

ASP.NET Core: The MVC Request Life Cycle

ESSENTIAL LIFE CYCLE CONCEPTS

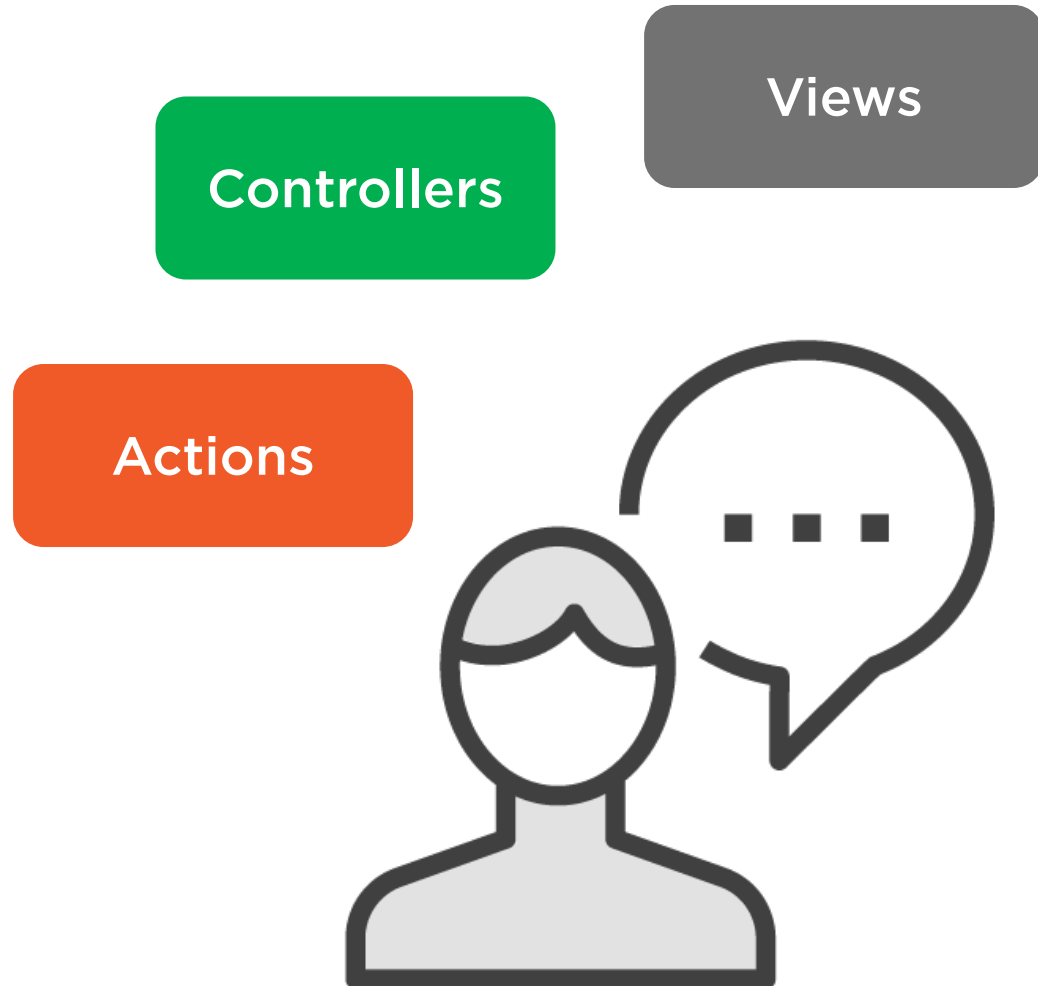


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Gaining a Deeper Understanding



How are all of these components connected and integrated?



Benefits of Understanding MVC

Debugging

Troubleshoot problems
faster

Customization

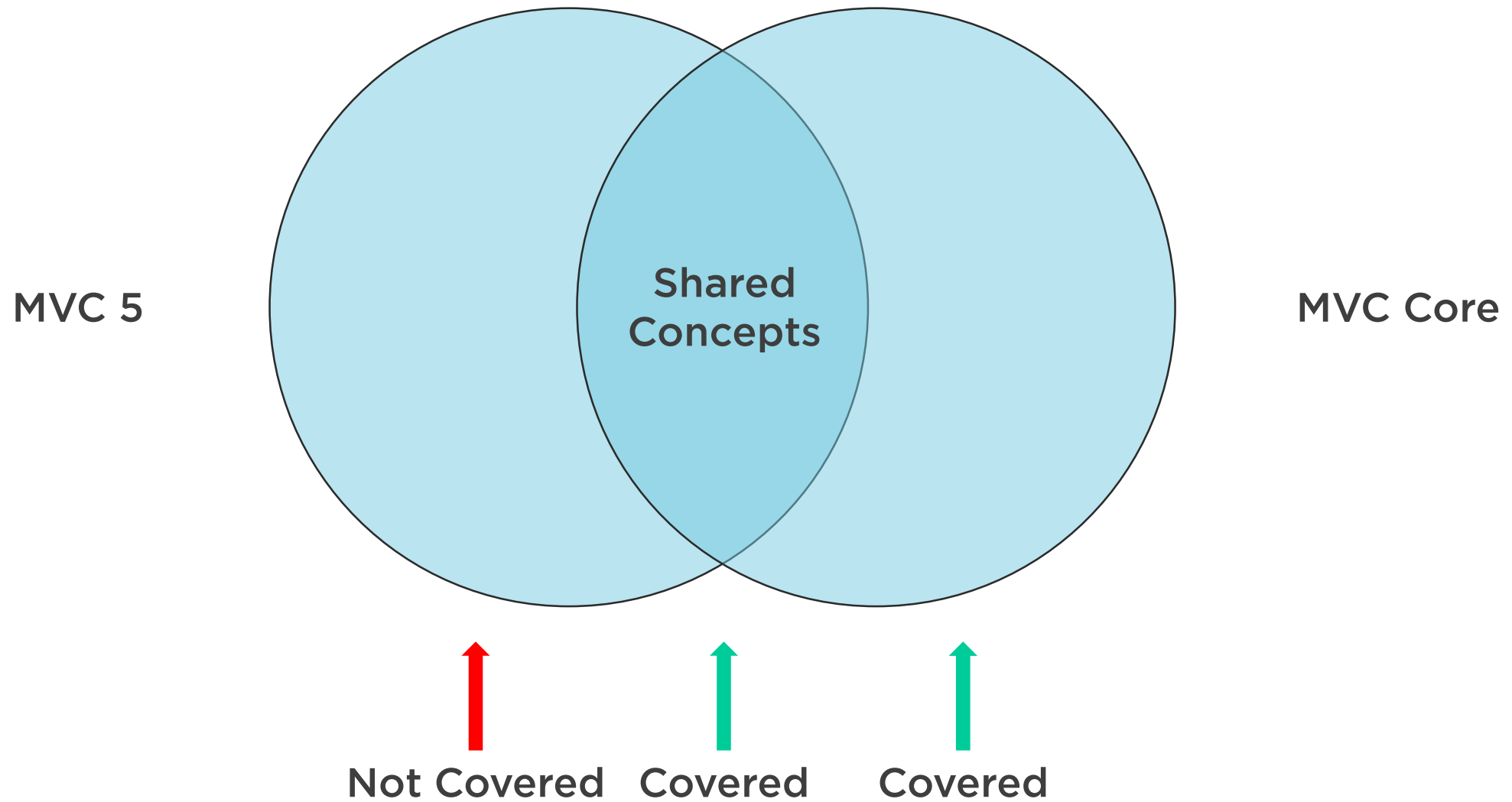
Extend MVC to meet
your needs

Architecture

Structure applications
more thoughtfully



The Old and the New



MVC Core is a new
framework with exciting
new concepts and features.



Are You in the Right Place?



Required and Recommended Skills

Need to Know



Nice to Know



The Advancing MVC Developer

How does the MVC pipeline really work?



How does a request travel through different components of MVC?



The .NET Core MVC Developer

What has changed in MVC Core?



How do these changes impact my application?



Defining the Request Life Cycle



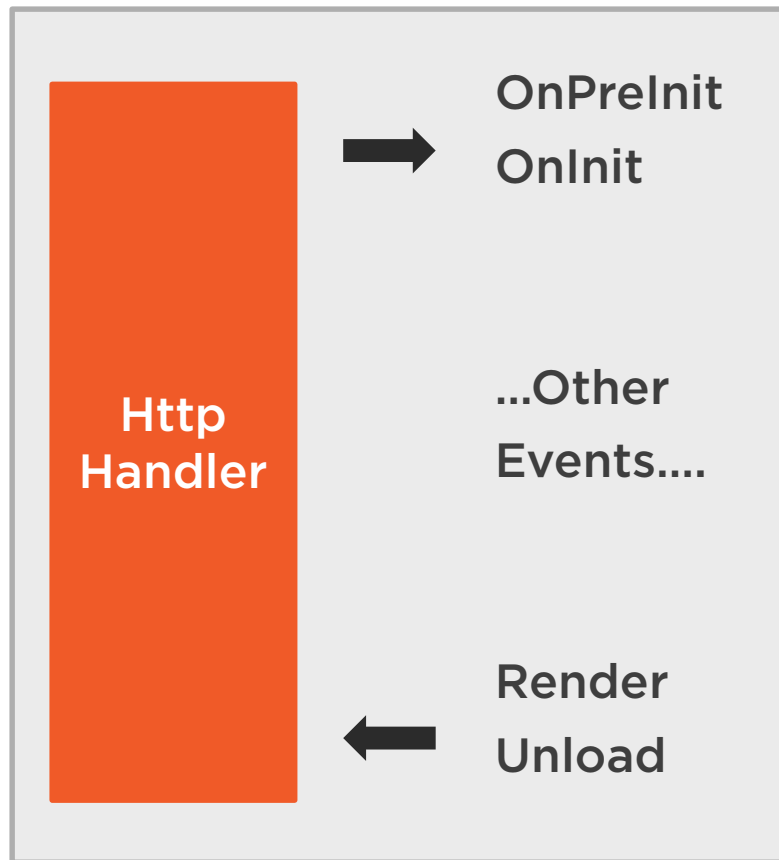
Life Cycle

A series of components, events, or stages of an application that process a request or respond to user interaction.



Sample Life Cycles

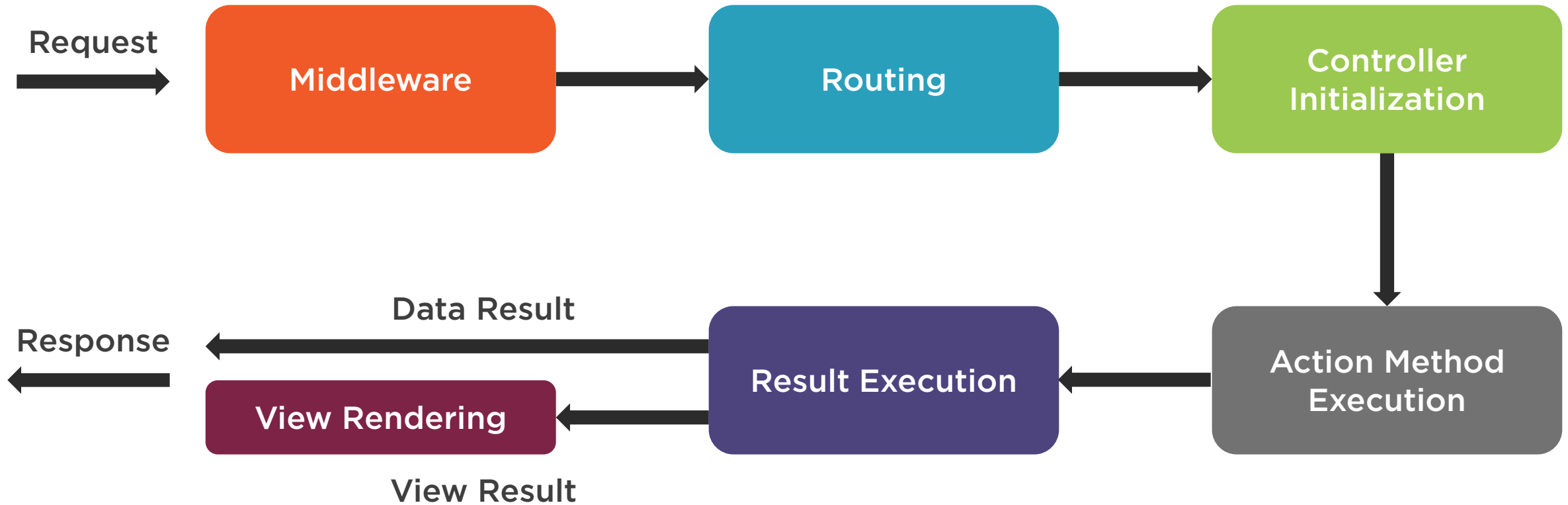
ASP.NET Webforms (Simplified)



Android Activity (Simplified)



The MVC Request Life Cycle



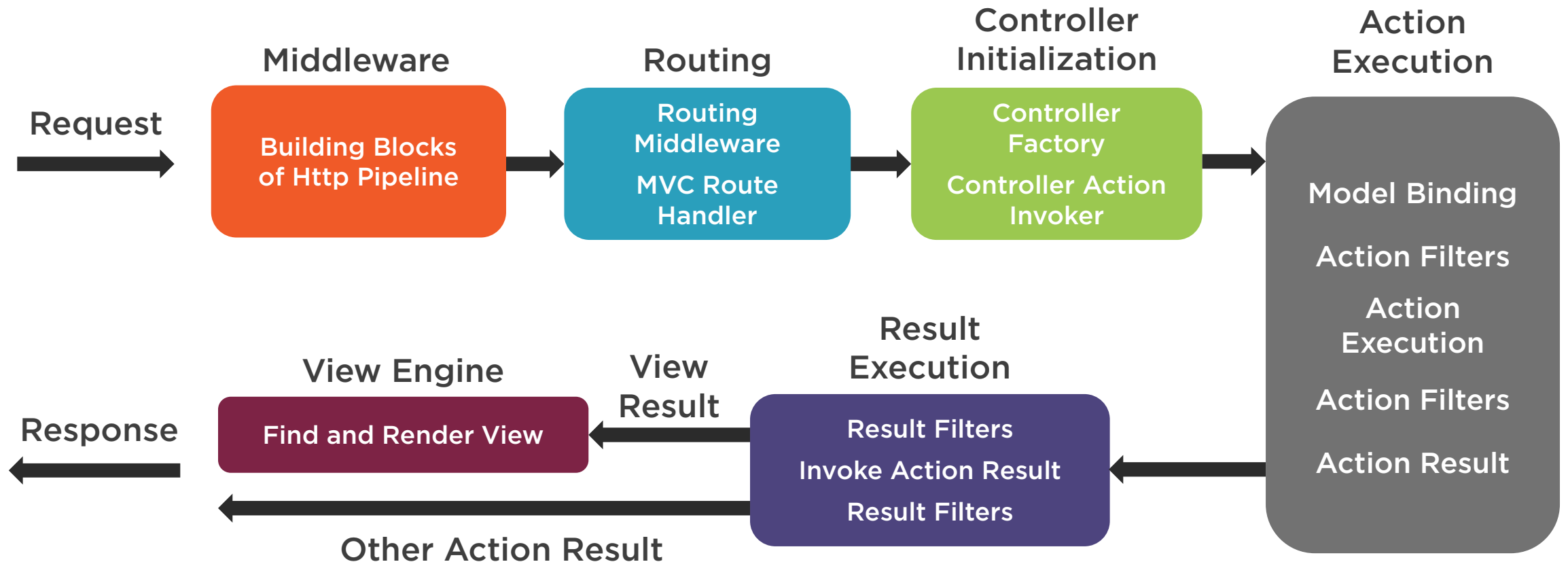
Understanding a framework's
processing pipeline empowers
you as a developer.



The MVC Request Life Cycle



The MVC Request Life Cycle



The State of ASP.NET and MVC



Web Forms, Web API, and MVC

Web Forms

MVC

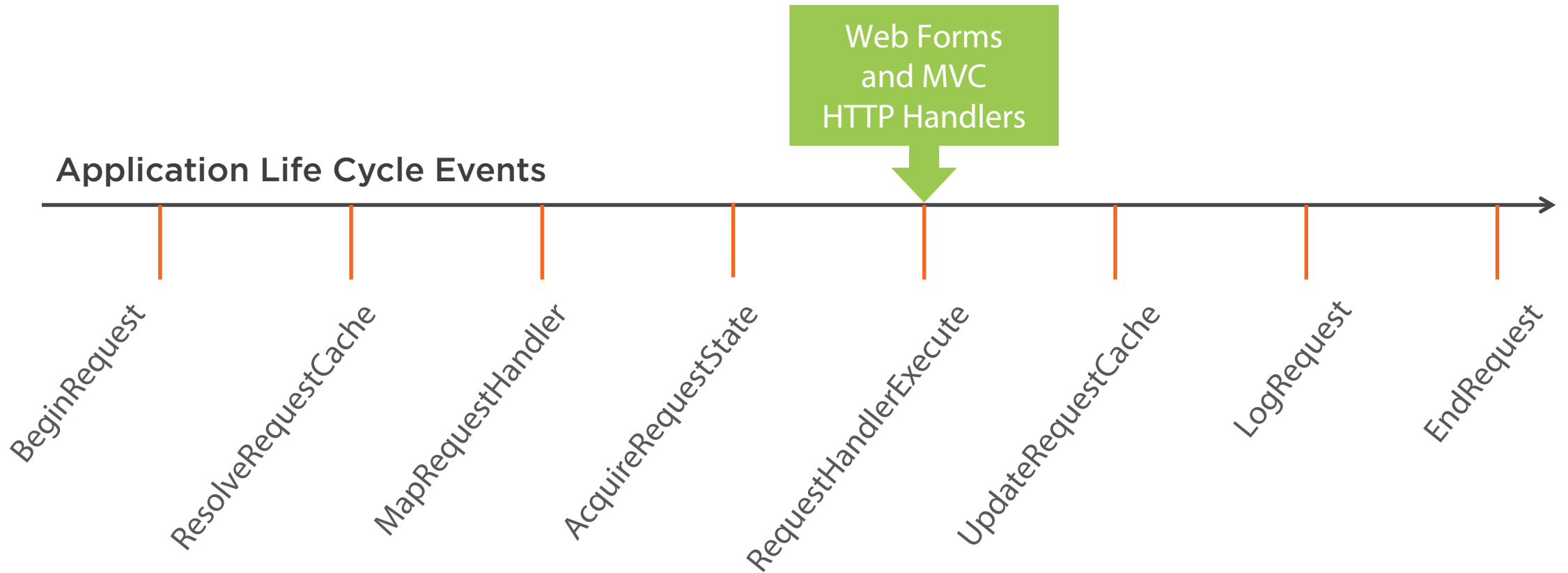
Web API

Shared Infrastructure

Shared Functionality



The Legacy ASP.NET Application Life Cycle

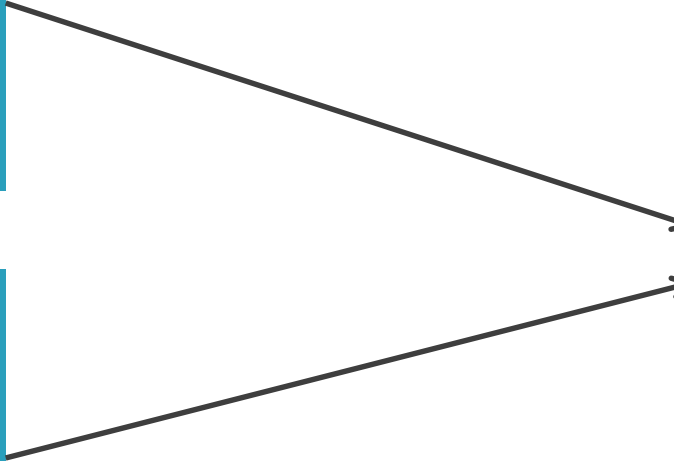


The Merger of Web API and MVC

ASP.NET 4.6 and Earlier

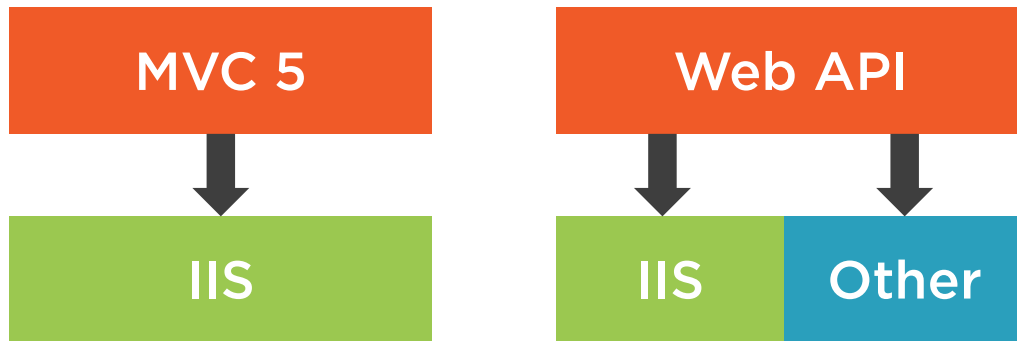


ASP.NET Core

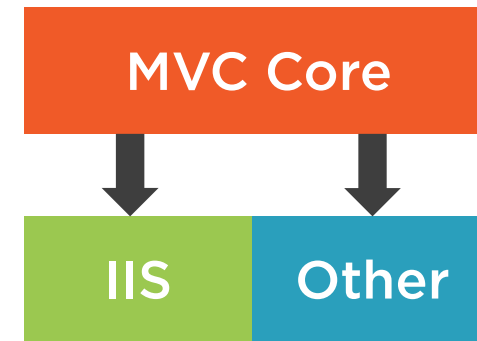


Understanding MVC and Web API

ASP.NET 4.6



ASP.NET Core



Demo



Setting up the MVC Source Code



The Agenda



To-Do List



Understanding the Middleware Pipeline

Working with Routing

Understanding Controller Initialization
and Execution

Diving into Action Method Execution

Exploring Action Results and the View
Engine

Introducing the Application Model



Summary



Middleware forms the basic building blocks of the HTTP Pipeline in MVC Core

Routing is now implemented through Middleware

Many MVC features like Controllers and Action Methods are implemented slightly differently in .NET Core

Web API and MVC are now a unified framework

Web Forms is not a part of .NET Core and no longer shares architecture with MVC

