

# Building a Consistent RESTful API with OData V4 in ASP.NET

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## INTRODUCTION TO REST AND ODATA V4



**KEVIN DOCKX**

ARCHITECT

@KevinDockx <https://www.kevindockx.com>



# Introduction



**OData: what, why and how**

**ASP.NET (Web API)**

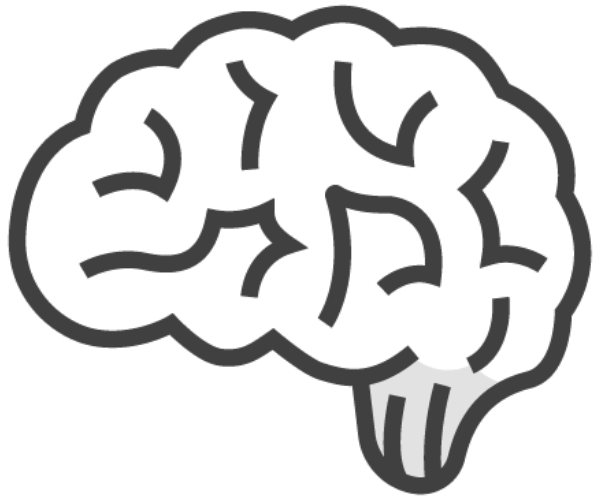
**All the important concepts and topics**

**Very demo-driven**

**Building and consuming**



# Course Prerequisites



## ASP.NET Web API

- Implementing an API in ASP.NET Web API (Shawn Wildermuth)

<http://bit.ly/20Vk2s1>

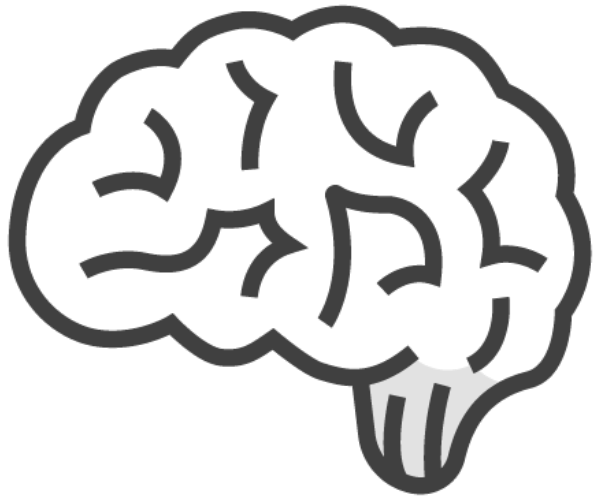
## Entity Framework (Code First)

- Getting Started With Entity Framework 6 (Julie Lerman)

<http://bit.ly/20WZj7l>



# Course Prerequisites



## REST

- Building and Securing a RESTful API for Multiple Clients in ASP.NET

<http://bit.ly/1p4JjnO>



# Tooling



Visual Studio  
(2013/2015)



Postman

<https://www.getpostman.com/>

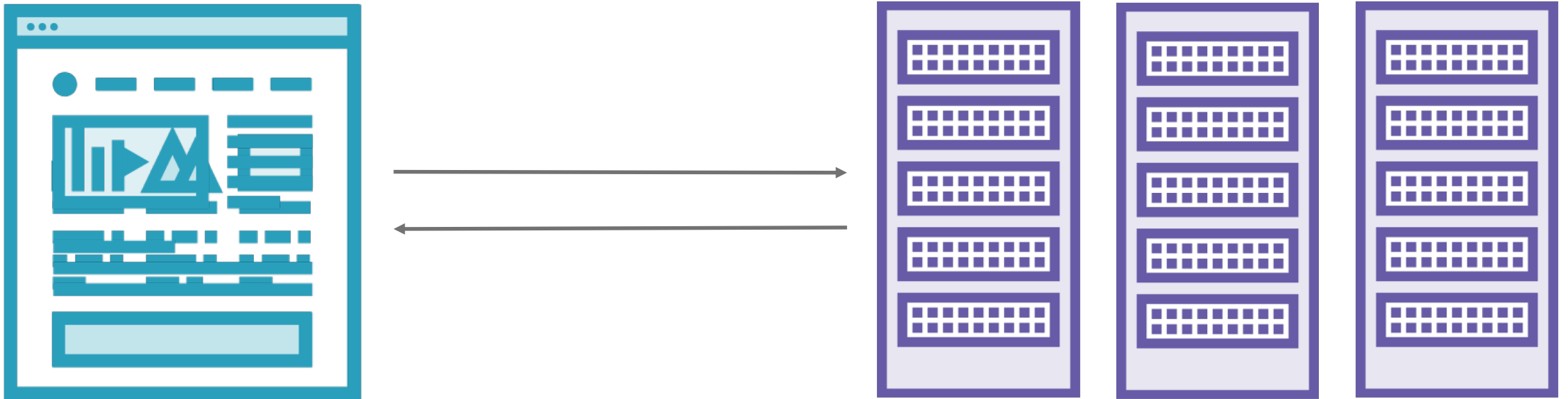


A browser of choice

REST is an architectural style for designing networked applications, intended to evoke an image of how a well-designed web application behaves



# Representational State Transfer



# REST



**Architectural style: constraints**

**REST is *not* a standard**

**Common design decisions are re-invented**





# “OData – The Best Way To REST”

**The OData people**



# OData (Open Data Protocol)

An open protocol to allow the creation and consumption of queryable and interoperable RESTful API's in a simple and standard way



# Introducing OData



**OASIS approved industry standard**

- <http://bit.ly/163s1gZ>

**Best practice for**

- building...
- & consuming RESTful API's

**Consistency & standardization**

# Introducing OData



## **Solves common design issues**

- naming resources, querying data, ...

## **Uniform way to describe**

- data
- data model

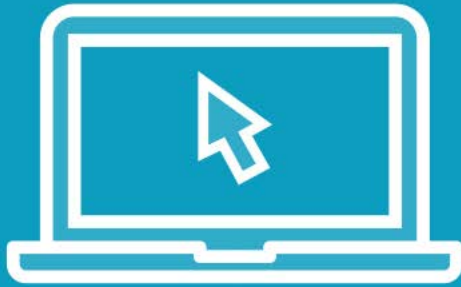
## **Machine-readable metadata**

- automate interaction
- generic client proxies/tools

We're not just building  
services. We're  
implementing a standard.



# Demo



## Getting Acquainted with AirVinyl and OData Requests

- Introducing AirVinyl
- Calling OData services with Postman
- Inspecting an OData URI
- Inspecting the data model



# Summary



**REST – not just a bunch of HTTP services**

**OData: the Open Data Protocol**

- Best practices for building and consuming RESTful API's
- Consistency & standardization
- Machine-readable metadata

**AirVinyl demo**

**OData URI**

