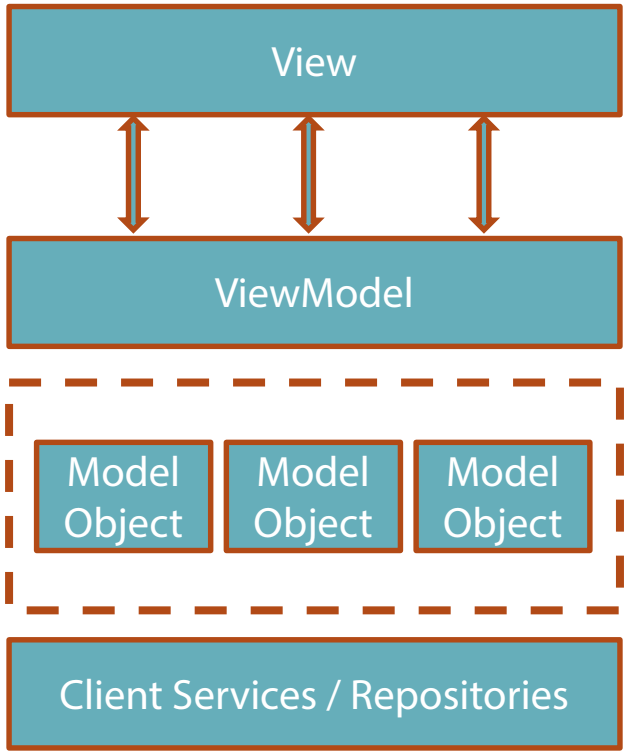
MVVM Applied – Part 1

Brian Noyes

@briannoyes | www.solliance.net

Overview



Naming and Location of Components

Hierachical MVVM / Navigation

MVVM App Building

There are no correct names,
only good or bad ones in the
eye of the beholder.

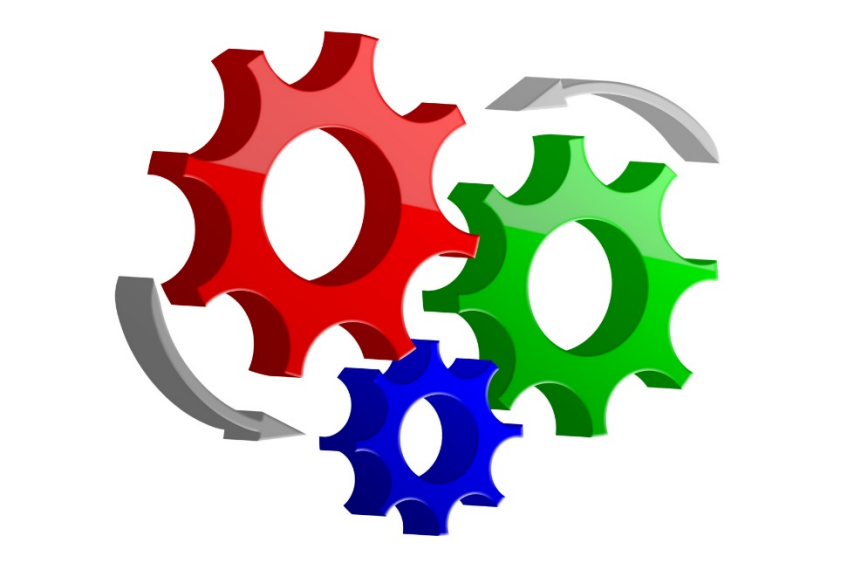
What matters is having a
pattern and using it
consistently.

View Naming Guidance

- Typically named "<Name>View"
- May have other name suffixes (i.e. Window, Page, Dialog)
- Recommendation: Don't include "View" in the type name unless it has a corresponding ViewModel

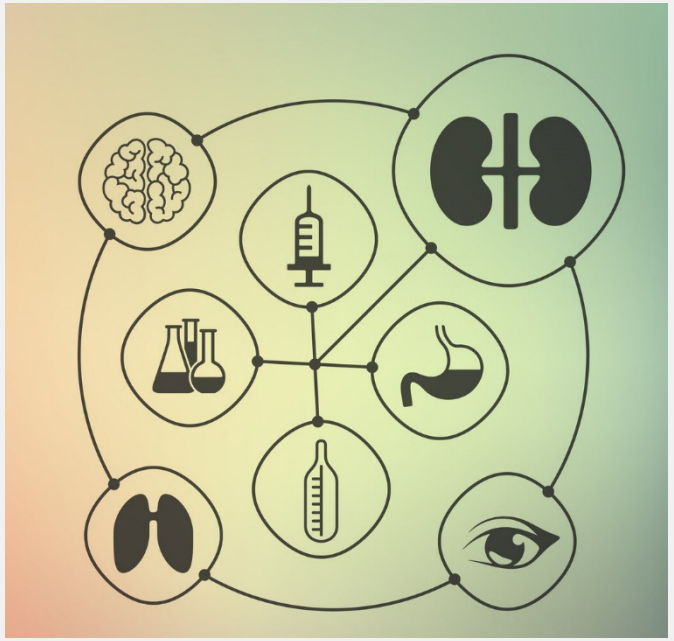
ViewModel Naming Guidance

- If the View name ends in “View”, append “Model”
  - CustomerEditView / CustomerEditViewModel
- If the View name does not end in “View”, append “ViewModel”
  - MainWindow / MainWindowViewModel
- The rest of the ViewModel name should match the View name



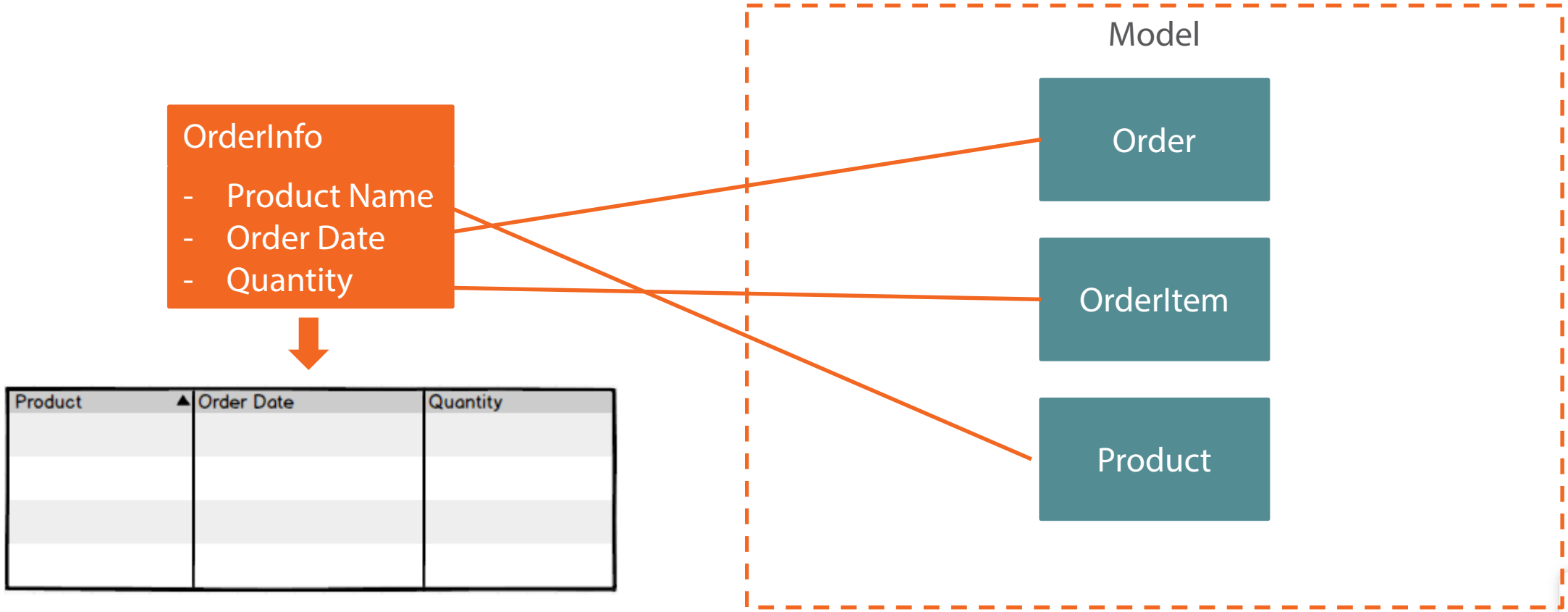
Naming Models

- Model objects are mostly data objects or Plain Old CLR Objects (POCOs) – aka "Entities"
  - Does not imply use of "Entity Framework"
- Name them for the data or state that they contain
  - Customer, Order, Product, Patient, Prescription, Appointment, etc.



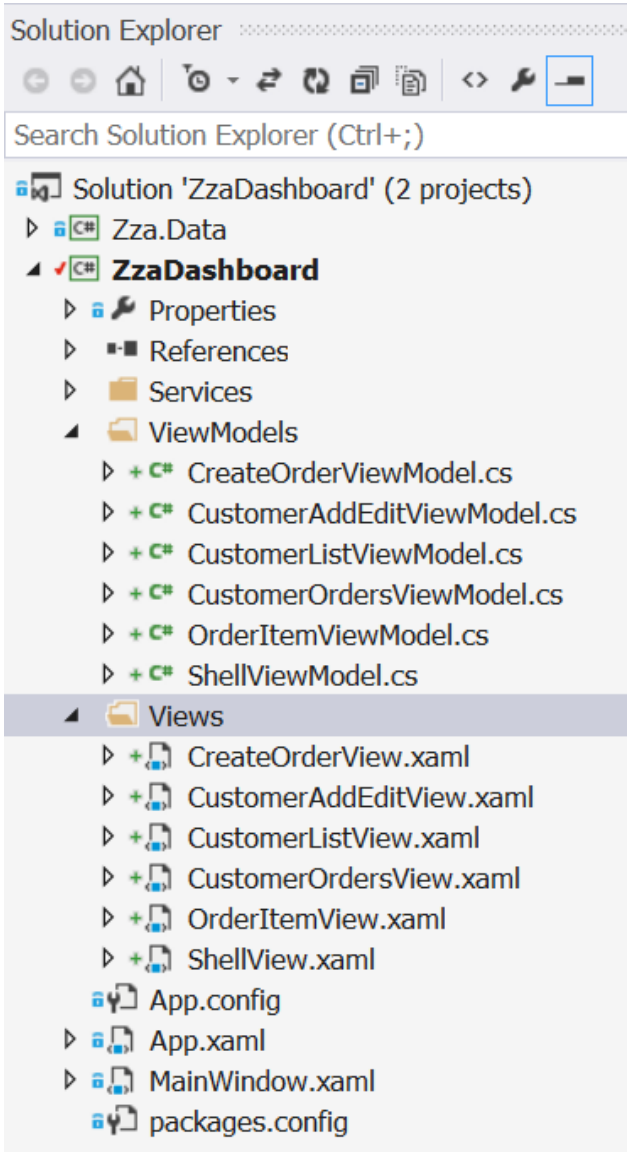
Wrapped Model Naming Guidance

- Don't name data objects that don't have a corresponding View a "ViewModel"
- But put them somewhere different from your Model types

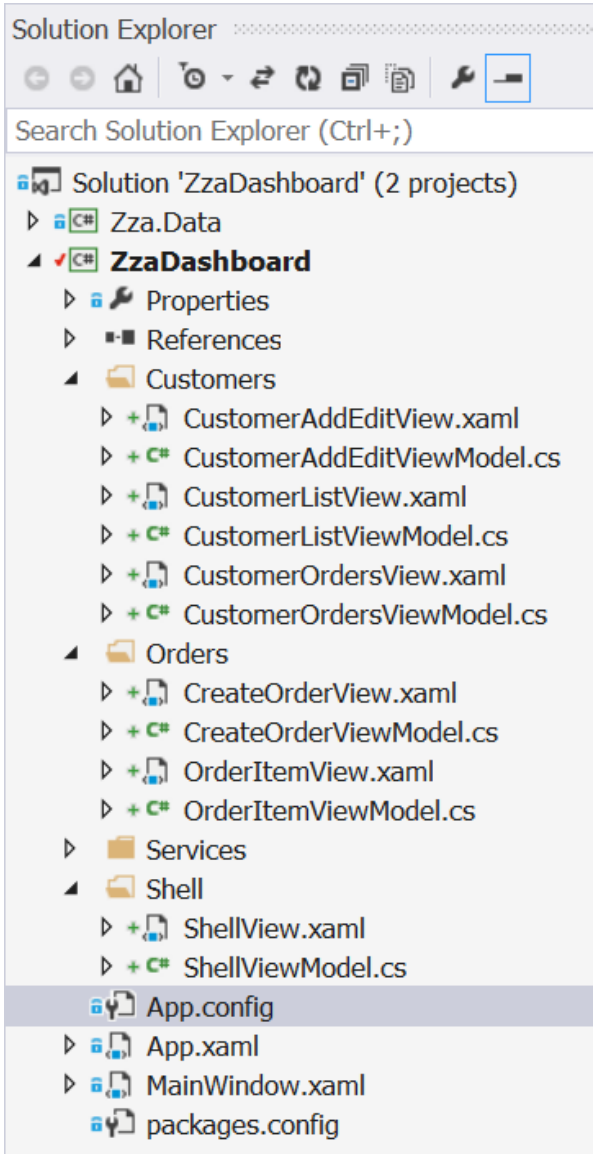


Locating Components

By Type

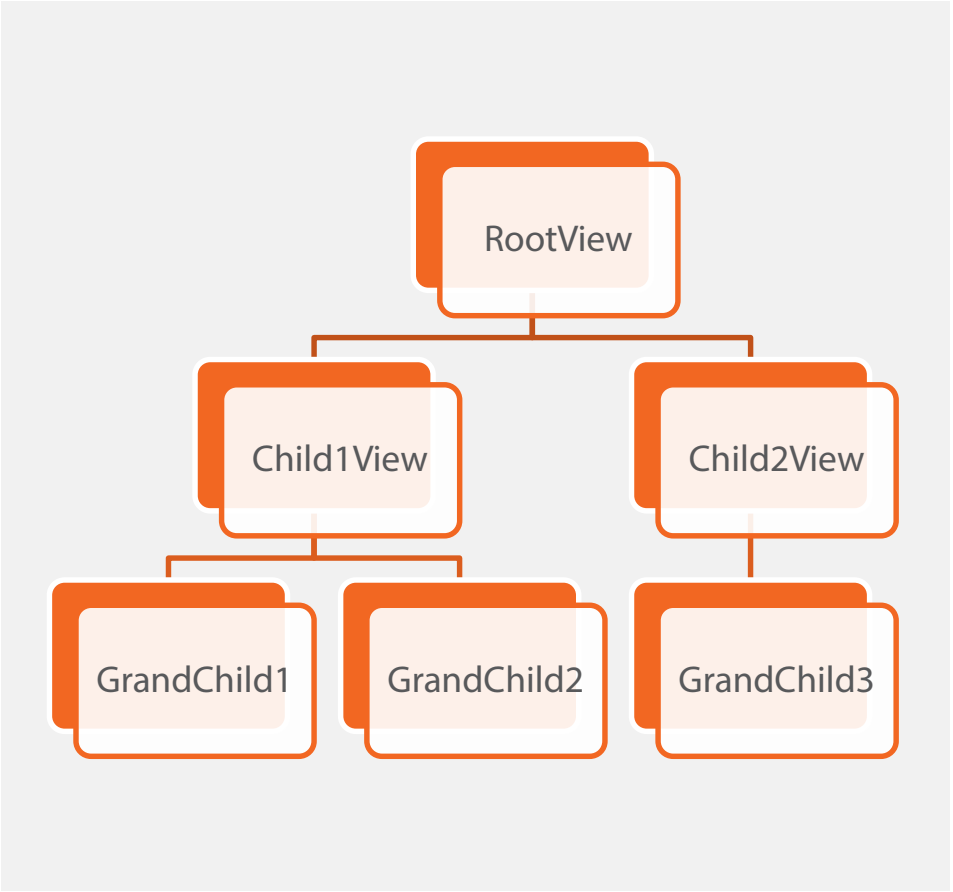


By Feature



Hierarchical MVVM and Navigation

- Views are commonly nested
- Nested content may or may not need to be Views with ViewModels
  - If no encapsulated data management or interaction logic, no need for a ViewModel
- Parent ViewModels can construct child ViewModels
  - And cause navigation, or view switching through DataTemplates
- Parent ViewModels can supervise and mediate between children



Applied MVVM Demo Use Cases

List Customers

Place Orders for a Customer

Add/Edit Customers

Monitor Order Preparation

Summary

Naming and location of components is important for maintainability

Hierarchical MVVM mirrors the way we normally compose complex screens

Building out an MVVM app is a progressive sequence of defining Views, ViewModels, navigation and communications to satisfy the requirements