ASP.NET 5
What's the Big Deal?

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Who Am I?

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Microsoft Regional Director

Microsoft RD Program

"I am appointed by Microsoft with an independent external role in the Regional Director program, as one of the top 130 advocates worldwide for Microsoft, being recognized for deep and broad technical expertise in many technologies, public communications, community leadership and corporate experience, while maintaining a privileged two-way relationship and communication channel with the regional office, product teams, and senior Microsoft HQ personnel."

tl; dr: Microsoft values and trusts me. I am here to help you and your organization achieve your business objectives.

The Plan For This Session

☐ Today's Modern Web

☐ Re-Architecting ASP.NET

☐ Consolidation

Today's Modern Web

- ☐ Apps today are very different from apps built with original version of ASP.NET

- ☐ More Dynamic

- ☐ Less Server-Side HTML

- ☐ Services Dominate (REST)

- ☐ Cloud-based Hosting Has Arrived

So, What is ASP.NET 5?

"ASP.NET 5 is an open source web framework for building modern web applications that can be developed and run on Windows, Linux and the Mac."

https://weblogs.asp.net/scottgu/introducing-asp-net-5

Re-Architecting ASP.NET

Why?

- ☐ Emergence of NodeJS
- ☐ The Need for a Lightweight, Fast Framework
- ☐ The Need to Stay Relevant
- ☐ Open Source Tools

How?

☐ Out in the open on Github!

https://github.com/aspnet/home

☐ Weekly Public Standups

https://www.youtube.com/playlist?list=PL0M0zPgJ3HSftTAAHttA3JQU4vOjXFquF

Who?

☐ ASP.NET team blog

http://blogs.msdn.com/b/webdev/

☐ Driven By Community

Where?

☐ ASP.NET vNext site

http://www.asp.net/vnext

Relax, Some Things Stay The Same

- ☐ Controllers
- ☐ Razor Views (.cshtml)
- ☐ Models
- ☐ HTML / CSS / JavaScript (TypeScript)

Parallel Tracks

☐ ASP.NET 4.6
- ■ MVC 5
- ■ WEB API 2
- ■ SignalR 2
- ■ WebForms

☐ ASP.NET 5
- ■ MVC 6
- ■ SignalR 3

You don't have to make the jump to ASP.NET 5 since ASP.NET 4.6 isn't being discontinued.

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TECHNOLOGIES

VS Code or VS 2015

- ☐ Visual Studio Code
  - ■ Command line centric developers

- ☐ Visual Studio 2015
  - ■ IDE centric developers

You can build ASP.NET 5 applications with either tool.
ASP.NET is moving away from requiring Visual Studio, Windows or any GUI tools at all to build apps. Text editor is all you need.

Primary Changes

- ☐ New Project Structure
  - ■ File Based
- ☐ Two Runtimes to Select From
  - ■ Full & Core
- ☐ Unification of MVC and Web API
  - ■ Simplifies things

New Project Structure

- ☐ File based – just add file to a folder
  - ■ The file system IS the project
- ☐ New Folder Structure
- ☐ Configuration Files (JSON) – bye web.config!
- ☐ wwwroot
  - ■ For static files
  - ■ The root of the website is no longer the root of the project.

Noticeable Changes

- ☐ .csproj file -> file system
- ☐ global.asax -> startup.cs
- ☐ web.config -> project.json

Configuration Files (JSON)

- ☐ global.json
- ☐ project.json
- ☐ config.json
- ☐ bower.json
- ☐ package.json

New Project Structure

DEMO

Two Runtimes, No Waiting

☐ DNX 4.5.1 (Full CLR)

☐ DNX Core 5.0 (Subset)

    ◼ Much faster startup times

    ◼ Lower memory consumption

    ◼ Runs on multiple platforms including Windows, OS X & Linux

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Which Runtime to Choose

- ☐ DNX 4.5.1 (Full Framework)
  - ■ When you need to use features not in Core Framework
- ☐ DNX Core 5.0
  - ■ Deploy apps side-by-side
  - ■ Cross platform Windows, Linux & OS X

Command Line Tools

- ☐ DNX: .NET Execution Environment
  - ■ Was: k, klr, kre
- ☐ DNVM: .NET Version Manager
  - ■ Was: kvm
- ☐ DNU: .NET Development Utility
  - ■ Was: kpm

Not a command line person? No problem since all command line commands will have a corresponding UI gesture in VS 2015.

Command Line Tools

DEMO

Unification MVC & Web API

- MVC 6 = MVC + Web API
- Single framework that can handle both API and HTML endpoints
- Yes, endpoints can even in the same controller!

Unification MVC & Web API

DEMO

ASP.NET 5 Resources

☐ http://www.asp.net/vnext

☐ http://docs.asp.net

☐ Open Command Line VS Extension

https://visualstudiogallery.msdn.microsoft.com/4e84e2cf-2d6b-472a-b1e2-b84932511379

☐ Rick Strahl Articles (CODE magazine Jan/Feb 2015)

http://www.codemag.com/Article/1501061

http://www.codemag.com/Article/1501081

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Thank You for Attending!

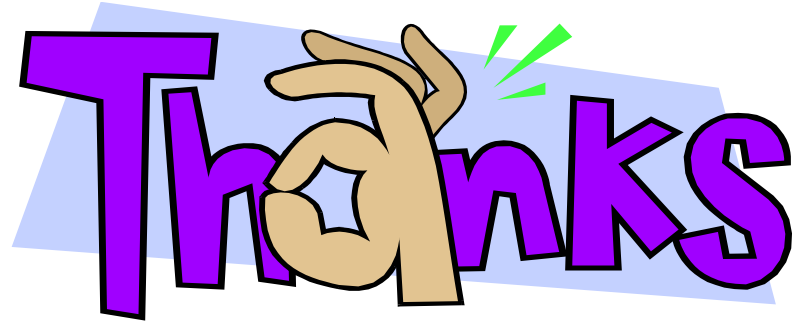☐ My Contact info:

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TakeNote Technologies

Training Division

☐ Provides public and on-site developer training classes and mentoring in:

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