

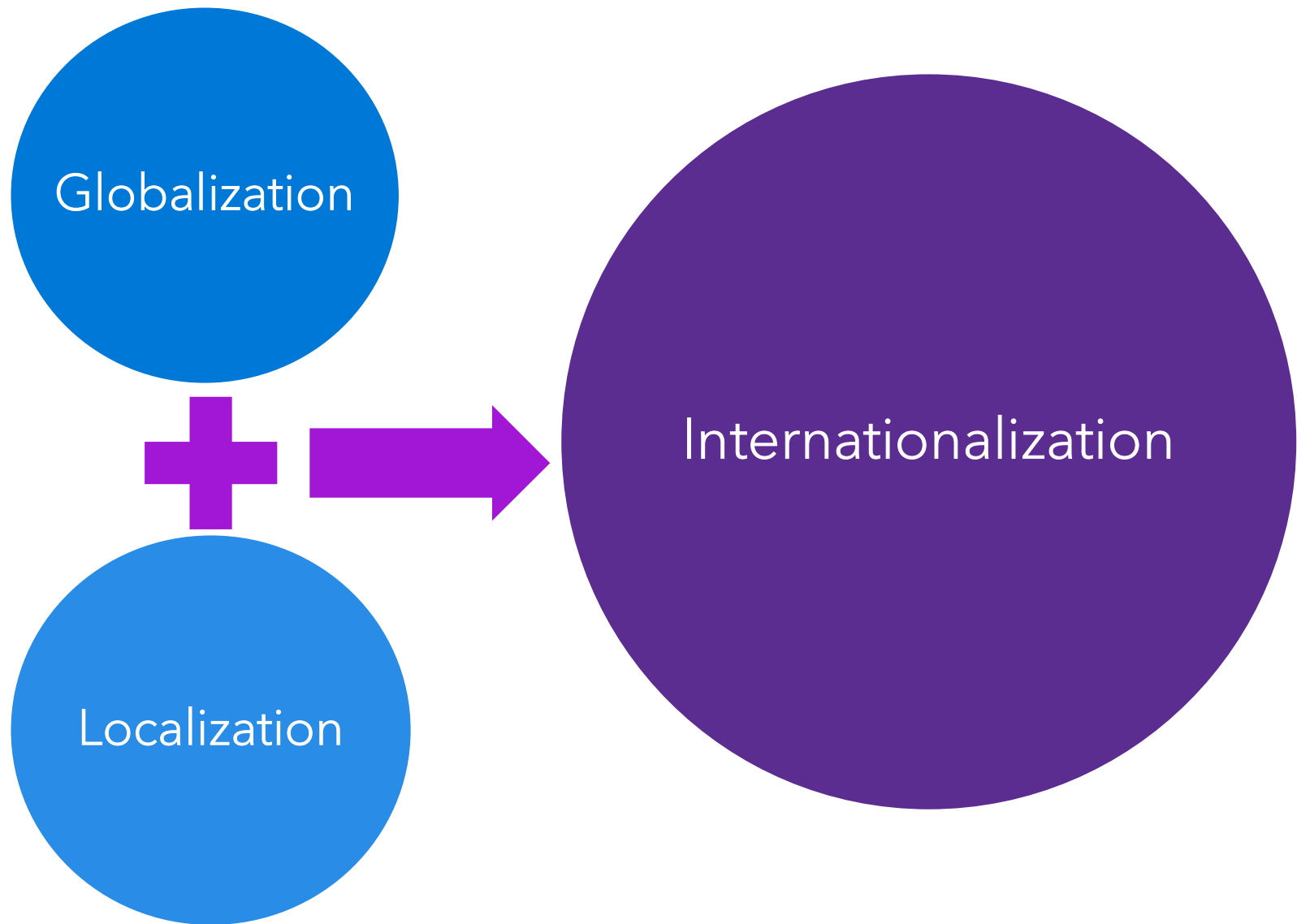
Globalizing Your ASP.NET 8 Presence

CONFOO 2024



Agenda

- Overview
- Globalizing ASP.NET Core MVC Projects
- Resource Files
- Localizing ASP.NET Core MVC Projects
- User Selectable Culture w/ Cookies
- Data Annotations
- Custom Providers
- Custom Localizers



Globalization

Process of designing and developing software for different cultures

- Identifying the culture/locale that must be supported
- Designing features which support those cultures/locales
- Writing code that functions equally well in any of the supported cultures/locales

Globalization

Areas we have to look at for Globalization:

- Languages
- Currencies
- Date and time formatting
- Numeric, weight, and measure conventions

Localization

- Translating the application user interface (UI) or adapting graphics for a specific culture
- The localization process for assigning UI elements with localized text and resizing application UI elements to accommodate localized text

Globalization



Methods to Determine Culture

URL Request String

- `QueryStringRequestCultureProvider`

Cookies

- `CookieRequestCultureProvider`

Accept-Language HTTP Header

- `AcceptLanguageHeaderRequestCultureProvider`

The background of the slide is an abstract composition. It features a smooth gradient that transitions from a bright yellow on the left to a deep red on the right. A dark, almost black, wavy shape is positioned at the bottom of the frame, partially obscuring the gradient. The word "Demo" is written in a bold, white, sans-serif font on the right side of the image.

Demo



Resource Files

Resource File Generation

RESGEN.EXE

Use a Localization Manager in your preferred IDE

Working with your Business Analyst



Localization: Controllers

```
public class HomeController : Controller {
    private readonly IHtmlStringLocalizer<HomeController>
        _localizer;

    public HomeController(
        IStringLocalizer<HomeController> localizer
    )
    {
        _localizer = localizer;
    }
}
```

Resource File Naming Standard

Resources/Controllers.HomeController.en.resx

Resources/Controllers.HomeController.fr.resx

Resources/Controllers.HomeController.en.resx

Resources/Controllers/HomeController.en.resx

Resources/Controllers/HomeController.fr.resx

Resources/Controllers/HomeController.en.resx

The background of the slide is an abstract composition. It features a smooth color gradient that transitions from a pale yellow on the left to a vibrant red on the right. A soft, wavy white line runs horizontally across the middle of the image, creating a sense of movement and depth. The overall effect is modern and visually appealing.

Demo



Localization: Views


```
public IActionResult Index()  
{  
    ViewData["Title"] = _localizer["Title"];  
    return View();  
}
```

```
@USING MICROSOFT.ASPNETCORE.MVC.LOCALIZATION

@INJECT IVIEWLOCALIZER LOCALIZER

@{
    VIEWDATA["TITLE"] = LOCALIZER["HOMETITLE"];
}
<H1 CLASS="PAGE-HEADER">@VIEWDATA["HOMETITLE"]
</H1>
```

Resource File Naming Standard

Resources/Views.Home.Index.en.resx

Resources/Views.Home.Index.fr.resx

Resources/Views.Home.Index.en.resx

Resources/Views/Home/Index.en.resx

Resources/Views/Home/Index.fr.resx

Resources/Views/Home/Index.en.resx

The background of the slide is an abstract composition. It features a color gradient that transitions from a pale yellow on the left to a vibrant red on the right. A soft, wavy white line separates the yellow area from the red area, creating a sense of movement and depth. The word "Demo" is positioned in the red area, to the right of the wavy line.

Demo



Localization: Data Annotation

Resource File Naming Standard

Models/AlbumViewModel.en-US.resx

Models/ AlbumViewModel.en-US.resx

Models/ AlbumViewModel.en-US.resx

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Demo



Localization: Custom Localizer

The background of the slide is an abstract composition. It features a smooth color gradient that transitions from a deep red at the top to a bright yellow at the bottom. A prominent, thick, white, wavy line curves across the middle of the image, separating the red upper portion from the yellow lower portion. The word "Demo" is written in white, bold, sans-serif font in the lower right area, positioned over the red section of the background.

Demo

**Thanks for
attending the
session!**



All the demos and code
located on GitHub

[https://github.com/cwoodruff/
ASPNETCore-I18n](https://github.com/cwoodruff/ASPNETCore-I18n)