

# Design Time Data Binding

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**pluralsight**   
hardcore developer training

# Outline

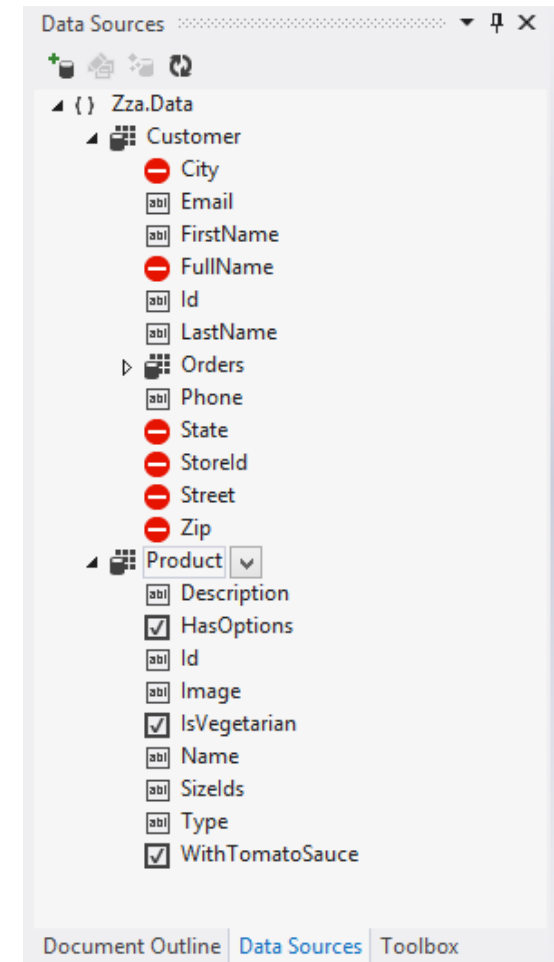
Data Sources and  
Properties  
Windows

Working with  
DataTemplates in  
the Designer

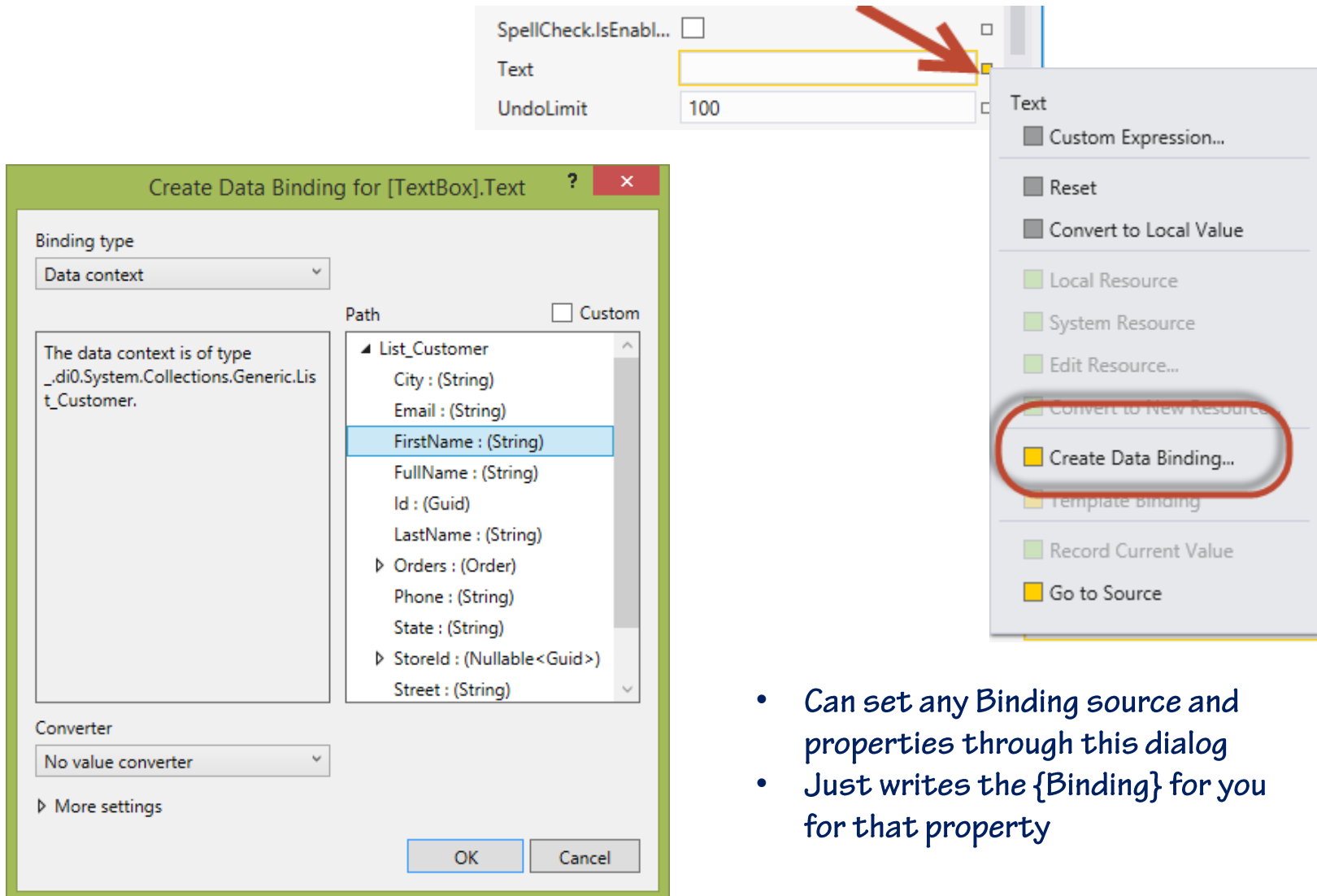
Design Time Data

# Visual Studio Data Sources Window

- Allows you to add objects that you intend to data bind
- Drag and drop entities or properties onto the XAML Designer
- Generates bound UI elements with appropriate properties hooked up to the entity with bindings
- Generates CollectionViewSources for the entity types dropped
- Just need to populate those view sources at runtime
- Can also hook up existing controls to properties through drag / drop
- Set of mapped controls is customizable



# Visual Studio Properties Window Data Binding



# Visual Studio DataTemplate Editing

- **Visual Studio includes a subset of the design time capabilities of Blend for Visual Studio**
  - Same designer and designer windows under the covers
- **Can graphically edit DataTemplates in the designer**
  - Add controls
  - Set properties
  - Hook up data binding to properties
- **Somewhat limited and can take more time in point / click than just typing the code if you are comfortable with the XAML needed**

# Design-Time Data

- **Designer needs to know what data you are working with**
  - Type of entities
  - Sample data
- **Can help out with graphical design of UI**
  - Hooking up code
    - Binding Intellisense
      - VS 2012 – Binding Properties
      - VS 2013 – DataContext object properties to hook up Path
    - Properties Binding Window
  - Laying out UI appropriately
    - Visualizing controls with contained data
    - Deciding on sizing and positioning
- **UI Elements are “live” in the designer**
  - Elements are constructed and loaded to render in the designer
  - Any code they call out to is live too
    - i.e. ViewModel code that calls service/database
  - Does not have full execution context (no config), so DB and service calls will fail

# Design-Time Data

- **d: namespace**
  - `xmlns:d="http://schemas.microsoft.com/expression/blend/2008"`
- **d:DataContext**
  - Provides a DataContext instance that can be used by the designer
  - Flows down visual tree just like normal DataContext
  - Ignored at runtime
- **d:DesignSource**
  - Provides design-time Source for CollectionViewSource
- **d:DesignInstance**
  - Creates default instance of identified object type (using {x.Type} )
- **d:DesignData**
  - Provides object model with populated data from a XAML or XML file
  - Can be a whole complex object graph
  - Used to set d:DataContext or d:DesignSource

# Summary

Can generate DataGrids or Detail Forms from entity types through drag/drop

Can hook up existing controls bindings through drag/drop of bound property

Set of mapped controls in Data Sources Windows is customizable

VS designer allows graphical design of DataTemplates

Design-time data provides VS designer type info or sample data