

Routing, Controllers and Actions

Routing

- Patterns
 - What are they?
 - Why should I care?
- Order, Order, Order
- Routing Module
 - Why does it matter?
- Constraints on pieces

Controllers

- MVC Handler
 - What does it do?
- ControllerBuilder & ControllerFactory
- Difference between IController and Controller
- Base Controller Classes
- ActionInvoker and Interaction

Actions

- How are they found?
- Filters; how do they alter action state?
- Controllers are filters – is this OK?
- ActionResult – tailoring content to the “view”

Controllers and Action

- If odd, redirect to <http://www.google.com>
- If even, give the value of JSON
- If divisible by 3, show the value in HTML

Views, ViewModels and Clients

Views

- How are they found?
- How are ViewEngines work?
 - Why do they need to play nice?
- What should you look for in a View Engine?
 - Simplicity
 - Transparency
- HTML Helpers
 - Why use them?
 - Base HTML sample
- Encoding
 - Explicitly <%= %>
 - Implicitly <=: %>
- MasterPages & Lack of Control
- Partial Views for snippets
- Display Templates
 - Where you place them?
 - MVC Futures (samples)
 - Out of box are code
- Editor Templates
 - Metadata for validation/UI generation

ViewModels

- Specifying contract for data
- Strongly-typed views
- Helpers for strongly-typed views

Clients

- jQuery for posting of data (JSON)
- RestSharp for “code” clients

QuickLab

Person Manager

- Person data
 - First Name (at most 20)
 - Last Name (at most 20)
 - Age (numeric)
- Stores data in static list and displays content in list view

Models, Binders and More

Model Binder

- Input models
 - Pulling data from route, query string, etc.
- Custom Binders
 - Date sample
 - Complex data type

Models

- Options for “M”
 - LINQ to SQL
 - Caslte ActiveRecord
 - NHibernate
- Model to View
 - Downsides of such approach
- Mapping the Model to the ViewModel
 - Manual mapping
 - AutoMapper

QuickLab

Simple To-do Tracker

- Support entry per day
 - Name (most 50)
 - Description
- Displays list of tasks for a specific day
 - Date can change via URL
- Displays list of all tasks

AppLab

miniURL

- Takes a URL and assigns it a “short name” to it
- When “short name” is typed into the application URL, redirection happens to original URL

Extra features

- Keep track of how many times URL is viewed
- Display URL info (views) with original URL when short name is “queried” in an specific way