Course Specifications

Punch Administration Advanced

Duration

5 days

Prerequisites

- A familiarity with using HTML to create web sites, including formatting text, inserting images and adding hyperlinks
- A familiarity with programming in either visual basic or Java, including using variables, control structures and procedures
- A familiarity with programming with using a relational database such as access or Sequel Server
- A familiarity with using Punch CMS to build and administer web sites

Overview

Punch is a complete content management solution that allows business to take control of information published on their Internet, Intranet and extranet website without worrying about the technical aspects of content generation and workflow. Punch allows you to manage users as well as content, making sure information is accurate, up-to date and with the correct look and feel.

Course Content

Punch and Web Architecture
Objective: Gain a conceptual overview of three-tier web architecture. Install then inspect Punch CMS as a practical example of this architecture.

Install Punch

- Unzip ASP files for IIS
- Create Website
- Install components

- Create the SQL database
- Customise the Punch CMS visual interface
- Inspect the Punch CMS web site and database tables
- Understand the principles of three-tier design
- Appreciate the role of Scripting Languages to add functionality to web sites
- Download, register and use Active X controls
- Understand the security issues and Active X controls
- Review the important HTmL mark-up tags, including input controls and object tags
- Appreciate the purpose of DHTML to enhance the presentation of a web site
- Appreciate the purpose of XML to move data around the internet
- Lab 1 Punch CMS

Programming the Web with Client-Side Scripting and ASP
Objective: Add intelligence to web sites by including program code. Understand the factors that determine whether to put this code in front at the browser of at the back with the server.

- Evaluate using client-side versus server-side scripting
- Consider Scripting languages, including VBScript and JavaScript
- Explore how ASP Architecture uses HTTP to pull HTML pages over the internet
- Understand the structure of the ASP object model
- Create web forms to submit information entered to an ASP page
- Use Include files to flexibly expand ASP pages
- Enhance ASP coding with the use of MS components and Scripting Objects
- Lab 2 Coding ASP pages with VB Script

Building a SQL Server Database
Objective: Construct a database by identifying entities then creating corresponding tables. Define the structure of the data by creating the table columns and the relationships between the tables.

- Create a new database and specify the name of the files
- Create new tables then add columns and column properties
- Add column constraints to build table relationships
- Import data from legacy data stores into the database tables
- Lab 3 Building a SQL Server 2000 database

Data Access with ADO
Objective: Access data from a variety of data stores with ADO. Use ADO objects to connect to a database, then view and modify data contained in tables.

- Understand ADO Architecture
- The Goal: Universal Data Access from any platform to any data store
- The Evolution: from DAO to RDO to ADO
- The Back-End Technologies: OLEDB and ODBC
- The ADO Object Model: Connection, Command and Recordset

Accessing the Database from the Web
Objective: View and modify database records from ASP pages. Use ADO objects to connect to a database then manipulate its data. Create, then call, a stored procedure.

- Specify the provider and database name to create a Connection object
- Open a recordset object to access rows from a table
- Navigate and view rows in a recordset
- Update and insert rows in a recordset
- Delete rows in a recordset
- Create a Command object to query the database
- Add parameters to the database
- Add parameters to the command
- Execute a stored procedure from the command
- Lab 4 Accessing the database from the Web
- Lab 5 Customising Punch CMS

Practical Labs
Lab 1 Punch CMS

Install
1. Unzip ASP files for IIS from installation CD
2. Launch the setup component for Punch FTP Upload component
3. Create the Web site in IIS using the website creation wizard
4. Install the database from SQL Server Enterprise Manager
5. Create a new user for the database
6. Execute SQL script to create tables
7. Change user access
8. Edit web sites global.asa file to reference database

Inspect
1. Examine user tables in the Punch database
2. Examine stored procedures in Punch database
3. Examine table relationships with the database diagram
4. Inspect the web site structure in IIS
5. Examine ASP pages in Front Page

Lab 2 Coding ASP pages with VB Script

1. Define a client-side scripting function then call this from a click event
2. Declare and manipulate variables
3. Declare and manipulate arrays
4. Post form inputs back to an ASP Page
5. Process form data using the QueryString collection
6. Process form data using the Forms collection
7. Add a header to a page with a Server Side Include file
8. Store the current date and time in a cookie on the client's PC
9. Store a visit count in an Application variable

Lab 3 Building a SQL Server 2000 Database

1. Identify the key system entities
2. Create a Bookstore database using Enterprise Manager
3. Create a filegroup and a transaction log
4. Create a table for each entity
5. Define column names and datatypes
6. Add primary key, foreign key and other constraints
7. Import data from text files into the database tables
8. Create a parameterised stored procedure
9. Execute a stored procedure passing in parameters

Lab 4 Accessing the Database from the Web

1. Create a simple ADO query to select records from a table
2. Pass a SQL String to the Execute method of the Connection object to:
    a. Add a record
    b. Update a record
    c. Delete a record
3. Use the Execute method of the Command object to calla stored procedure passing the parameters

Lab 5 Customising Punch CMS

1. Paste an ASP page into a Punch Special Feature template
2. Insert the Special Feature into a Punch page
3. Preview the page including the special feature in a web browser
4. Customise the Punch visual interface by changing a text box label