10 Ways to Build Web Services in .NET FubuMVC

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Module Outline

- Introduction to FubuMVC
- Installing and Configuring FubuMVC
- Creating our first Endpoint
- An Endpoint with a route parameter
- Endpoints using JSON requests
- Endpoint with Delete Verb
- Creating and using our own Behavior
- Receiving data using the Spring.NET REST Client
- Sending data using the Spring.NET REST Client
- Review

FubuMVC

- A MVC framework built on top of the ASP.NET library
- A strong focus on "pluggability" and conventional configuration
- Can easily replace, override, extend, and customize most components of FubuMVC
- Uses user-defined convention over configuration to avoid unnecessary configuration

FubuMVC

Uses "behaviors" to process input and return output

- Every step in the process is a behavior that can be reused between requests
- Route -> Action -> Output
- Behavior chain can be modified by developers

One Model In, One Model Out

 Controller code is only concerned with processing the data, not retrieving it or rendering the output

Review

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FubuMVC – Convention over Configuration

- Controllers are automatically registered based on Class name (*Endpoints)
- Routes are automatically mapped based on convention
 - Verb_Route_Route_Variable(InputModel model)
 - Get_Puns_PunID(PunIDRequest request) results in GET /Puns/{PunID}

FubuMVC – Behaviors

- Behaviors are reusable components of a request pipeline
 - Routing, Actions, Content Negotiation & Output
- Each request is served by a Behavior Chain
 - Routing -> Endpoints Method -> Content Negotiation & Output
- Each Behavior can continue or stop the chain
- New Behaviors can be created and inserted at any point in the Behavior Graph

Spring.NET REST Client

- RestTemplate wraps the root URL and functionality of the client
- MessageConverters handle serialization and deserialization of objects to and from the request and response
- GetForObject<Type>("/route") automatically deserializes the response data into the specified type
- Can use route parameters by specifying a dictionary or ordered list of parameters
- Passing an object into Put or Post will serialize and send it with the request