# **Microsoft .NET 201**

Learn one of the most in-demand skill sets in the technology space and fast, during an immersive 5 days of instruction. Your class will begin with a primer on C# and the Visual Studio IDE. Next you'll learn how to build RESTful WEB API's that can be consumed by native mobile apps, cross-platform JavaScript apps, or server-side C# code. Then you will spend the last several days of the course building real-world web applications on top of the MVC framework, while learning WebAPI and Razor syntax in the process.

## Is this Course for Me?

This class is for someone interested in diving head-first into the .NET framework, such as:

- Career Changers
- Entrepreneurs
- Corporate Developers
- Software Development Managers

## **Daily Schedule**

### Monday:

8:30 AM - 9:00 AM Breakfast

9:00 AM - 12:30 PM Class Sessions

12:30 PM - 1:30 PM Lunch

1:30 PM - 5:00 PM Class Sessions

5:00 PM - 6:00 PM Study Session (Optional)

### **Tuesday through Thursday:**

8:30 AM - 9:00 AM Breakfast

9:00 AM - 12:00 PM Class Sessions

12:00 PM - 1:00 PM Lunch

1:00 PM - 2:00 PM Working Session

2:00 PM - 4:00 PM Break/Study Hall

4:00 PM - 6:00 PM Class Session

6:00 PM - 7:00 PM Dinner

7:00 PM - 9:00 PM Class Session

#### Friday:

8:30 AM – 9:00 AM Breakfast 9:00 AM – 12:00 PM Class Sessions 12:00 PM – 1:00 PM Lunch

This is a full immersion, all-inclusive course running Monday through Friday, which includes class sessions, study sessions, breakfast, lunch, breaks and activities. Dinner will only be served on the course days that go until 9PM.

## What Will I Learn?

- Walkthrough of the Visual Studio IDE
- Declaring Constants and Variables
- C# control statements, loops, and enumerators
- String manipulation
- Working with Arrays, Dictionaries, and Hashtables
- Function Declarations
- Anonymous functions
- Class definitions, Structures, Enumerations, Generics
- ASP .NET MVC 5 Overview
- ASP .NET MVC Lifecycle
- ASP .NET Web API
- Controllers and Routing
- Entity Framework 6 Code First and Database First
- Validating form input
- Building and Consuming RESTful services
- Interacting with third-party API's
- Debugging

## What will I build?

First we cover C# fundamentals and then move on to building and learning:

- ASP.NET MVC Website with Note Taking application
- Web service for consuming data from application
- Database with code-first methodology, and explanation of code-first, database-first, and migrations between the two

# What to expect?

We insist on an always-in-the-code instruction style. There are no textbooks, video instructions, or FAQs to follow along. This is real world code being taught by real world humans who have all have the resumes to back it up.

# Requirements

To get the most out of this class, you'll need three things:

- Programming: Understanding of basic computer science concepts, such as loops, functions, and
  arrays is preferred. If you're a complete beginner, we recommend taking the <a href="Intro to Coding">Intro to Coding</a> course
  first. Some knowledge about C# is helpful, but not required. A basic understanding of HTML is
  required any 101 or online course will likely suffice.
- **Hardware**: Any modern Windows laptop or Mac running Bootcamp with at least 4GB RAM and running Windows 7 or newer. NO VIRTUAL MACHINES.
- Software: Visual Studio 2015, Modern Web Browser such as Edge, Chrome, or Firefox.

# What Else Can I do to Prepare for this Course?

Understanding of basic computer science concepts, such as loops, functions, and arrays is preferred. If you're a complete beginner, we recommend taking Eleven Fifty Academy's Intro to Coding course first.

# What Can I do after the Class to Continue Self-learning?

Work on adding features and functionality to the projects you built in the class, or start on new ones. If you don't start immediately applying what you learned, you will lose the knowledge! The instructor has a track record of making himself available for questions and after-class projects.