

# Rich Client

## DESIGN PATTERNS

# What is a Rich Client?

A **stateful application** that uses **client-side business logic** in order to provide the user with an **improved experience.**

MVC

MVP

MVVM

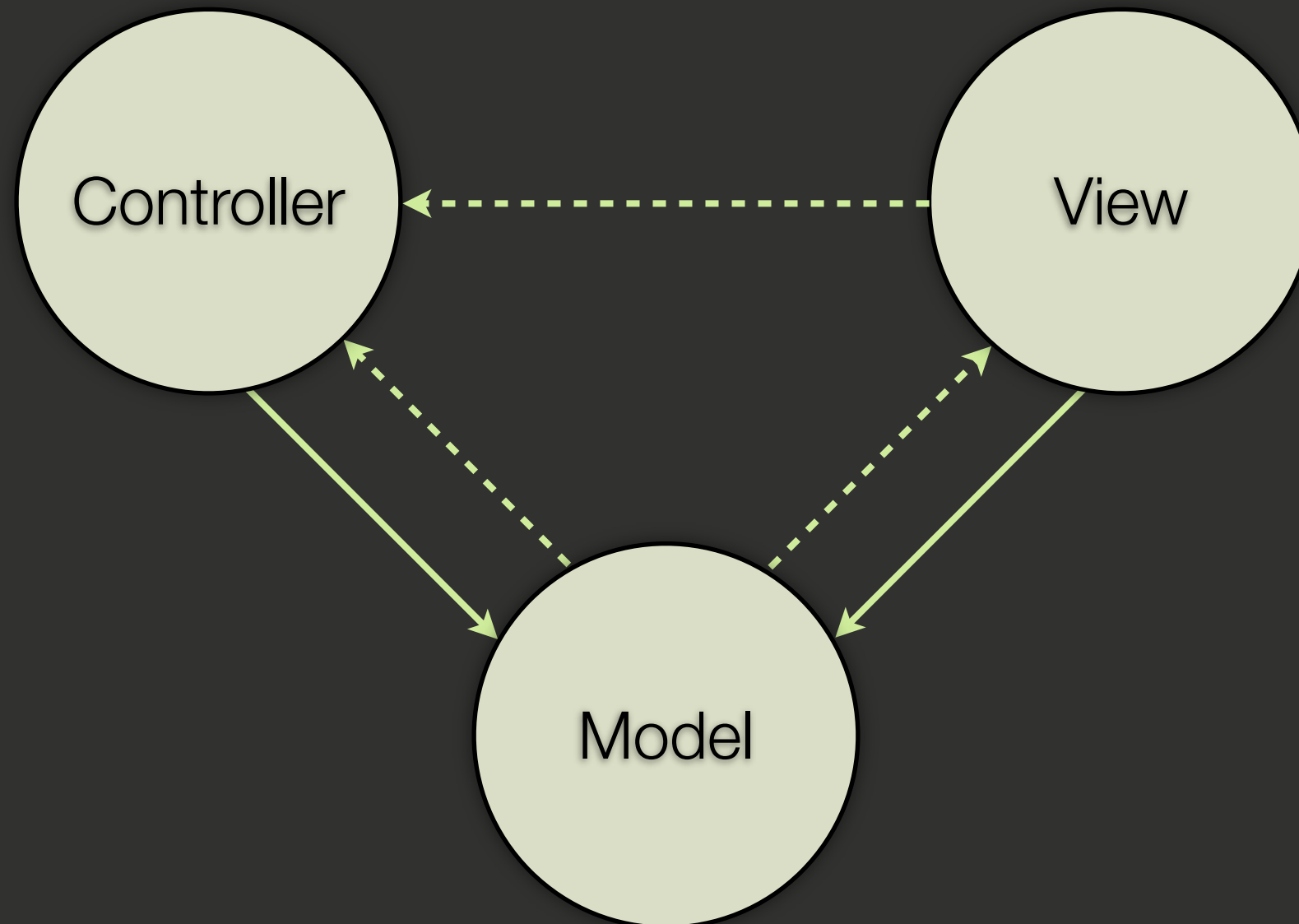
MVC

MVP

MVVM

# Communication

MVC



# Architecture

MVC

View

Controller

Business Logic Layer

Data Access Layer

# Key Points

## MVC

Reuse through nested view/controller pairs

Observer and strategy patterns decrease coupling

Tied directly to domain model

View code can be difficult to test

MVC

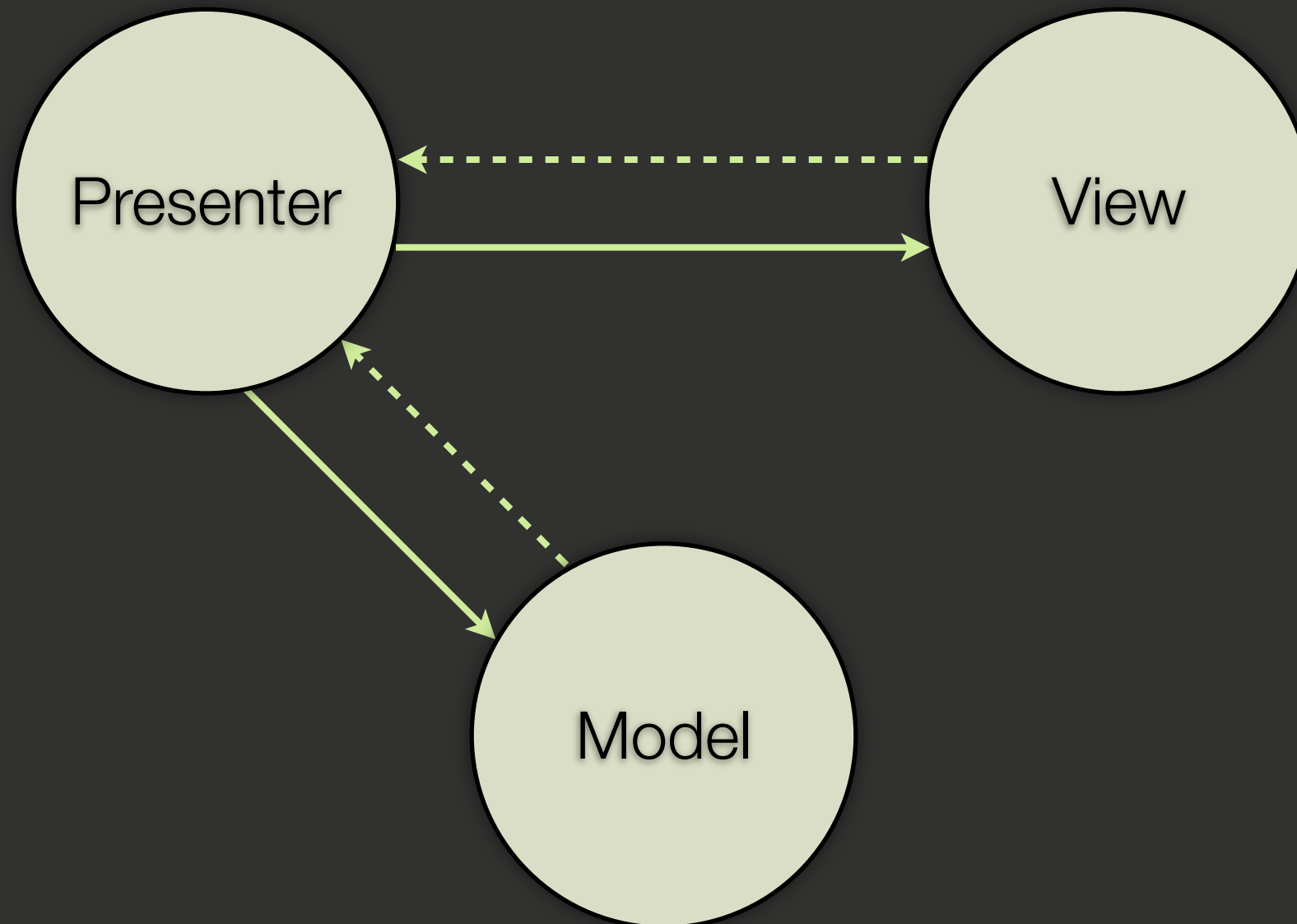
MVP

MVVM



# Communication

MVP



# Architecture

MVP

View

Presenter

Business Logic Layer

Data Access Layer

# Key Points

MVP

Reuse by using presenter with multiple views

More obvious interaction than MVC

View decoupled from domain model

Mockable views for easier testing

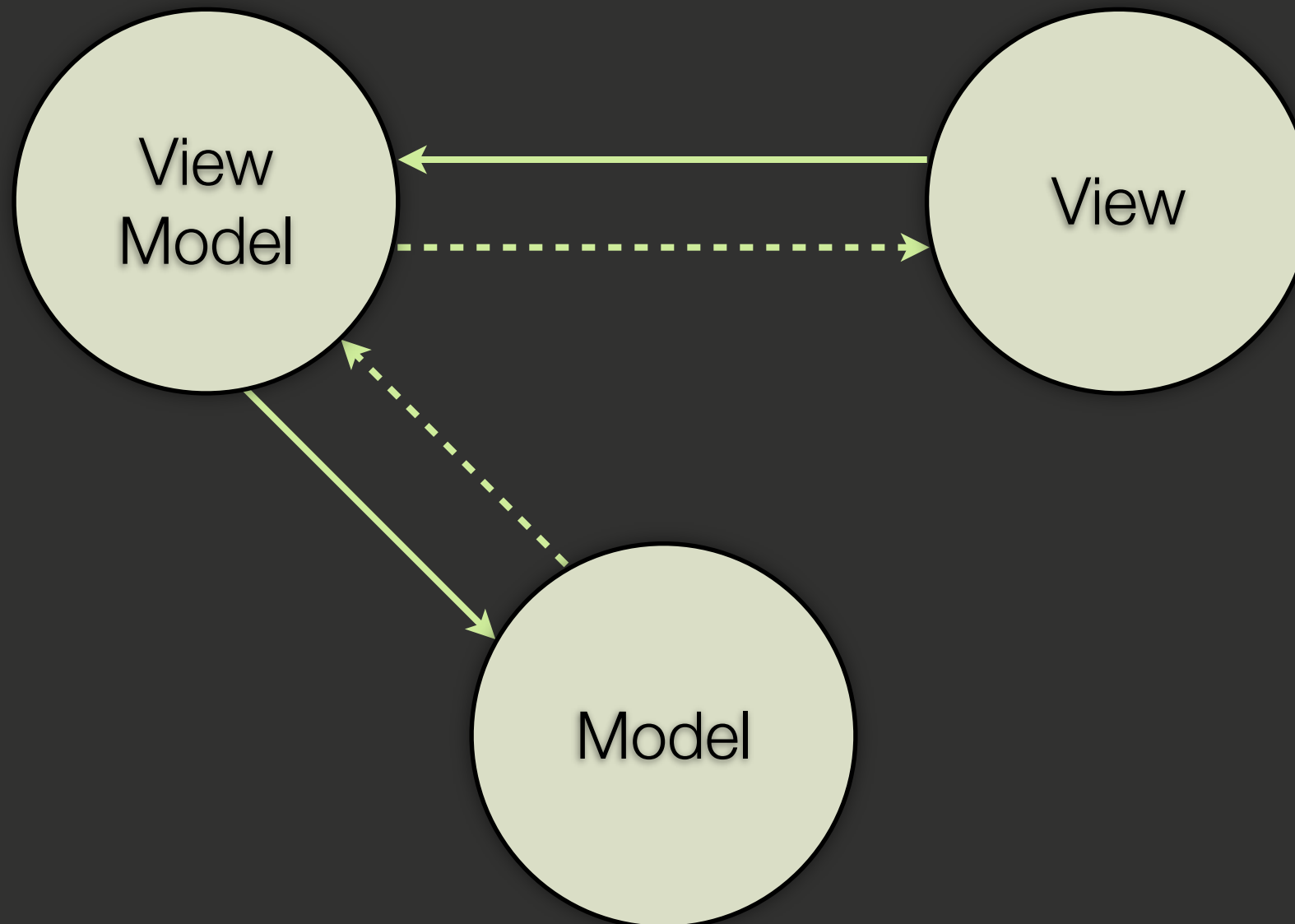
MVC

MVP

MVVM

# Communication

MVVM



# Architecture

MVVM

View

View Model

Business Logic Layer

Data Access Layer

# Key Points

MVVM

Reuse through nested views

Observer pattern decreases coupling

View decoupled from domain model

View model is easily testable

Any Questions?