



# Using Layer Diagrams

Keep your MVVM code from turning into spaghetti

Ash Tewari

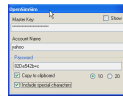
[www.ashtewari.com](http://www.ashtewari.com)

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OpenSimSim



Windigo

*DbUpdater*  
Version-aware sql  
schema deployment



CensusMapper



## Feedback Cards & Raffle

1. Your Name
2. Email Address
3. Comments/Feedback



<http://www.codedemo.net>

# Agenda

- Layer Diagrams
- MVVM

# Prerequisite

Visual Studio (Ultimate) is required to CREATE Layer Diagrams

# Who is here?

What are you working on these days?

What are you learning?

Personal / Weekend Projects?

MVVM?

Layer Diagrams?

Layer Diagrams - MVVM (Ash Tewari -  
<http://www.ashtewari.com>)

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# M-V-VM

Model

View

ViewModel

Layer Diagrams - MVVM (Ash Tewari -  
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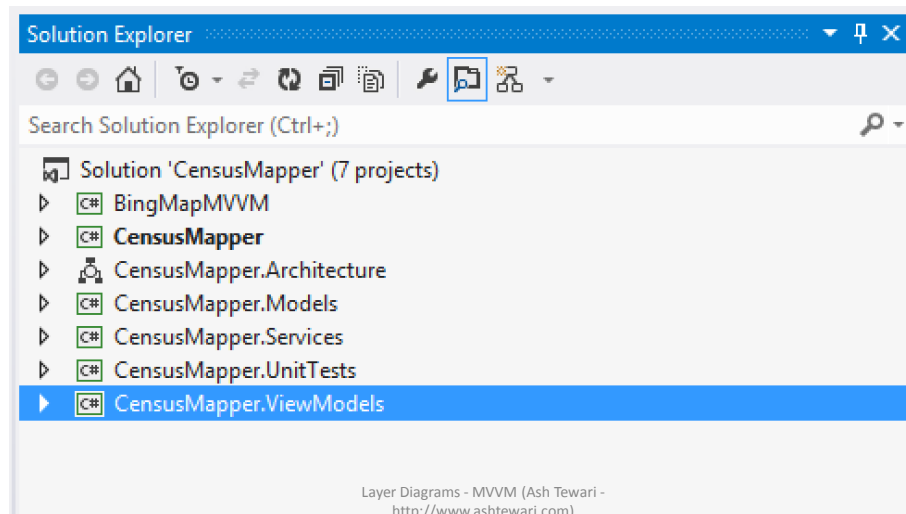
# M-V-VM Rules

- Model does not know about ViewModel/View.
- ViewModel does not know about the View.

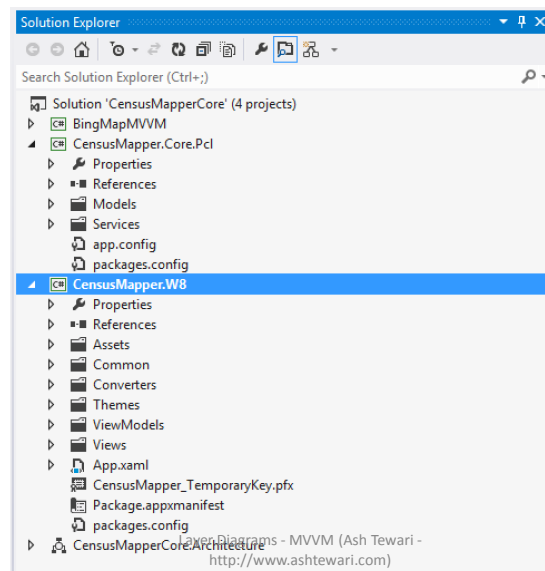
# Demo

## MVVM (Code Organization)

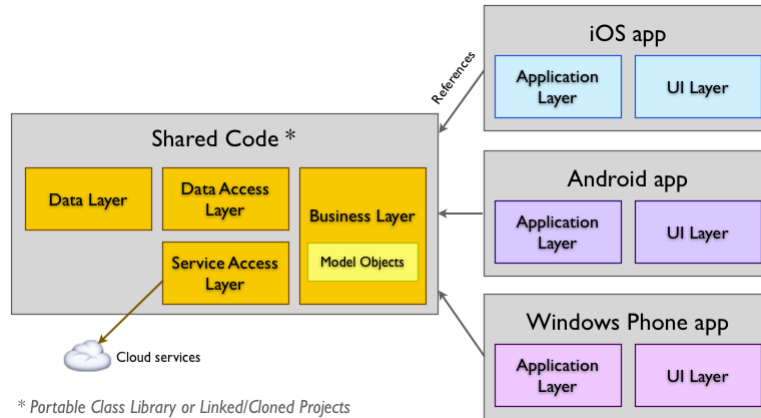
## MVVM – Separate Assemblies



## Core-Platform Separation



# Code Sharing – Cross Platform (Xamarin)



\* Portable Class Library or Linked/Cloned Projects

[http://docs.xamarin.com/guides/cross-platform/application\\_fundamentals/building\\_cross\\_platform\\_applications/part\\_3\\_-\\_setting\\_up\\_a\\_xamarin\\_cross\\_platform\\_solution](http://docs.xamarin.com/guides/cross-platform/application_fundamentals/building_cross_platform_applications/part_3_-_setting_up_a_xamarin_cross_platform_solution)  
 Layer Diagrams - MVVM (Ash Tewari) - <http://www.ashtewari.com>

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## GitHub

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File	Commit	Author	Time	Description
[Tasky.Pro] 4" iPhone support	67d11ad186	conceptdev	7 months ago	[Tasky.Pro] 4" iPhone support [conceptdev]
Dependencies			11 months ago	[taskypro] add PDBs for dependencies [conceptdev]
Screenshots			9 months ago	add README and L10n screenshots [conceptdev]
Tasky.Android			9 months ago	Renamed from TaskyVS to TaskyPro [bryan costanich]
Tasky.Core.Tests			9 months ago	Renamed from TaskyVS to TaskyPro [bryan costanich]
Tasky.Core			8 months ago	[TaskyPro] new sample, Windows 8 version of TaskyPro [conceptdev]
Tasky.WP7			9 months ago	Renamed from TaskyVS to TaskyPro [bryan costanich]
Tasky.Win8			8 months ago	[TaskyPro] new sample, Windows 8 version of TaskyPro [conceptdev]
Tasky.iOS			7 months ago	[Tasky.Pro] 4" iPhone support [conceptdev]
Local.testsettings			9 months ago	Renamed from TaskyVS to TaskyPro [bryan costanich]
Metadata.xml			9 months ago	add metadata & screenshots [conceptdev]
README.md			9 months ago	add README and L10n screenshots [conceptdev]
TaskyMD_Mac.sln			9 months ago	Renamed from TaskyVS to TaskyPro [bryan costanich]
TaskyVS.sln			9 months ago	Renamed from TaskyVS to TaskyPro [bryan costanich]
TaskyVS.vsmidi			9 months ago	Renamed from TaskyVS to TaskyPro [bryan costanich]
TraceAndTestImpact.testsettings			9 months ago	Renamed from TaskyVS to TaskyPro [bryan costanich]

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# CensusMapper Source Code

<https://github.com/ashtewari/CensusMapper>

## What is a Layer Diagram?

- It is a high level architectural diagram. It identifies major components of your design and their interdependencies.
- Layer diagrams can help you visualize and configure the separation of concerns in your code base and help enforce it.
- Layer diagram is both an architectural design tool and an enforcement mechanism.



## What it is not?

- Layer Diagram is not a static analysis tool.
- It does not analyze your code to point out where you have spaghetti code. And then somehow help you clean it up with a few clicks.

## Demo

Create a Layer Diagram

# Demo

## Configure Namespaces

- Allowed
- Forbidden
- Forbidden dependencies

# Demo

## Assign Artifacts to Layers

# Demo

## Layer Validation

# Questions?

And the winner is ...



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