



# Build cross-platform mobile apps with Fabulous

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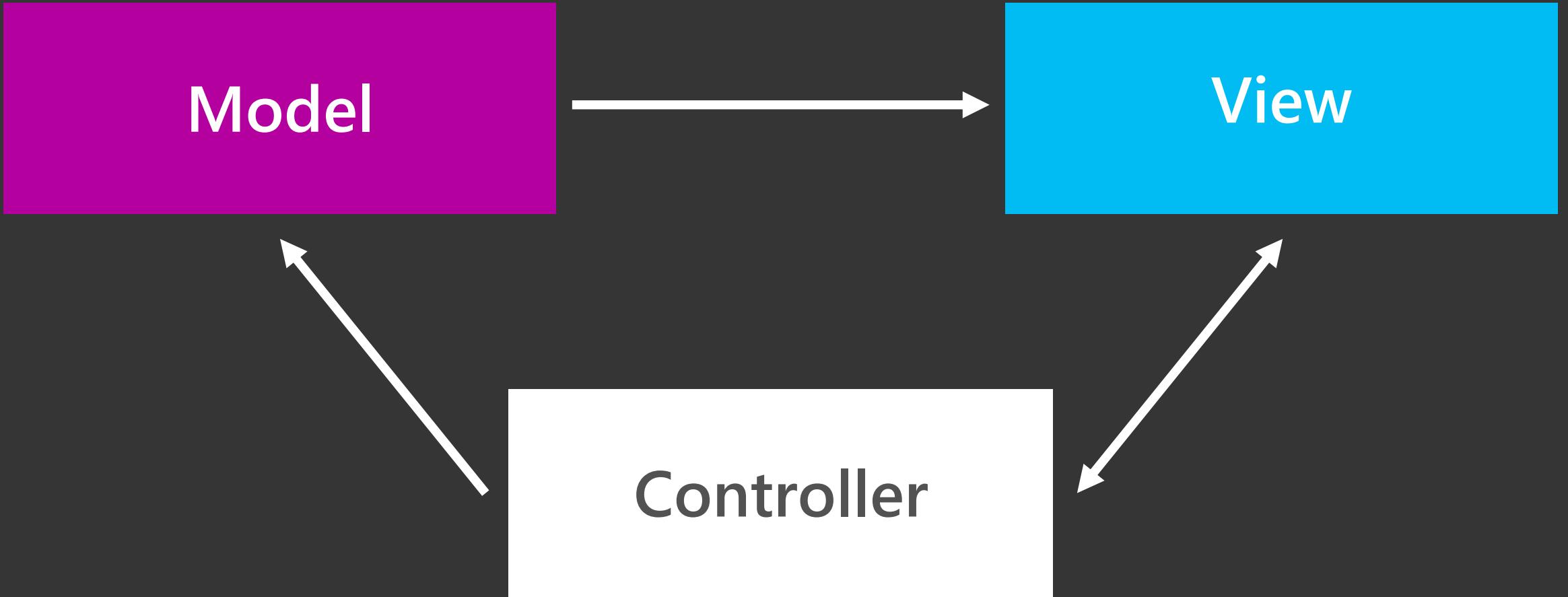


# MV\* design patterns

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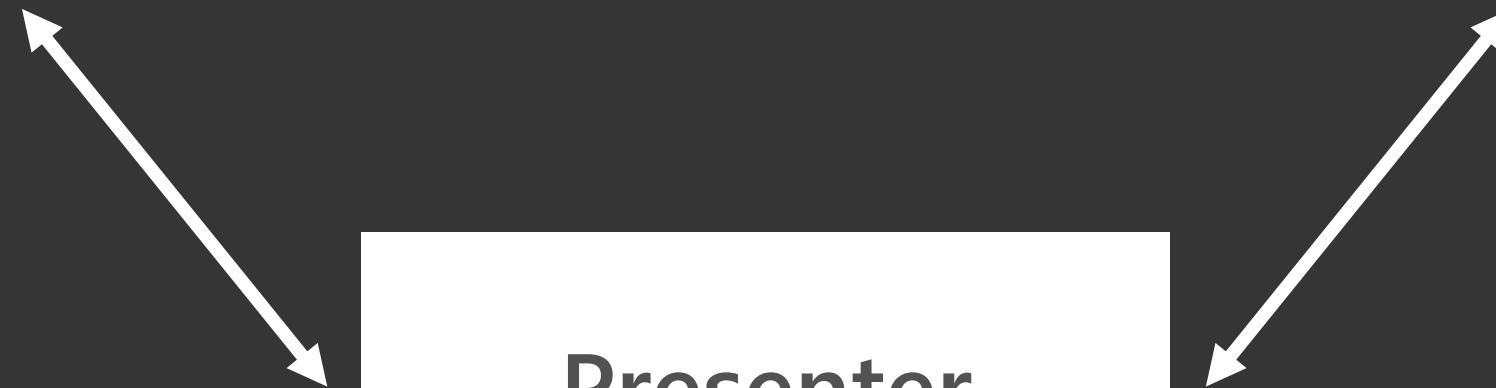
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**Model**

**View**

**Presenter**

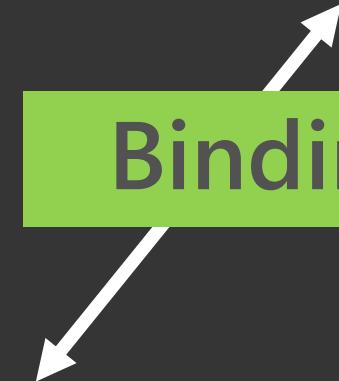
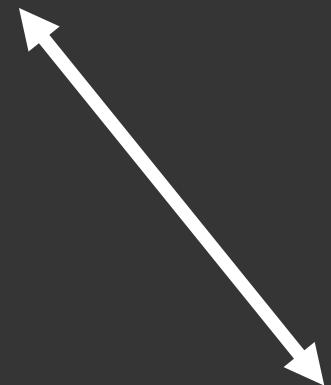


**Model**

**View**

**ViewModel**

**Binding**



# Where's the state?

# What about race conditions?

MVU FTW!

# MVU

# Model View Update

- Immutable Model
- Message with optional data
- Update function
- View function

# Model

- Golden source of state
- Immutable
- Every app has a single instance of the model as its state

# Message

- Indicates a change in state
- Can optionally have data

# Update

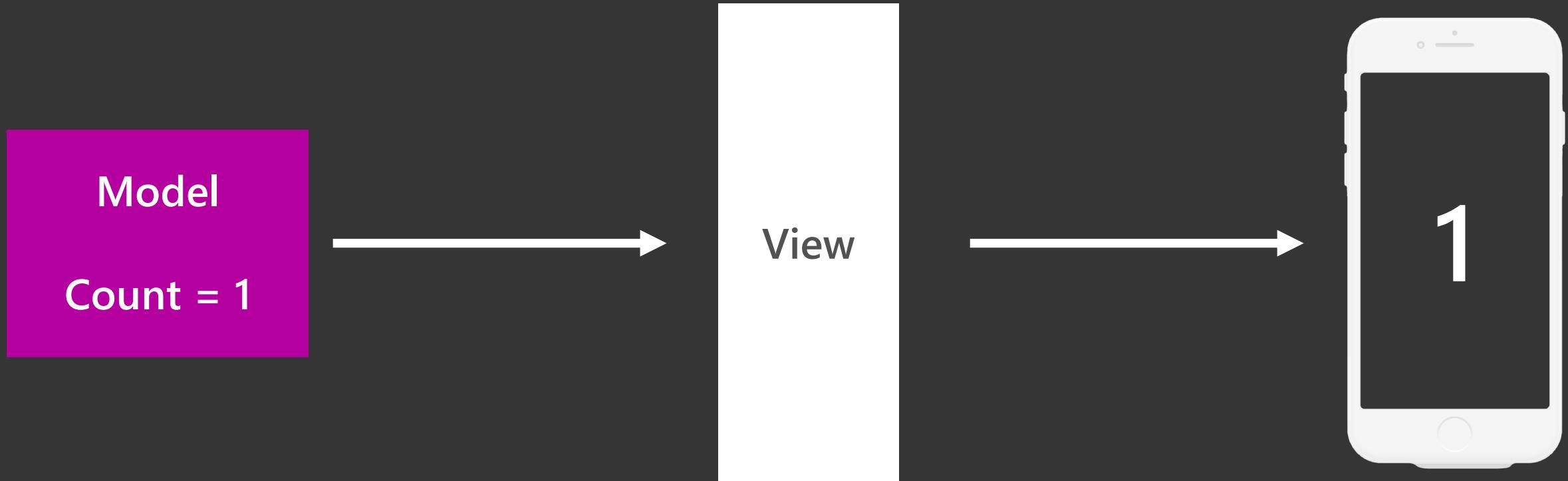
- Function that takes a model and message
- Creates a new model
- Synchronous

# View

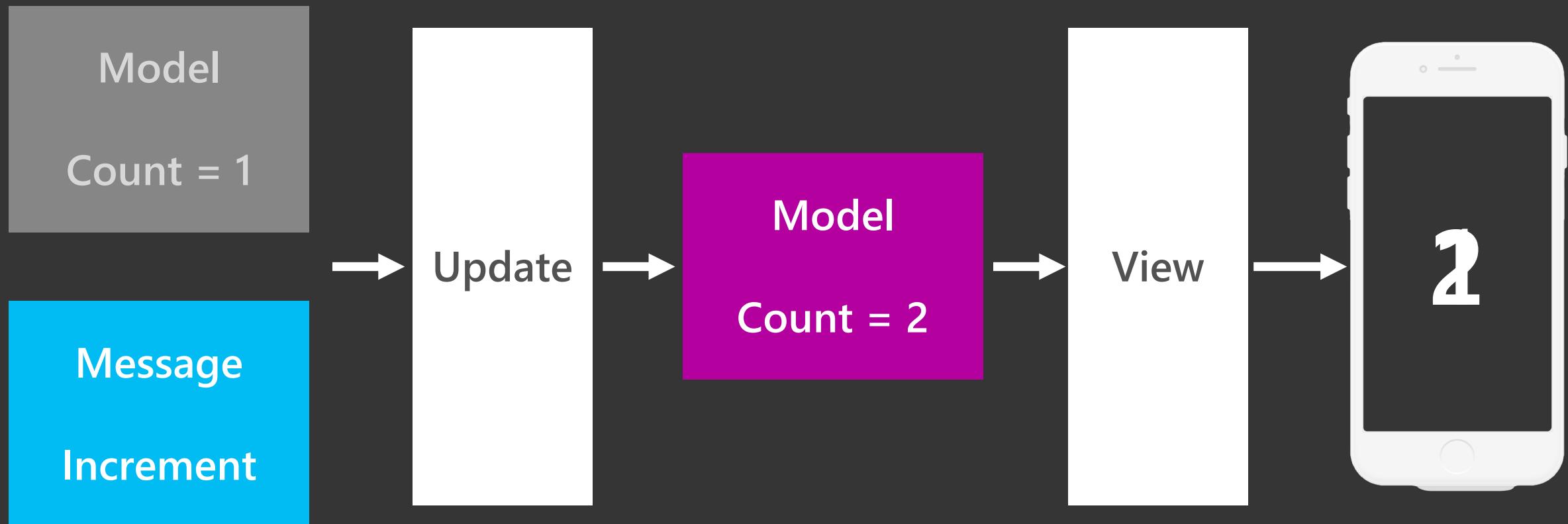
- Function that takes a model
- Returns a virtual UI

# Virtual UI?

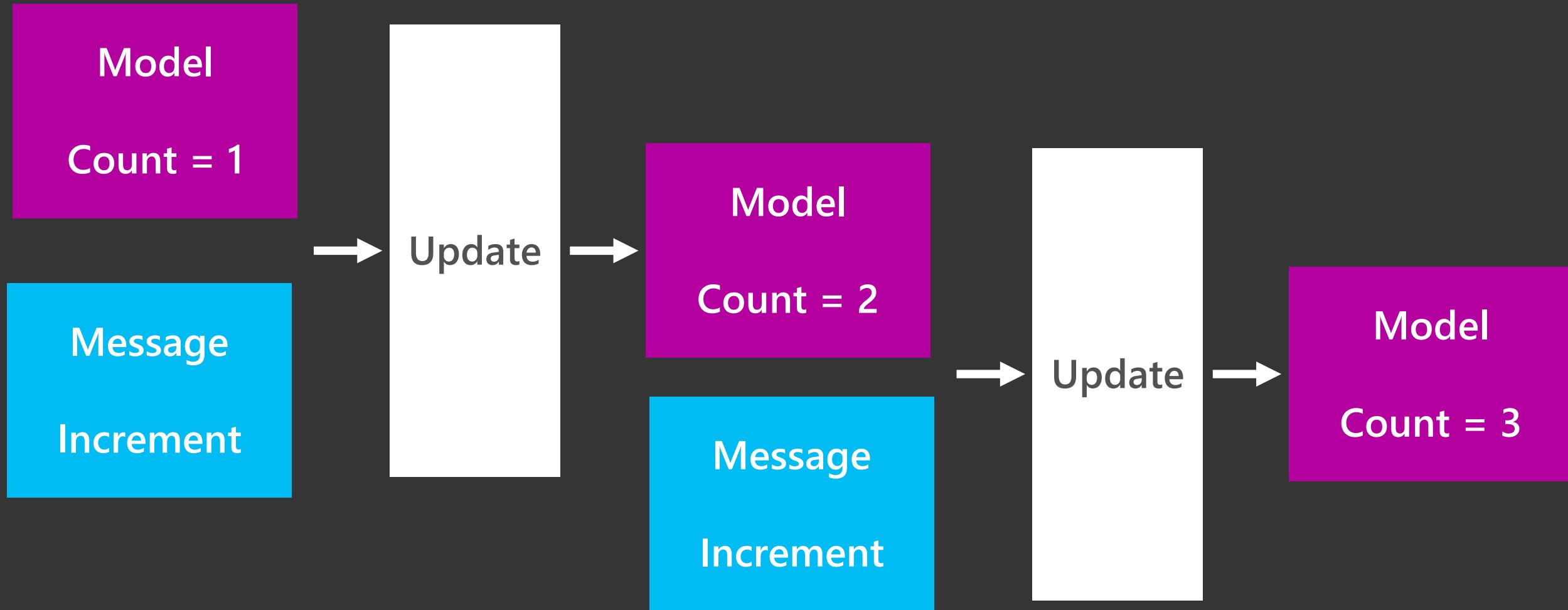
# Initial setup



# Update



# Update



# Why MVU?

- Single source of truth
- No race conditions
- Easier to debug
- Easier to unit test

# What is Fabulous?

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# Fabulous

- Cross-platform app framework
- iOS, Android, desktop...
- 100% native apps
- 100% native API access

# Demo

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Powered by  
F#!

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# F#

- Functional first programming language
- Cross platform
- Fully .NET compatible
- Open source
- Community driven, Microsoft powered

# Powered by Xamarin!

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# Xamarin

- .NET wrappers around iOS and Android SDKs
- 100% native apps
- Fully .NET compatible
- Code in VS –Windows or Mac

# Xamarin.Forms

- UI Abstraction
- 100% native apps
- Can access native controls
- Open source

# Demo

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# Getting started

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- Install Visual Studio
- Install the templates
- `dotnet new fabulous-app`



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