer
- Constructors and finalizers
- Operator overloading and conversions
- Object oriented programming
- Generic types and methods
- Collection types
- Delegates and events
- Exceptions handling
- Namespaces
- Assemblies and application domains
- Working with I/O
- Threading and synchronization

#### Windows Programming Basics

- Introduction of windows applications
- Window application and .Net
- Woindow form Basics
- Event handling
- IDE
- Intellisense
- Integrated compiler, solutions builder and debugger
- Solution explorer
- Menus
- Setting various properties of the form
- Adding event handling

### More Windows Controls and Standard dialog boxes

- Collection controls
- List box control
- Combobox control
- Imagelist control
- Listview control
- Treenode editor
- Adding/removing items at runtime

- Tree view event
- Main menu
- Toolbar
- Datetime picker
- Windows standard dialog boxes
- Debugging

#### Database connectivity using ADO.NET

- Introduction ADO.net
- Different components of ADO.net
- A review of basic SQL queries
- Performing common data access tasks
- Connection string, connection, command string
- Data adapter
- Creating and filing the dataset
- Loading tables
- Filling the controls on the form
- Navigating through the records
- Updating the table
- Editing records
- Inserting, deletion and updating of records
- A demonstration application for data grid control

#### ASP.NET Web Server Controls

- Introduction of ASP.NET
- An overview of web server controls
- Label
- Textbox
- Button
- Linkbutton
- Image button
- Hyperlink
- Dropdownlist
- Listbox
- Checkbox
- Checkboxlist
- Radiobutton
- Radiobuttonlist
- Image
- Table
- Calendar
- Adroatator
- Panel
- Placeholder
- Bulletedlist
- hiddenfield
- fileupload

- multiview and view
- wizard
- Imagemap

### Validation Server Control

- Requiredfieldvalidator
- Comparevalidator
- Rangevalidator
- Regularexpressionvalidator
- Customvalidator
- Validationsummary
- Working with validation groups

### HTML and CSS Design with ASP.NET

- HTML and CSS overview
- Introducing CSS
- Creating Style sheets
- CSS Rules
- CSS inheritance
- Element layout and positioning
- Working with HTML and CSS

### Working with Master pages

- Explain the need of master pages
- The basic of master pages
- Master page
- Content page
- Working with controls and properties from the master pages

### **Themes and Skins**

- Using ASP.net themes
- Creating your own themes creating a skin
- Including CSS files in your themes

### • Themes, skins, and custom controls

## Data Binding and Data Management

- Data Source controls
- sqlDatasource control
- AccessDataSource control
- GridView
- Basic ADO.NET features
- Common ADO.NET tasks
- Connection object
- Command object
- DataReader
- DatAdapter
- DataSet and DataTable
- Creating a Connection to the dcataSource
- Introduction of XML
- Use of XML

#### Security and Membership

- Authentication and Authorization
- Setting up your web site for membership
- Adding users
- Working with authenticated users
- Adding users
- Working with authenticated users
- Dealing with passwords
- Using the login view server control
- Using the web site administration tool
- Windows based authentication
- Passport authentication
- Authenticating specific file and folders

#### State management

- Cookies
- Understanding the session object in ASP.NET
- Configuring session state management
- Extending session state with other providers
- Cookies less session state

#### ASP.NET AJAX

- Understanding the need for AJAX
- ASP.NET AJAX
- Developing with asp.net ajax
- Timer Control
- Using Multiple update panel controls
- Working with page History
- Script Combining