

# CIS 266 – Web Services

## Scrum 4

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Scrum Team :

Scrum Master: **Derrick Olson**

Team members: **Derrick Olson, Eric Harlan**

# Objectives:

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- Understand basic Object Oriented Programming (OOP) concepts using C#
- Understand how to utilize C# classes/objects with RESTful Web Services
- Create a C# RESTful Web Service similar to the Unit1\_Ex3 PHP RESTful Web Service
- Test/debug to ensure implemented code runs successfully

# UML Class Diagrams

ProductController

-productDB : ProductDB

+Get : IEnumerable<string>

Product

-code : string

-description : string

-price : double

-publisher : string

+formattedPrice() : string

+toString() : string

ProductDB

+getProduct : Product

# Approach:

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- Use Unit1Ex3 PHP code as basis
- Create C# versions of everything except API
- Create C# REST Controller API (shown ahead)

# Create the Program Solution

New Project



Recent

Installed

- Visual C#
  - Get Started
  - Windows Universal
  - Windows Desktop
  - Web
  - .NET Core
  - .NET Standard
  - Cloud
  - Test
  - WCF
- Visual Basic
- Visual C++
- Visual F#
- SQL Server
- PHP
- JavaScript
- Reporting Services
- Other Project Types

Sort by: Default

Search (Ctrl+E)

	ASP.NET Core Web Application	Visual C#	<b>Type:</b> Visual C# Project templates for creating ASP.NET applications. You can create ASP.NET Web Forms, MVC, or Web API applications and add many other features in ASP.NET.
	ASP.NET Web Application (.NET Framework)	Visual C#	

Not finding what you are looking for?  
[Open Visual Studio Installer](#)

Name: Example1

Location: C:\Users\derrick.olson\source\repos

Solution name: Example1


Framework: .NET Framework 4.6.1

Create directory for solution


Create new Git repository

# Empty WebAPI


New ASP.NET Web Application - Example1 ? ×




Empty




Web Forms




MVC



Web API



Single Page Application



Azure API App

An empty project template for creating ASP.NET applications. This template does not have any content in it.  
[Learn more](#)

Add folders and core references for:

Web Forms    MVC    Web API

Enable Docker Compose support (Requires [Docker for Windows](#))

Add unit tests

Test project name:

Authentication: **No Authentication**

# Create REST Controller API

Add Scaffold

Installed

- Common Controller

- MVC 5 Controller - Empty
- MVC 5 Controller with read/write actions
- MVC 5 Controller with views, using Entity Framework
- Web API 2 Controller - Empty
- Web API 2 Controller with actions, using Entity Framework
- Web API 2 Controller with read/write actions**
- Web API 2 OData v3 Controller with actions, using Entity Framework
- Web API 2 OData v3 Controller with read/write actions

**Web API 2 Controller with read/write actions**  
by Microsoft  
v2.0.0.0  
A Web API controller with REST actions to create, read, update, delete, and list entities.  
Id: ApiControllerWithActionsScaffolder

[Click here to go online and find more scaffolding extensions.](#)

Add Cancel

# Test/Debug the Solution:

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- Get connected to local host
- Debug (X)
- Alter code as needed
- Test solution



# Demonstration of Code

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