

# MVC III

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2015

# Localization

## CultureInfo

- Provides information about a specific culture (the writing system, the calendar used, the sort order of strings, and formatting for dates and numbers...)

## System.Threading.Thread properties:

- Culture - number and date formats, currency symbols, sort order, casing etc.
- UICulture - resource localization (string translations)

## Resource files (resx) naming conventions

- name.resx – used as default when culture specific resource was not found
- name.[language].resx – specific (strings.en.resx)
- name.[language]-[region].resx – more specific (strings.en-us.resx)

<https://msdn.microsoft.com/en-us/library/ms247246.aspx>

# Working with resources

## View

- @[Namespace].[ResourceName].[StringName] ("@Resources.Resources.LogOn ")
- You can add this namespace to the views Web.config and type "@Resources.LogOn"

## Data annotations

```
[Display(Name = "FirstName", ResourceType = typeof(Resources.Resources))]  
[Required(ErrorMessageResourceType = typeof(Resources.Resources),  
ErrorMessageResourceName = "FirstNameRequired")]  
[StringLength(50, ErrorMessageResourceType = typeof(Resources.Resources),  
ErrorMessageResourceName = "FirstNameLong")]  
public string FirstName { get; set; }
```

# Determining culture

## Web.config

- Fixed: `<globalization culture="en-US" uiCulture="fr" />`
- From "AcceptLanguage" header: `<globalization uiCulture="auto:en-US" culture="auto:en-US"/>`
  - First language in header is used, if you want to process all languages in header, you need to write custom code.

## Cookie / Session

- Implement switch action that writes selected culture to cookie.
- Use culture stored in cookie. If cookie is not set, use AcceptLanguage header.

## Culture in URL

- Add {culture} parameter to routes: {culture}/{controller}/{action} (http://server/en-us/...)
- Landing page without culture parameter redirects to proper URL based on AcceptLanguage header.

## When?

- Before model binding. Culture is used to validate model formatting.
- After authentication if you are storing preferred culture in user profile.
- Best place to do so is probably in `HttpApplication.AcquireRequestState` event handler.

<http://www.asp.net/mvc/overview/getting-started/lifecycle-of-an-aspnet-mvc-5-application>

<https://msdn.microsoft.com/en-us/library/bb470252.aspx> (look for `HttpApplication` pipeline)

<http://weblog.west-wind.com/posts/2014/Mar/27/Auto-Selecting-Cultures-for-Localization-in-ASPNET>

# Localization resources

- [ASP.NET MVC 5 Internationalization](#)
- [Selecting Cultures for Localization in ASP.NET](#)
- [ASP.NET MVC 5 Internationalization · Date and Time](#)
- [ASP.NET MVC 5 Internationalization · How to Store Strings in a Database or Xml](#)
- [Globalization, Internationalization and Localization in ASP.NET MVC 3, JavaScript and jQuery](#)
- [Internationalization](#)
- [Localization](#)

# Bundling & minification

- Nuget Microsoft.AspNet.Web.Optimization

## Register

- BundleTable.Bundles.Add()
- Pass StyleBundle / ScriptBundle object

## Render

- Use namespace System.Web.Optimization
- @Styles.Render("~/BundleName")
- @Scripts.Render("~/BundleName")

## Debug

- Bundling & minification is disabled in debug mode (configured in web.config)
- You can override this behavior by setting BundleTable.EnableOptimizations property.

<http://www.asp.net/mvc/overview/performance/bundling-and-minification>