

# ASP.NET Web API Essentials Using C# (2 Days)

## Overview

This ASP.NET Web API Essentials Using C# training class provides a practical hands-on introduction to developing and consuming ASP.NET Web API services using C# and Visual Studio. This Web development framework from Microsoft makes it easy to create HTTP services that can reach a broad range of clients. It is an excellent platform for creating RESTful Web applications.

## COURSE BENEFITS

- Gain an understanding of what ASP.NET Web API is and why it is useful
- Implement HTTP services using Web API and Visual Studio
- Consume HTTP services using both jQuery and the ASP.NET Web API client library
- Handle different media formats and content variations in Web API services
- Understand routing and binding in Web API
- Perform validation of request data

## COURSE OUTLINE

### Introduction to ASP.NET Web API

ASP.NET Web API  
Representational State Transfer  
REST and Web API  
HTTP Services Using Web API  
Using Fiddler  
Web API vs. WCF

### Web API and HTTP

HTTP Response Codes  
HttpResponseException  
Implementing POST  
Implementing PUT  
Implementing DELETE

## **Media Formatters and Content Negotiation**

- Internet Media Types
- Media Formatters
- JSON and XML Formatters
- Content Negotiation
- Accept and Content-Type Headers
- Using the Query String
- Custom Request Headers
- Serialization
- BSON Serialization

## **JavaScript Clients**

- Document Object Model
- jQuery
- Sending AJAX Requests
- Implementing a Client

## **Binding, Validation and Routing**

- Reading Raw HTTP Requests
- Route Data, Query String and Request Body
- Binding to Simple Types
- Binding to Complex Types
- Validation Using Data Annotations
- Routing in ASP.NET Web API
- Using Default Routes

## **NET Clients**

- Web API Client Libraries
- HttpClient
- Issuing GET Requests
- Issuing POST Requests
- Other Requests