# **Build Your Own Application Framework with ASP.NET MVC 5**

What Is an "Application Framework?"

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#### What We'll Cover

**Application Framework Basics** 

The Power of Inversion of Control

**Optimizing Your Controller Layer** 

**Optimizing Your View Layer** 

**Optimizing Your JavaScript** 

### **Not For Beginners!**

# You Should Know:

- Controllers
- View
- Models
- Razor

# Be Comfortable With:

- Action Filters
- Action Results
- HTML Helpers
- Model Binding

### **How This Course Will Make You a Better Developer**

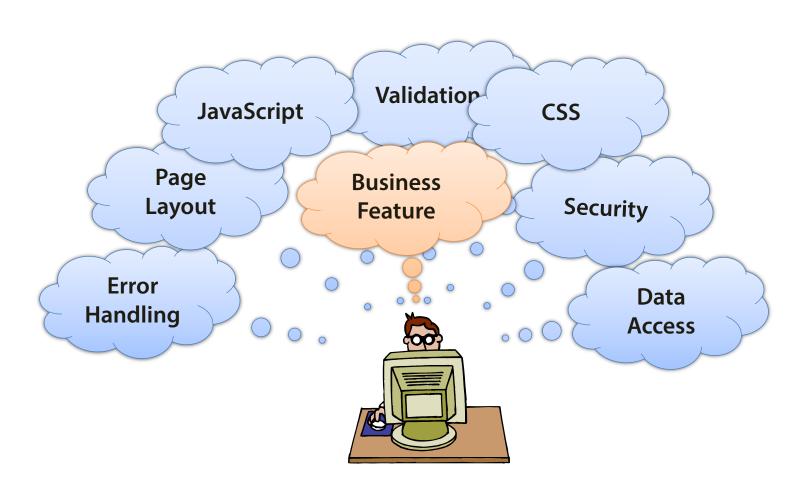
Get More Accomplished

Write Less Code

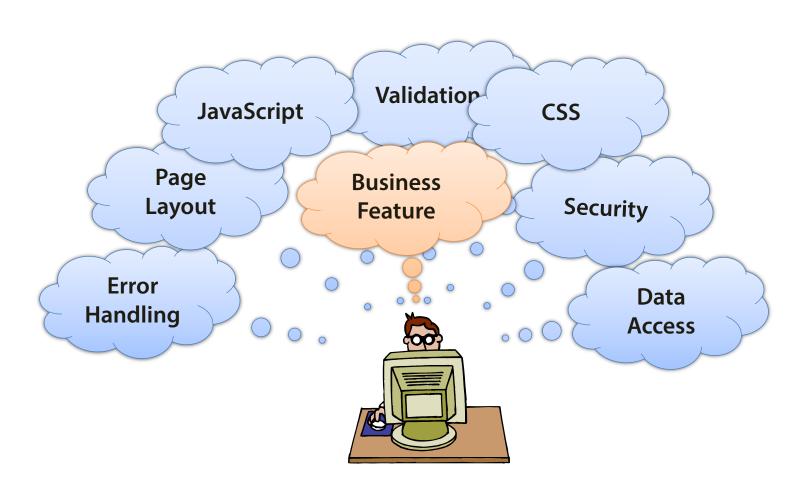
Go Beyond the Basics

Make ASP.NET
MVC Work the
Way You Want It
To!

### **Development: There's a Lot to Think About!**



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### What Is an Application Framework?



## Validation

**Data Access** 

Dependency Injection

Logging

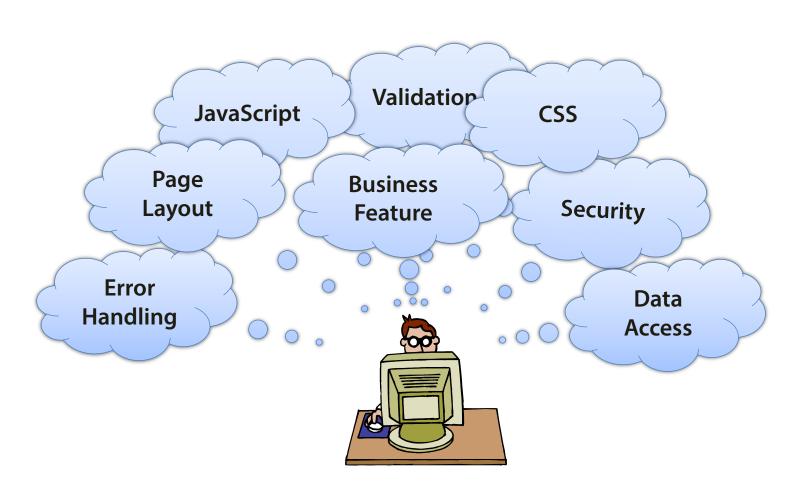
Error Handling

Security

## **Conventions & Infrastructure**

**And More!** 

### The Effect of a Good Application Framework



# Convention

Configuration

### **Convention Over Configuration**

Reasonable Defaults

Only Specify the Unconventional Bits

Reduces the Number of Decisions You Have to Make

Eliminates Distractions

Simplifies Day-to-Day Development Does <u>Not</u> Have to Sacrifice Flexibility!

### **Application Frameworks**

Conventions

**Architecture** 

Infrastructure

Team Agreement

### **Application Frameworks**

#### A Good Framework:

- Simplifies
- Handles uninteresting concerns
- Does not sacrifice flexibility
- Conventions can be overridden progressively
- Helps you and your team work the way want to work

#### **A Bad Framework:**

- All-or-nothing
- Is complex
- Obfuscates code and logic
- Is difficult to troubleshoot or debug
- Is massive!

#### The ASP.NET MVC "Problem"

No loC Container Lacks Solutions to Common Problems

String-Based Helpers

Poor Abstractions

**Fat Controllers** 

There's more!

### Let's Be Heroes!



### A Good Framework...



### Don't...



### **Summary**

Introduced the Application Framework

**Examined Convention Over Configuration** 

Good and Bad Qualities of Application Frameworks

What's Wrong with ASP.NET MVC

Next: the Heart of Fail Tracker's Application Framework