

Understanding Regions



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Agenda



What Are Regions?

Understanding the Region Manager

Defining Regions

What Are RegionAdapters?

Create a StackPanel RegionAdapter



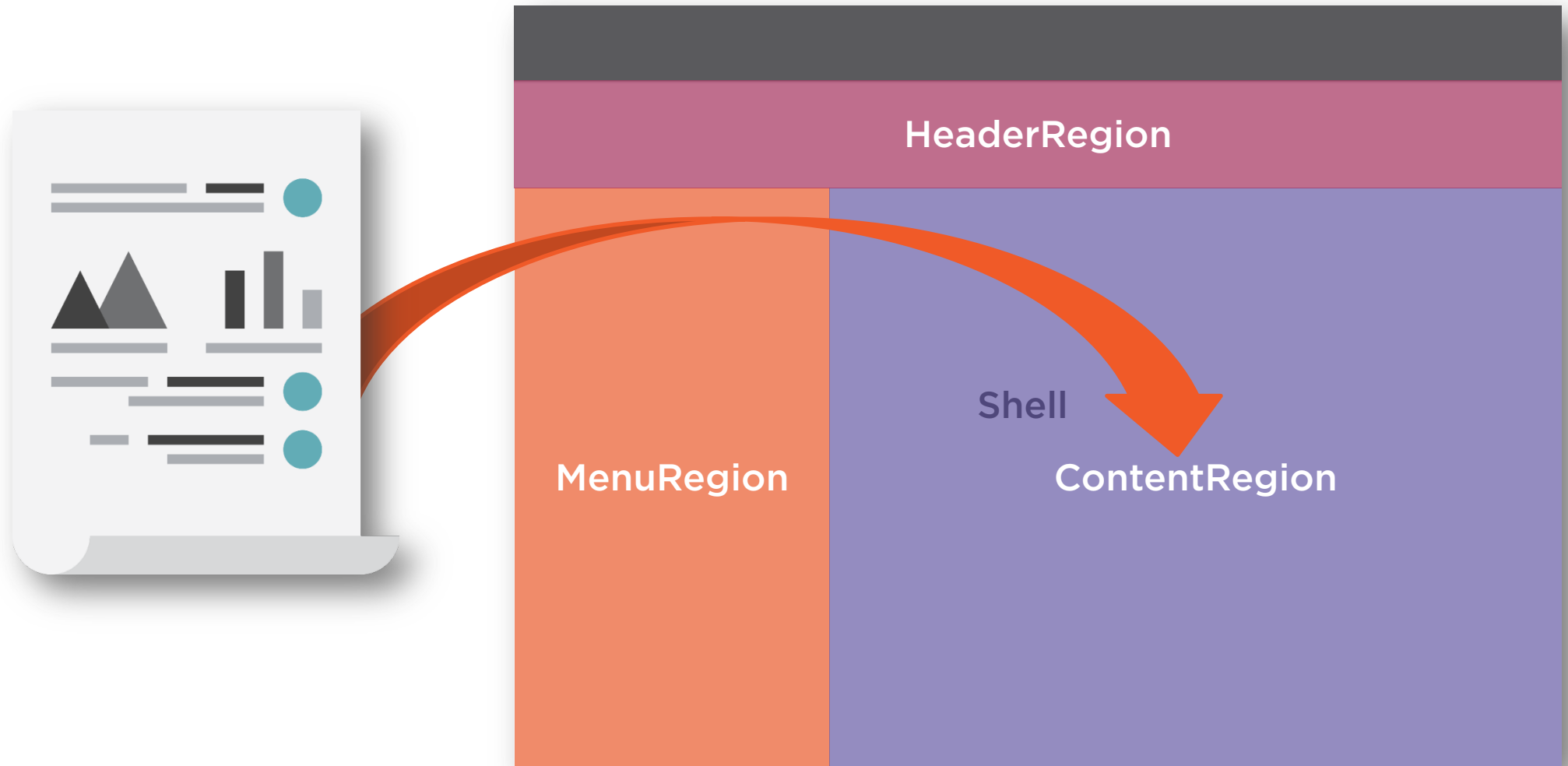
What Are Regions?



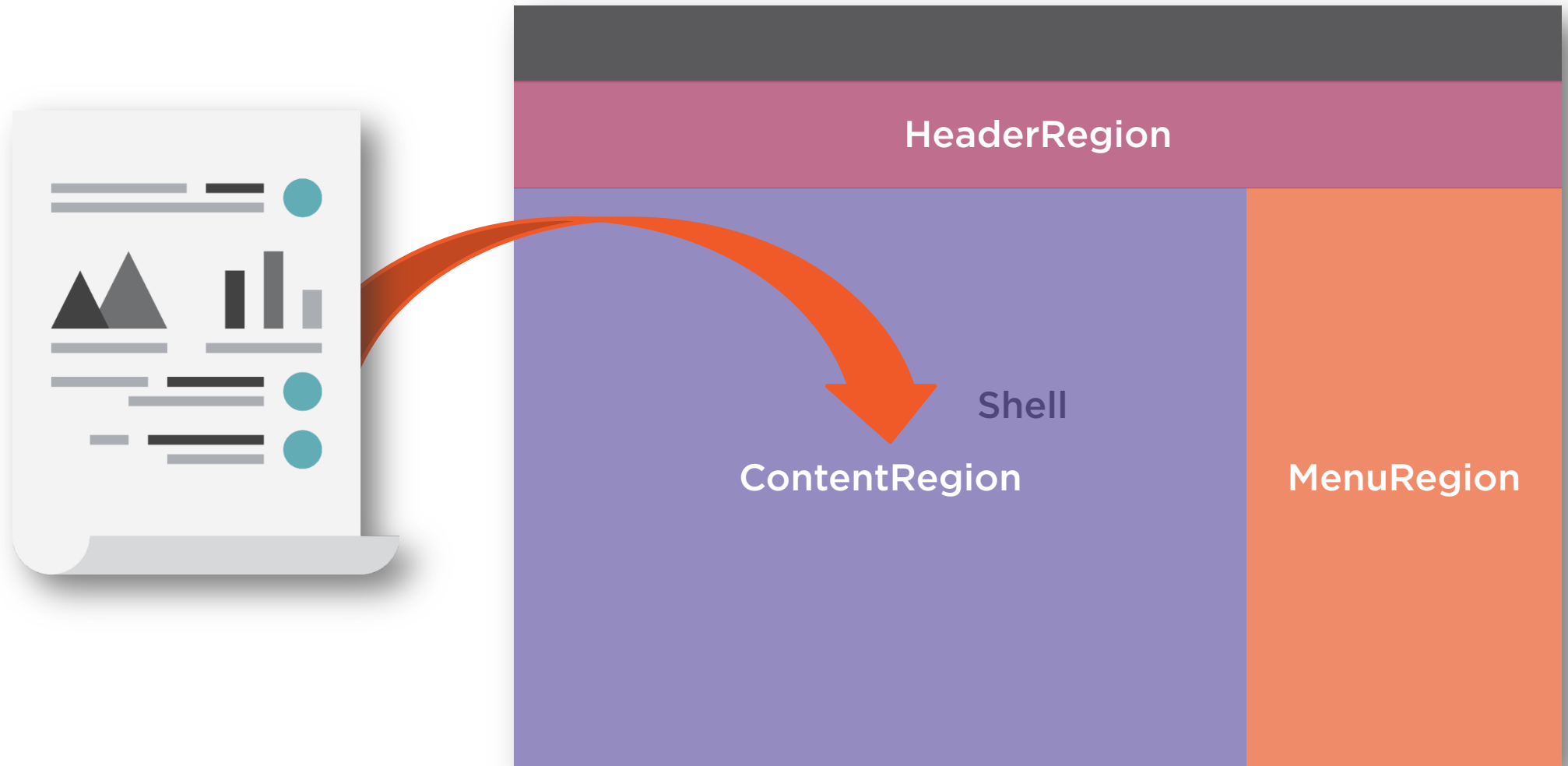
Place holder for dynamic content



What Are Regions?



What Are Regions?



What Are Regions?



Place holder for dynamic content

No knowledge of views

Create in XAML or code

- `RegionManager.RegionName` (XAML)
- `RegionManager.SetRegionName` (Code)



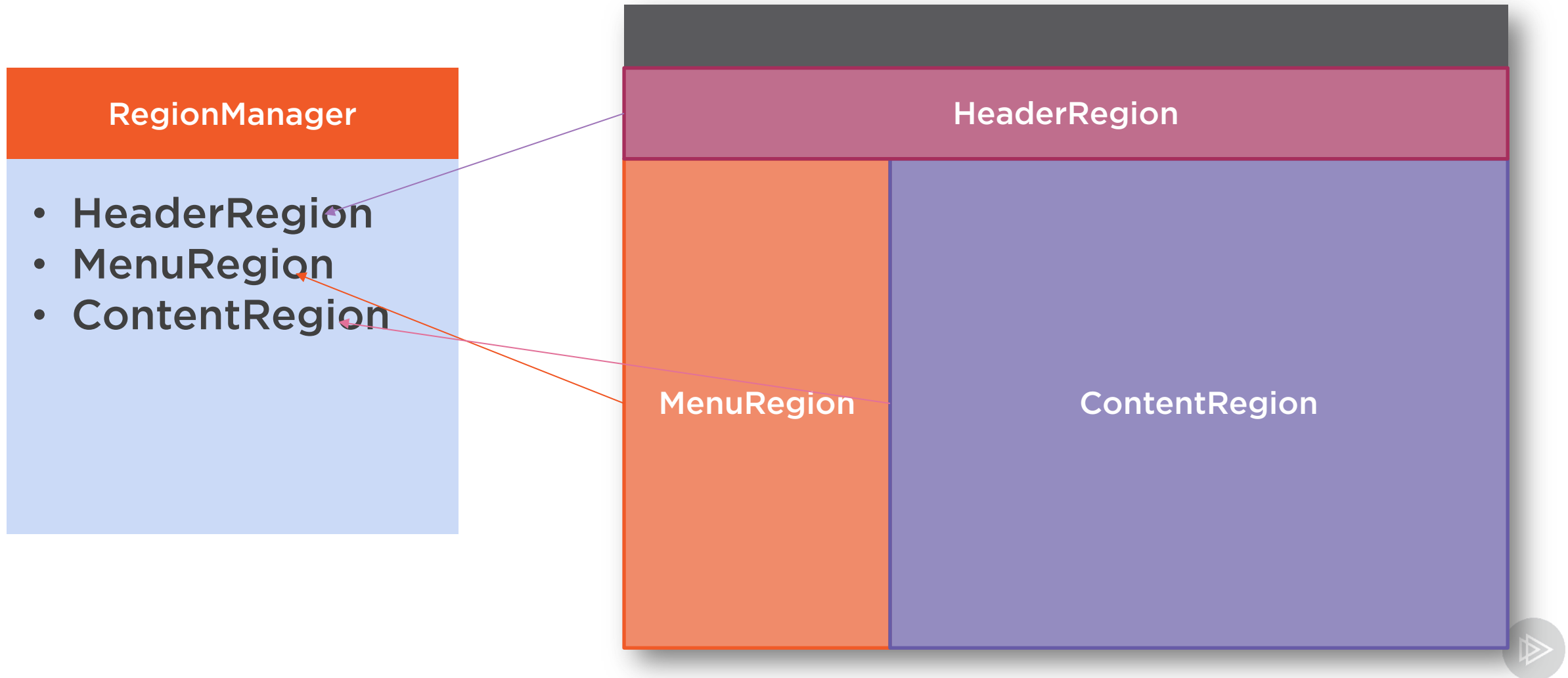
Understanding the RegionManager



Maintains collection of regions



Understanding the RegionManager



RegionManager



Maintains collection of regions

Provides access to Regions

Used for View Composition

Used for Region Navigation

Used to define Regions



Defining Regions

```
<Window x:Class="PrismApp.Views.MainWindow"  
    xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"  
    xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml">  
    <Grid>  
        <ContentControl />  
    </Grid>  
</Window>
```



Defining Regions

```
<Window x:Class="PrismApp.Views.MainWindow"  
    xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"  
    xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"  
    xmlns:prism="http://prismlibrary.com/" >  
    <Grid>  
        <ContentControl />  
    </Grid>  
</Window>
```



Defining Regions

```
<Window x:Class="PrismApp.Views.MainWindow"
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
        xmlns:prism="http://prismlibrary.com/" >

    <Grid>

        <ContentControl prism:RegionManager.RegionName="ContentRegion" />

    </Grid>

</Window>
```



Region names **MUST** be
unique!



Demo

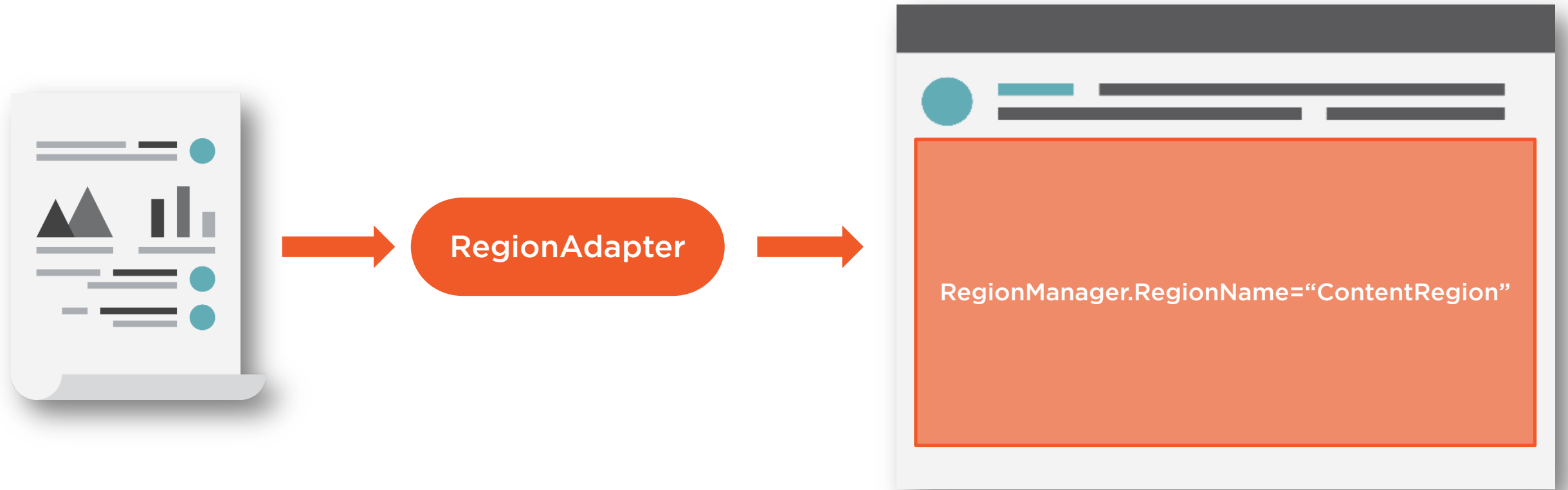


Defining a Region

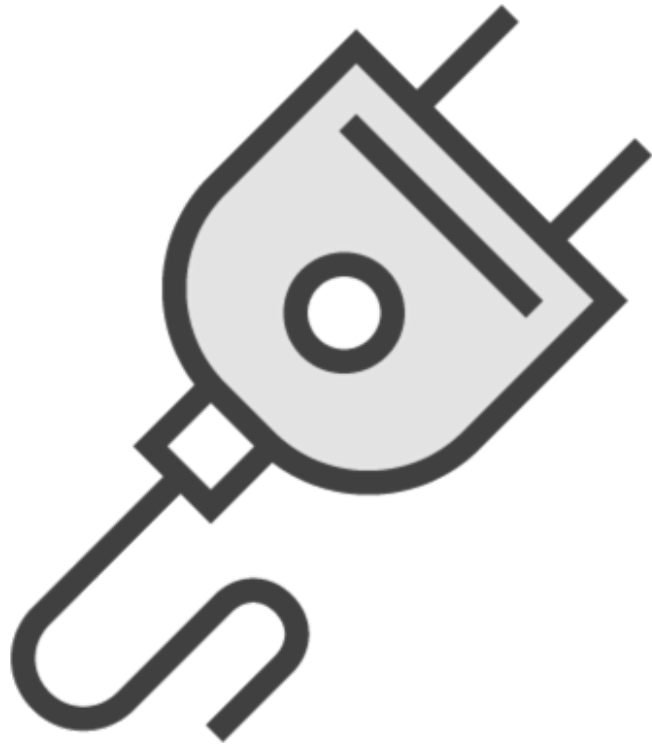


What Are RegionAdapters?

Adapts a View to a Region



Supported RegionAdapters



ContentControlRegionAdapter

ItemsControlRegionAdapter

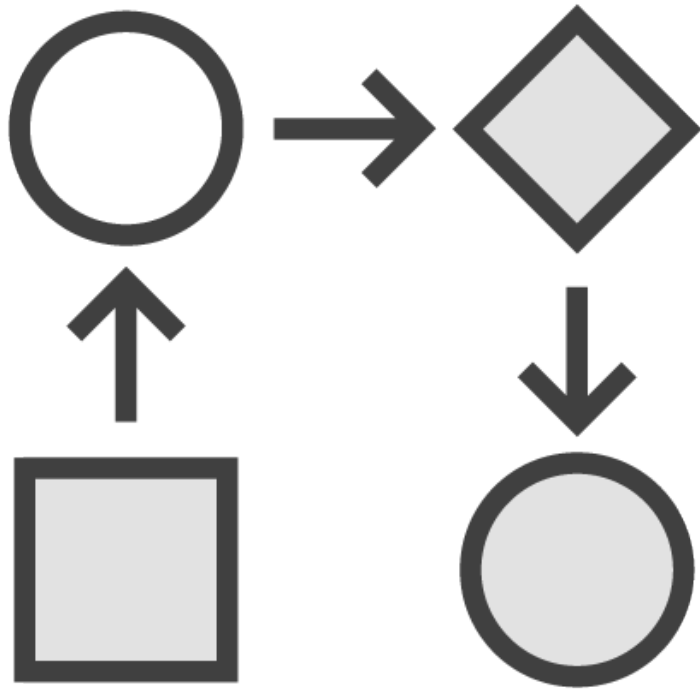
SelectorRegionAdapter

- ComboBox
- ListBox
- Ribbon
- TabControl

All other controls will require a custom RegionAdapter



Creating a Custom RegionAdapter



Derive from `RegionAdapterBase<T>`

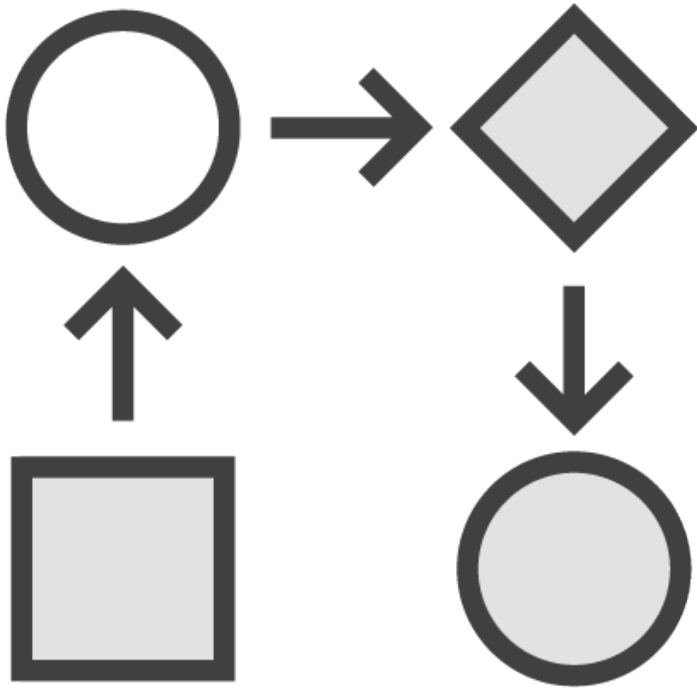


Derive from RegionAdapterBase<T>

```
public class StackPanelRegionAdapter : RegionAdapterBase<StackPanel>
{
    public StackPanelRegionAdapter(IRegionBehaviorFactory regionBehaviorFactory)
        : base(regionBehaviorFactory){ }
}
```



Creating a Custom RegionAdapter



Derive from RegionAdapterBase<T>

Override CreateRegion method

- SingleActiveRegion
- AllActiveRegion
- Region



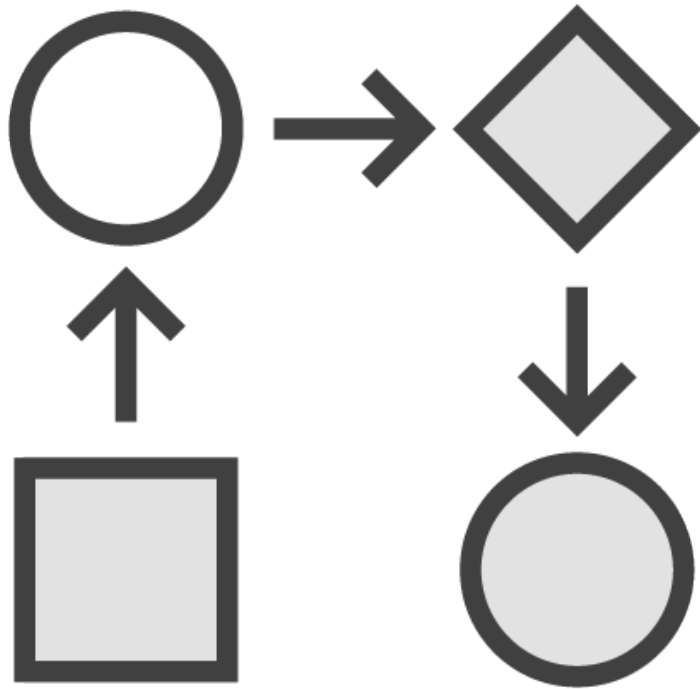
Override CreateRegion Method

```
public class StackPanelRegionAdapter : RegionAdapterBase<StackPanel>
{
    public StackPanelRegionAdapter(IRegionBehaviorFactory regionBehaviorFactory)
        : base(regionBehaviorFactory){ }

    protected override IRegion CreateRegion() => new Region();
}
```



Creating a Custom RegionAdapter



Derive from RegionAdapterBase<T>

Override CreateRegion method

- SingleActiveRegion
- AllActiveRegion
- Region

Override Adapt method

- Add view to region (host control)

Custom RegionAdapter

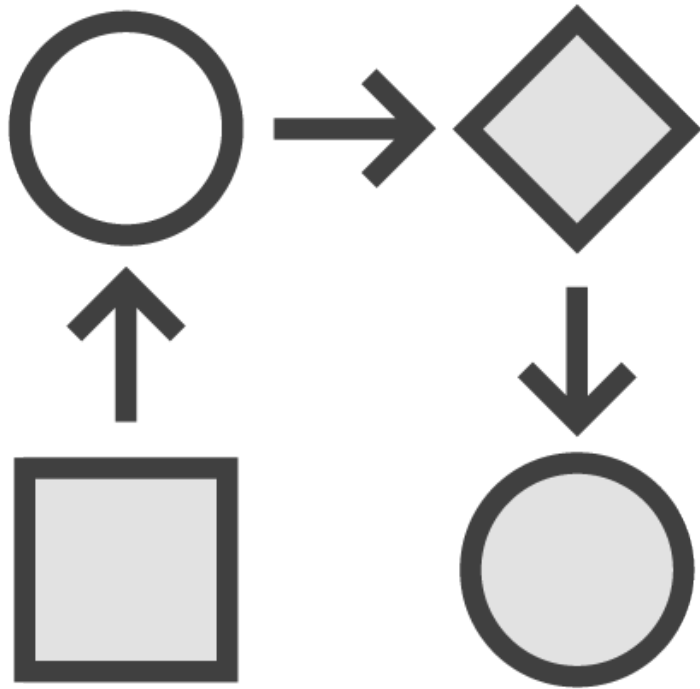
```
public class StackPanelRegionAdapter : RegionAdapterBase<StackPanel>
{
    public StackPanelRegionAdapter(IRegionBehaviorFactory regionBehaviorFactory)
        : base(regionBehaviorFactory){ }

    protected override void Adapt(IRegion region, StackPanel regionTarget)
    {
        //implement code
    }

    protected override IRegion CreateRegion() => new Region();
}
```



Creating a Custom RegionAdapter



Derive from `RegionAdapterBase<T>`

Override `CreateRegion` method

- `SingleActiveRegion`
- `AllActiveRegion`
- `Region`

Override `Adapt` method

- Add view to region (host control)

Register your adapter in `PrismApplication`

Register with PrismApplication

```
protected override void ConfigureRegionAdapterMappings(RegionAdapterMappings mappings)
{
    base.ConfigureRegionAdapterMappings(mappings);

    mappings.RegisterMapping(typeof(StackPanel),
        Container.Resolve<StackPanelRegionAdapter>());
}
```



Demo



Create a StackPanel RegionAdapter



Summary



What are Regions?

Understanding the Region Manager

Defining Regions

What are RegionAdapters?

Create a StackPanel RegionAdapter

