HELLO WORLD
центр IT-курсов

Course

.NET Trainee+ course

Audience

The person wishing to sign up to this course must have strong understanding of C# syntax and .NET run time principles. Knowledge of object oriented programming philosophy is a must for this course. Basic experience of HTML and JS would be a plus for web part.

Materials for reading

http://www.amazon.com/Pro-WPF-4-5-Presentation-Foundation/dp/1430243651/ref=sr_1_5?ie=UTF8&qid=1442392844&sr=8-5http://www.amazon.com/Programming-Microsoft-ASP-NET-Developer-Reference/dp/0735662843/ref=pd_bxgy_14_img_y&keywords=.net+wpf

http://www.amazon.com/Programming-Microsoft-ASP-NET-Developer-Reference/dp/0735643385/ref=sr_1_3?s=books&ie=UTF8&qid=1442392677&sr=1-3&keywords=esposito+programming+microsoft+asp.net

http://wpftutorial.net/WPFBools.html

Duration

4 months (around 17 weeks)

2 lessons per week 2 hours per lesson

35 lessons (70 hours)

Goals

To learn how to store and process data outside of the process memory. (databases, files, clouds)

To learn how to build rich intuitive and attractive UI

To get the understanding of the most popular contemporary .NET frameworks aimed for desktop and WEB development.

To learn the IIS ASP.NET and HTTP protocol idea and base principles

To learn where and how theoretical knowledge obtained on the elementary level can be applied.

Syllabus

Databases and alternative data storage

1) What is the database? What are the different database types available? Role and purpose of the database schema. Database providers and their evolution. Connection String. Database security.

2) SQL Server and SQL Server Management studio configuration

3) SQL language and schema definition CREATE/ALTER/DROP clauses. Main database objects. SQL Server data types. Data normalization principles.

4) SELECT clause, Backup/Restore process.

5) Data modification language Insert Update Delete Truncate

6) Consuming data being loaded from databases in .NET applications. ADO.NET provider. Entity Framework. Repository and Storage patterns.

7) Small and big data :) Query execution plan, indexes and database performance.

8) Entity Framework development approaches (code first, database first)

9) Transactions, concurrency, isolation levels, locks.

Desktop development for Windows

1) C# Events, delegates and Event Driven development. Application life cycle.

2) Windows messages, Spy++, Main window procedure, SDI, MDI, Metro style. Introduction to Win Forms: Form and Application objects. Modal and non modal dialogs.

3) WinForms buttons and other most important controls (text box, check box, radio, etc…)

4) Window and control state. (visibilty, avialability). Data binding. DataGrids. Modal dialogs. Message boxes and confirmations.

5) Control Events

6) **Threads.** Long operations. Progress bars and spinners

7) **Threads synchronizations**

8) Sockets and network communication

9) Implementation of simple chat application

10) WPF UI framework and its advantages

11) XAML markup and elements layout and positioning

12) Dependency and attached objects and properties

13) Routed events concept

14)Data binding and MVVM

15) Input handling (mouse, keyboard, touch)

16) Styles and Themes

Web development (34 hours)

1) Client – server programming model and fundamental HTTP principles.
2) IIS and ASP.NET fundamental principles.
3) Request processing pipeline. Http modules, handlers and routing.
4) Anatomy of ASP.NET page
5) ASP.NET Input Forms
6) Data Binding
7) ASP.NET State management
8) ASP.NET MVC Fundamentals
9) MVC Controllers and Views
10) MVC Model binding and input forms
11) Securing your applications
12) Customizing ASP.NET MVC Controllers
13) Implementation of some simple web application.