





Diploma in Web Engineering Training Program

Who can do?

- New Comers
- Students who would like to get the knowledge of Web Designing & Development.
- Already working class who are willing to update and learn the new methodologies of Web Designing & Development.
- Who want to be good and reputable jobs in the market and are like to enhance their skills in Web Designing
 Development

100,000+ Students have been Trained

since 1997

Invest in
People the
only Asset
that Appreciates

Program is offered by



⊕ www.3dedudcators.com ⋈ info@3deducators.com



Table of Content

Detail

Inauguration

Structure

Topics & Time Allocation

About the Program Designer & Instructor

Syllabus



About the Program Designer & Instructor

The "Web Engineering" Program has been designed and will be conducted by Certified Consultant and having the vast experience of training, development & consulting. They have worked with various large Government, National, and multinational organizations at local and abroad.

The Trainers who are conducting this program are have on the position of the following:

- Web Designers
- Developers
- E-Commerce Implementers
- Deployment
- Implementers

They trainers are foreign qualified and having the degree & certification of Ph.D, MBA, MSc, Microsoft Partner, MSCE, MCDBA, A+, Web Certified, CIW, Windows Certified.

Inauguration

The Training Program will be inaugurated by a senior member of 3DEducators

Program Structure

No of classes per week
Duration of each class
Duration of Web
Designing
Duration of ASP.NET/
SQL SERVER
Duration of PHP/MySQL
Duration of Mobile
Application
Development

O2 Class
02 – Hour
06 Months
04 Months
04 Months
04 Months
04 Months

Other Learning Activities

Classroom Assignments **08**Presentations by Trainees **01**



Module 1: Duration: 06 Months

FRONT END DEVELOPMENT:

This module consists on designing aspect, where some renowned tools are going to teach and enable the candidate to develop a responsive website effectively.

Basic Fundamentals

- The Internet
- World wide web
- TCP/IP
- HTTP
- HTML
- URL
- Website
- Web Browser
- Data Access

About Servers

- Web Server
- Application Server
- Server technologies

About CGI

- Computer Graphics Interface
- 2D Graphics
- 3D Graphics
- Web Graphics and Animation



Module 1: Duration: 06 Months

ADOBE PHOTOSHOP CS:

Introduction to Adobe Photoshop Interface Topics:

- Image size
- Width
- Height
- Color mode
- Contents
- Resolution

Color management in Photoshop

- Foreground/Background color
- Color Picker And Custom Colors
- Selecting Default Colors
- Gradient

Image Adjust

- Levels
- Curves
- Brightness Contrast
- Color Balance



Module 1:

Duration: 06 Months

- Hue Saturation Brightness
- Variations
- Channel Mixer
- Replace Color
- Invert
- Posterize
- Threshold

Image Mode

- Bitmap
- Gray Scale
- Index
- RGB
- CMYK
- LAB

Filters

- Artistic
- Liquefy



Module 1: Duration: 06 Months

- Blur
- Noise
- Render
- 3D Transform
- Clouds
- Different Clouds
- Lens Flare
- Lighting effect
- Sharpen
- Sketch
- Chrome
- Extrude
- Tile
- Wind
- Mosaic tiles
- Grain

Concept of Layer and Layer Option

- Assigning Layer Properties
- Deleting Layer
- Duplicating Layers
- Arranging and Merging Layers
- Layers styles



Module 1:

Duration: 06 Months

Drawing Tool

- Marquee Tools
- Lasso Tools
- Magic Wand
- Cropping
- Air Brush/Pencil
- Air Spray
- Rubber
- Stamp
- Type tool
- Sharpen, Smudge and Blur
- Sponge, Dodge, Burn
- Ruler, Bucket
- Zoom
- Hand Tool
- Pen Tool and its purpose

Difference b/w Fill and Stroke
Transformation of Objects
Action Palette
History Palette
Transparent Images
Layer Masking



ADOBE DREAMWEAVER MX:

- Introduction to Dream weaver MX
- Configuring Environment
- Server Technology
- Web servers
- Dream weaver MX Menu's
- Window menu
- Working in Dream Viewer MX
- Work in Layout view
- Add content to the page
- Basic page element
- Features
- Work in Standard view
- Use the Assets panel
- Insert flash objects
- Create a template
- CSS Cascading Style Sheets
- Applying CSS (Cascading Style Sheets)
- Database Connection
- Concept of database
- Active server pages



Introduction to Dream weaver MX

- Interface
- Object Panel
- Property Inspector
- Applications
- Code & Design Views

Configuring Environment

- Web server
- Application Server
- Data Store

Dream weaver Menu's

- File menu
- Edit menu
- Insert menu
- Modify menu
- Text menu
- Command menu
- Site menu



Window menu

- Dream weaver MX work area
- Defining a Local Site
- Creating the site home page
- Designing a page Layout view

Working in Dream Weaver MX

- Defining a local site
- Creating a page in layout view
- Inserting an image and a rollover image
- Working with tables in standard view
- Creating a link to another document
- Inserting assets from the Assets panel
- Inserting flash text and Flash button objects
- Creating and applying a template
- Running a site report
- Adding a Design Note

Work in Layout view

- Draw layout cells
- Resize layout cells
- Add multiple layout cell



Module 1:

- Move a layout cells
- Group cells in a layout table
- Move the layout table
- Add another layout cell
- Create a layout table
- Draw layout cells in a table

Add content to the page

- Insert images
- Create a rollover image
- Create the other rollover images
- Preview your document
- Insert text format text
- Apply color and style

Basic Page Element

- **Tables**
- Layers
- **Images**
- Rollover images
- Form
- Form Elements
- **Frames**



Features

- Behavior
- Ref materials
- Asset Panel
- Library
- History

Work in Standard view

- Set cell properties
- Selecting a table
- Set table properties
- Add cell padding
- View the site files
- Linking documents
- Testing page

Use the Assets panel

- Select a new document
- View site assets
- Insert an image
- Insert a Flash movie



Module 1:

- Apply a color using a Assets panel
- Create a favorite assets list
- Add multiple images to favorites
- View favorite assets

Insert Flash objects

- Create a Flash Text object
- View the Flash Text object in the document
- Create a Flash button object
- View the Flash button in the document

Create a template

- Create a template from an existing page
- Modify the template
- Apply the template to a new page
- Editing a template-based page
- Create a design note
- Site wide reports

CSS3.0 Cascading Style Sheets

- **Using CSS**
- **Nested Tags**
- **CSS Classes**



Applying CSS (Cascading Style Sheets)

- Creating New Style sheets
- Applying New Style Sheets
- Applying Editable Style Sheets

Database Connection

- Database Panel
- Database Connection

Concept of Database

- DBMS
- Data Base
- Tables
- Columns
- Rows
- Fields
- Relative Databases



- - Queries
 - Keys
 - Candidate
 - Primary Foreign
 - Tables Relationship
 - One to One
 - One to My
 - My to My
 - Bootstrap complete



WEB DEVELOPMENT THROUGH ASP.NET WITH MS SQL SERVER:

DOT NET FRAME WORK AND FUNDAMENTALS:

Arrays, Generics and Collections

- **Iterators and Enumerators**
- Lists, Queues, Stacks and Dictionaries
- Using Arrays and Collections
- **Using Generics**

Branching and Operators

- **Assignment and Mathematical Operators**
- Increment, Decrement, and Relational Operators
- **Iteration Statements**
- **Unconditional and Conditional Branching**

Delegates and Events

- Asynchronous Processing
- Callbacks
- Event Creation and Usage
- Using Anonymous Methods



Exception Handling

- **Custom Exceptions**
- Exception Flow
- Exception Management
- Rethrowing Exceptions

Language

- Fields, Methods in Classes
- Instance Constructors and Properties in Classes
- Language Basics
- Static Constructors and Static Classes in Classes
- String and Text Handling
- Working with Numbers and Enums

Object-Oriented Design

- Abstract Classes and Nesting Classes
- Inheritance and Polymorphism
- Interfaces
- Operator Overloading
- Specialization and Generalization



Types and Type Members

- Access Modifiers and Nested Types
- Attributes
- Nullable Types and Partial Types Properties and Indexers

ASP - DOT NET 4.5 - WEB BASED APPLICATION

INTRO TO ASP.NET WITH .NET FRAMEWORK:

- Defining standard styles & themes
- Defining master pages
- Creating user controls
- Creating custom server controls
- Extending existing controls
- Creating portals
- Creating & configuring webparts
- Managing view state
- Using state management techniques
- Accessing data by using <u>ado.net</u>
- Going further with ado.net
- Improving performance by using caching
- Managing resources & localization
- asp.net security essentials
- Ling
- Entity framework



WEB DEVELOPMENT THROUGH PHP/MySQL

- An Introduction to PHP
- Getting Started With Variables
- Conditional Logic
- Working with HTML Forms
- Programming Loops
- Arrays in PHP
- String Manipulation
- Create your own Functions
- Security Issues
- Working With Files In PHP
- Date and Time Functions in PHP
- PHP and MySQL
- Manipulate a MySQL Database
- PHP User Authentication
- Build your own PHP Survey/Poll Application
- How to Build an Online Forum: the database
- The Code for the Forum



Module 4: (Option 1)

MOBILE ANDROID APPLICATION DEVELOPMENT:

As a result of taking this Android training course, you will be able to:

- Describe the platforms upon which the Android operating system will run.
- Create a simple application that runs under the Android operating system.
- Access and work with the Android file system.
- Create an application that uses multimedia under the Android operating system.
- Access and work with databases under the Android operating system.

Modular Outline: (Part One)

3 Hours

Module 00: Introduction to Android Programming - Course Introduction

Module 01: Android Overview and History - Part One

- How it all got started
- Why Android is different (and important)
- Native Android Applications
- Android SDK Features



Module 02: Android Overview and History (Part Two)

2 Hours

- Android Development Environment
- Elements of Android SDK
- Android Software Stack
- Android Application Architecture
- Android Libraries
- Lab Exercise: Initial Configuration of the Android SDK

Module 03: Android Stack

2 Hours

- Overview of the stack
- Linux kernel
- Native libraries
- App framework
- Apps
- Lab Exercise: Configure Initial Application, Run in Emulator

Module 04: SDK Overview

- Platforms
- Tools
- Versions
- Lab Exercise: Download and Create in Android Virtual Device Manager



Module 4: (Option 1)

Module 05: Hello World App

2 Hours

- Creating your first project
- The manifest file
- Layout resource
- Running your app on Emulator
- Lab Exercise: Create, Compile and Run 'Hello, Android' App

Module 06: Main Building Blocks

2 Hours

- Activities
- Activity lifecycle
- Intents
- Services
- Content Providers
- Broadcast Receivers
- Lab Exercise: Review Activities, Intents, and Content Providers

Module 06a: Main Building Blocks Demo



Module 07: Basic Android User Interface

- XML versus Java UI
- Dips and Sps
- Views and layouts
- Common UI components
- Handling user events
- Lab Exercise: Create Application with on Click, on Key Down, on Focus Changed Event Handlers

Module 07a: Basic Android User Interface Demo

Module 08: Android System Overview

- File System
- Preferences
- Notifications
- Security model
- Lab Exercise: Create Application with Toast Notifications

Module 09: Advanced Android User Interface - (Part One)

- Selection components
- Adapters
- Complex UI components
- Building UI for performance



Module 4: (Option 1)

Module 10: Advanced Android User Interface - (Part Two)

- Menus and Dialogs
- Graphics
- Animation
- Lab Exercise: Create Application with Android's Advanced User Interface **Functions**

Module 10a: Advanced Android User Interface Demo 2 Hours

Module 11: Multimedia in Android

- Multimedia Supported audio formats
- Simple media playback
- Supported video formats
- Simple video playback
- Lab Exercise: Create Android Audio/Video Application

Module 11a: Multimedia in Android Demo **3 Hours**

Module 12: SQL Database

- Introducing SQLite
- SQLite Open Helper and creating a database
- Opening and closing a database
- Working with cursors Inserts, updates, and deletes
- Lab Exercise: Create Application to Create, Modify and Query an SQLite Database



. . . .

Module 12a: SQL Database Demo

Module 13: Basic Content Providers

- Content provider MIME types
- Searching for content
- Adding, changing, and removing content
- Working with content files
- Lab Exercise: Create Application that Works with an Android Content Provider
- Module 13a: Basic Content Providers Demo

Module 14: Data Storage, Retrieval and Sharing

- Android Techniques for Saving Data
- Saving Simple Application Data
- Creating and Saving Preferences
- Retrieving Shared Preferences
- Saving Activity State
- Creating a Preferences Page
- Saving and Loading Files
- Lab Exercise: Create application that performs Data Storage and Retrieval from Android External Storage



Module 15: Mapping and Location Based Services

- Using Location Based Services
- Setting up your Emulator with Location Based Services
- Selecting a Location Provider
- Finding Your Location
- Using Proximity Alerts
- Using the Geocoded
- Creating Map Based Activities
- Lab Exercise: Create Location-Aware application that uses Proximity Alerts and Google Maps API

Module 15a: Mapping and Location Based Services Demo

Module 16: Working in the Background

- Introducing Services
- Using Background Worker Threads
- Introducing Notifications
- Using Alarms
- Lab Exercise: Create application with One-Time, Repeating Alarms, and Long-Running Background Task as Service



MOBILE APPLICATION DEVELOPMENT (APPLE PROGRAMMING THROUGH OBJECTIVE C):

Introduction

- iPhone and iPad Device Anatomy
- iOS Architecture and SDK Frameworks
- iOS and SDK Version Compatibility
- Apple iOS Developer Program

Xcode 5

- Tour of the IDE
- Templates, Projects, and Workspaces
- Creating a New Project
- LLVM and LLDB
- Debug Gauges
- Asset Management
- XCTest Testing Framework
- Continuous Integration and Bots
- Automatic Configuration

Objective-C for Experienced Programmers

- Classes, Objects, and Methods
- Declared Properties



Module 4: (Option 2)

- Memory Management
- Automatic Reference Counting (ARC
- Categories and Extensions
- Formal and Informal Protocols
- **Blocks**

Application Patterns and Architecture

- Model View Controller (MVC)
- **IBOutlets and IBActions**
- Subclassing and Delegation

Views and Windows

- The View Hierarchy
- Containers
- Controls
- Text and Web Views
- **Navigation View and Tab Bars**
- Alert Views and Action Sheets
- Controlling Rotation Behavior
- View Autosizing
- Autolayout



- Adding Scenes
- Segues

Storyboards

- Transitions
- Using in a Tab Bar Application

Table Views

- Static and Dynamic Table Views
- Delegates and DataSources
- Table View Styles
- Custom Cells

Navigation Based Applications

- Adding the Root View Controller
- Creating the Navigation Controller
- Controlling the Stack Navigation Programmatically

UIPickerView and UIDatePicker

- Designing the UI
- Coding for the Data Picker
- Hiding the Keyboard
- Memory Management



Directories and Files

- NSFileManager, NSFileHandle, and NSData
- Problems Solved by ADO.NET Entity Framework
- Pathnames in Objective-C
- Working with Directories
- Working with Files
- Reading and Writing from a File
- iCloud
- Key-Value Data
- Archiving

Working with Data

- SQLite Integration
- Using SQLite Directly
- Overview of Core Data
- Managed Objects
- Persistent Store Coordinator
- Entity Descriptions
- Retrieving and Modifying Data

Multitouch, Taps, and Gestures

- The Responder Chain
- Touch Notification Methods



- Module 4: (Option 2)
 - **Enabling Multitouch on the View**
 - Gesture Motions
 - Gesture Recognizers

Drawing

- Core Graphics and Quartz 2D
- Lines, Paths, and Shapes

Animation

- Core Animation Blocks
- Animation Curves
- Transformations

Multitasking

- Application States
- Background Execution
- Background App Refresh in iOS 7
- State Restoration

Notifications

- Local Notifications
- Push Notifications



Core Location Framework

- Location Accuracy
- Obtaining Location Information
- Calculating Distances
- MapKit Framework and MKMapView

Concurrency

- Grand Central Dispatch (GCD)
- Serial and Concurrent Queues
- Main Dispatch Queue
- Completion Blocks
- Operation Queues

Networking

- Reachability
- Synchronous Downloads
- Asynchronous Downloads
- Handling Timeouts
- Sending HTTP GET and POST Requests
- Parsing JSON
- Parsing XML
- AirDrop



Targeting Multiple Devices

- iPhone vs. iPad
- Universal Apps
- Multiple SDK Support
- Detecting Device Capabilities
- Supporting iOS 6 and iOS 7

Localization

- Resources
- Language and Region
- NSLocale
- Text
- Dates
- Numbers

Performance and Power Optimization

- Measuring Performance
- Instruments
- Responsiveness
- Memory Usage, Spikes, and Leaks
- Networking and Power



TERMS & CONDITIONS

WITHDRAWAL FROM THE CERTIFICATION OR DIPLOMA

Students are not allowed to withdraw from the CERTIFICATION/DIPLOMA. If a student cannot continue the CERTIFICATION his/her fee will be forfeited.

CONDUCT AND DISCIPLINE

A disciplinary action, leading to rustication, will be taken against students whose conduct is found objectionable at any time during the course of study. Reference will be made to 3D Educators code of conduct.

EVALUATION AND GRADING

The performance of students is evaluated through continuous observation of a student's performance in the CERTIFICATION/DIPLOMA – class participation, submission of assignments, guizzes and exercises.

The student will be examined through three hourly exams conducted at the midterm and a final exam at the end of the program. Total marks for passing the CERTIFICATION/DIPLOMA will be 70 out of a total of 100.

Students who do not meet the attendance or any other eligibility criteria will not be allowed to appear in the final examination.

The following grading plan will be applicable for the CERTIFICATION/DIPLOMA:

Α	B+	В	C+	С	F
87-100	81-86	72-80	66-71	60-65	Below 60

Students who are unable to appear for the final exam are required to submit a written application stating the reason for not appearing for the exam. 3D Educators reserves the right to approve or deny such applications. If approved, the student will be allowed to sit for the exam within one month. Failure to do so, the student will be resubmit the examination fee and sit the future schedule exam. Without passing of the exams no certification will be awarded.



ONLINE LIVE CLASSES FACILITY AVAILABLE

- Instructor Led Training
- Real Time Presentations
- Interactive Classes
- Complete Notes and Other Stuff shall be provided through our Secure Student Login Member's Area
- For Online Live Classes, you may please download the Admission Form through our website http://www.3deducators.com. Fill it properly and attached the required document along with Picture and send back to info@3deducators.com with scanned fee submitted voucher in the bank.
- For Pakistan you may submit the fee at any MCB Branch with the title of "3D EDUCATORS-TRAINERS & CONSULTANTS".
- If you are outside Pakistan then you may transfer via Bank to Bank or any western union, Fast Track, Money Gram or else International Transfer Body.
- After Admission, if you don't have GMAIL Account then you are requested to kindly make one GMAIL Account and shared it info@3deducators.com. Then further correspondence shall be made by our institute official.
- Extra Bandwidth Charges shall be incurred.

DISTANCE NOT MATTER

You can join in the live classes Sessions of 3D EDUCATORS – TRAINERS & CONSULTANTS from anywhere of the world.



PRECAUTIONARY MEASURES

- During Classes, you are requested to make sure that you are in isolated room, where no noise should be there except your voice.
- Kindly Switch Off your Cell Phone during the class, because it will disturb the quorum of class.
- If you have taken the admission in the course online lonely, then ethically it is recommended and suggested that you alone in the class.
- Recording of Lectures are not allowed at your end.

This world is emerging and growing in the 21st Century very rapidly because of latest and remarkable technologies and its advancement. Due to advancement of technology, we 3D EDUCATORS offer Live Interactive class sessions

3D EDUCATORS believe on Information Technology and its systems. Now you can also avail this facility at your home.

CONTACT US

021-34141329, 0333-2402474 021-34857148 info@3deducators.com
http://www.3deducators.com

Get the Admission Form



MANAGEMENT
3D EDUCATORS
TRAINERS & CONSULTANTS