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# CC-ASP.NET

## Certificate Course in ASP.NET

**COURSE CODE : CC-037**

**COURSE CONTENT & SYLLABUS**

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# CC-ASP.NET

## Certificate Course in ASP.NET

### COURSE CONTENTS

COURSE CODE – CC-037

ELIGIBILITY : 12<sup>TH</sup> CLASS & ABOVE

DURATION : 3 MONTH

- WEB PROGRAMMING INTRODUCTION
- HTML AND JAVASCRIPT
- INTRODUCTION TO ASP
- ASP.NET INTRODUCTION & SAMPLE PROGRAMS
- VALIDATION CONTROLS
- APPLYING THEMES AND STYLES TO CONTROLS
- ASP.NET ARCHITECTURE
- PAGE NAVIGATION OPTIONS
- CREATING A LAYOUT USING MASTER PAGES
- USER CONTROL
- ASP.NET STATE MANAGEMENT
- DATABOUND CONTROLS
- CREATING VIRTUAL DIRECTORY & WEB APPLICATION
- GLOBAL.ASAX & HTTPAPPLICATION
- UNDERSTANDING CONFIGURATION FILE WEB CONFIG
- WEB CACHING
- AUTHENTICATION & AUTHORIZATION
- GLOBALIZATION AND LOCALIZATION
- AJAX.NET

# CC-ASP.NET

## Certificate Course in ASP.NET

### COURSE SYLLABUS

#### **WEB PROGRAMMING INTRODUCTION**

- A. UNDERSTANDING ROLE OF WEB SERVER AND WEB BROWSER
- B. BRIEF ABOUT HTTP PROTOCOL
- C. HTTP REQUEST STRUCTURE
- D. FORM TAG AND COMPARISON BETWEEN GET AND POST METHODS
- E. HTTP RESPONSE STRUCTURE

#### **HTML AND JAVASCRIPT**

- A. UNDERSTANDING HTML FORM TAG AND ELEMENTS WITHIN IT
- B. JAVA SCRIPT USING SAMPLE PROGRAMS

#### **INTRODUCTION TO ASP**

- A. INTRODUCTION TO ASP
- B. TYPES OF PATH
- C. EXAMPLES USING RESPONSE OBJECT OF ASP
- D. WORKING WITH FORM TAG
- E. IMPORTANT POINTS ABOUT THE FORM SUBMISSION
- F. FEW MORE EXAMPLES
- G. PROBLEM WITH ASP

#### **ASP.NET INTRODUCTION & SAMPLE PROGRAMS**

- A. HOW TO CREATE AND RUN THE FIRST ASP.NET APPLICATION
- B. UNDERSTANDING THE CODE GENERATED BY VS.NET
- C. EXAMPLE PROGRAMS
- D. UNDERSTANDING AUTO POST BACK
- E. TYPES OF SERVER CONTROLS
  - A. HTML CONTROLS
  - B. WEB SERVER CONTROLS
- F. EXPLORING SERVER CONTROLS

#### **VALIDATION CONTROLS**

- A. BASE VALIDATOR
- B. VALIDATION SUMMARY
- C. REQUIRED FIELD VALIDATOR
- D. COMPARE VALIDATOR
- E. RANGE VALIDATOR
- F. REGULAR EXPRESSION VALIDATOR
- G. CAUSES VALIDATION PROPERTY OF BUTTON
- H. GROUPING CONTROLS FOR VALIDATION

## **APPLYING THEMES AND STYLES TO CONTROLS**

- A. WORKING WITH CSS
- B. USING THEMES TO CUSTOMIZE A SITE
- C. NAMED SKINS WITHIN A THEME
- D. SERVER-SIDE STYLES USING THEMES
- E. CONTENTS OF A THEME AND SKIN
- F. THEMES AND PROFILES

## **ASP.NET ARCHITECTURE**

- A. WHAT IS APP DOMAIN
- B. LIFE CYCLE OF A WEB FORM WHEN REQUESTED BY A CLIENT.
- C. HOW DOES A CONTROL MANAGES ITS STATE
- D. ENABLE VIEW STATE PROPERTY
- E. EVENT HANDLING IN WEB FORMS
- F. WRITING / USING CUSTOM CLASSES IN WEB APPLICATION

## **PAGE NAVIGATION OPTIONS**

- A. RESPONSE REDIRECT
- B. SERVER TRANSFER
- C. CROSS PAGE POST BACK PROPERTY OF BUTTON
  - 1. ACCESSING CONTROLS OF PREVIOUS PAGE
  - 2. ACCESSING PROPERTIES OF PREVIOUS PAGE
  - 3. PREVIOUS PAGE TYPE DIRECTIVE

## **CREATING A LAYOUT USING MASTER PAGES**

- A. WHY MASTER PAGES
- B. SIGNIFICANCE OF CONTENT PLACE HOLDER TAG IN MASTER PAGE AND CONTENT TAG IN WEB FORM
- C. HOW A CONTROL OF MASTER PAGE CAN BE ACCESSED / PROGRAMMED IN WEB FORM
  - 1. MASTER FIND CONTROL
  - 2. PUBLIC PROPERTY IN MASTER PAGE AND <%@MASTER TYPE DIRECTIVE IN WEB FORM
- D. LOAD AND LOAD COMPLETE EVENTS OF THE PAGE AND MASTER PAGE CLASSES
- E. UNDERSTANDING CLIENT ID AND UNIQUE ID PROPERTIES

## **USER CONTROL**

- A. CREATING A USER CONTROL
- B. ADDING A USER CONTROL TO THE WEB FORM
- C. REGISTER – DIRECTIVE
- D. LOADING USER CONTROL DYNAMICALLY
- E. USAGE OF PAGE CLIENT SCRIPT REGISTER CLIENT SCRIPT BLOCK METHOD

**ASP.NET STATE MANAGEMENT**

- A. NEED FOR STATE MANAGEMENT
- B. STATIC MEMBERS IN WEB FORM
- C. GLOBAL CLASS IN APP CODE FOLDER
- D. VIEW STATE
- E. HIDDEN FIELD
- F. QUERY STRING
- G. HTTP CONTEXT
- H. HTTP COOKIE AND COOKIE DICTIONARY
- I. HTTP SESSION STATE
- J. HTTP APPLICATION STATE

**DATABOUND CONTROLS**

- A. RENDERING TABLE O/P USING SQL DATA ADAPTER AND SQL COMMAND READER
- B. SQL DATA SOURCE
- C. GRID VIEW
- D. DETAILS VIEW
- E. FORMS VIEW
- F. DATA LIST
- G. REPEATER
- H. LIST VIEW

**CREATING VIRTUAL DIRECTORY & WEB APPLICATION**

- A. WHAT IS WEB APPLICATIONS & VIRTUAL DIRECTORY
- B. USING VS.NET CREATING WEB APPLICATION WITH LOCATION AS IIS
- C. HOW TO CREATE A VIRTUAL DIRECTORY & WEB APPLICATION IN IIS
- D. ADVANTAGES OF WEB APPLICATION
- E. STEPS FOR MOVING WEB APPLICATION CREATED USING FILE SYSTEM TO IIS
- F. HOW TO USE VIRTUAL DIRECTORY WHICH IS NOT A WEB APPLICATION.

**GLOBAL ASAX & HTTP APPLICATION**

- A. GLOBAL ASAX FILE
- B. HTTP APPLICATION CLASS
- C. EVENTS OF HTTP APPLICATION OBJECT
- D. EXAMPLES
  - A. URL REWRITING
  - B. HANDLING ERRORS
  - C. TRACKING NUMBER OF SESSIONS

## **UNDERSTANDING CONFIGURATION FILE - WEB CONFIG**

- A. IMPORTANCE OF WEB CONFIG
- B. MANAGING APPLICATION SETTINGS
- C. HANDLING ERRORS / CUSTOM ERRORS
- D. URL RE-WRITING
- E. TRACING OF PAGE LIFE CYCLE
- F. CONFIG SOURCE ATTRIBUTE
- G. LOCATION SECTION
- H. UPDATING WEB CONFIG PROGRAMMATICALLY

## **WEB CACHING**

- A. WHY CACHING
- B. OUTPUT CACHING
- C. FRAGMENT CACHING
- D. SUBSTITUTION CACHING
- E. DATA CACHING
- F. EXPIRATION POLICY TO EXPIRE DATA & OUTPUT CACHE

## **AUTHENTICATION & AUTHORIZATION**

- A. AUTHENTICATION & AUTHORIZATION
- B. WINDOWS BASED AUTHENTICATION
- C. FORM BASED AUTHENTICATION
- D. AUTHORIZING USERS AND ROLES
- E. IMPERSONATION

## **GLOBALIZATION AND LOCALIZATION**

- A. NEED FOR GLOBALIZATION
- B. HOW TO HANDLE MULTILINGUAL DYNAMIC DATA IN DATABASE
- C. CREATING OF LOCAL AND GLOBAL RESOURCE FILE
- D. MAPPING CONTROL PROPERTIES TO KEYS IN RESOURCE FILE
- E. SETTING CULTURE AND UI CULTURE OF THREAD
- F. RIGHT TO LEFT DIRECTION OF TEXT IN WEB PAGE

## **AJAX.NET**

- A. ARCHITECTURE
- B. WORKING WITH AJAX PRO
- C. USING AJAX.NET CONTROLS
  - 1. ACCORDION
  - 2. CALENDAR
  - 3. CASCADING DROP DOW
  - 4. COLLAPSIBLE PANEL
  - 5. FILTERED TEXT BOX
  - 6. NUMERIC UP DOWN
  - 7. MODAL POPUP
  - 8. POPUP CONTROL