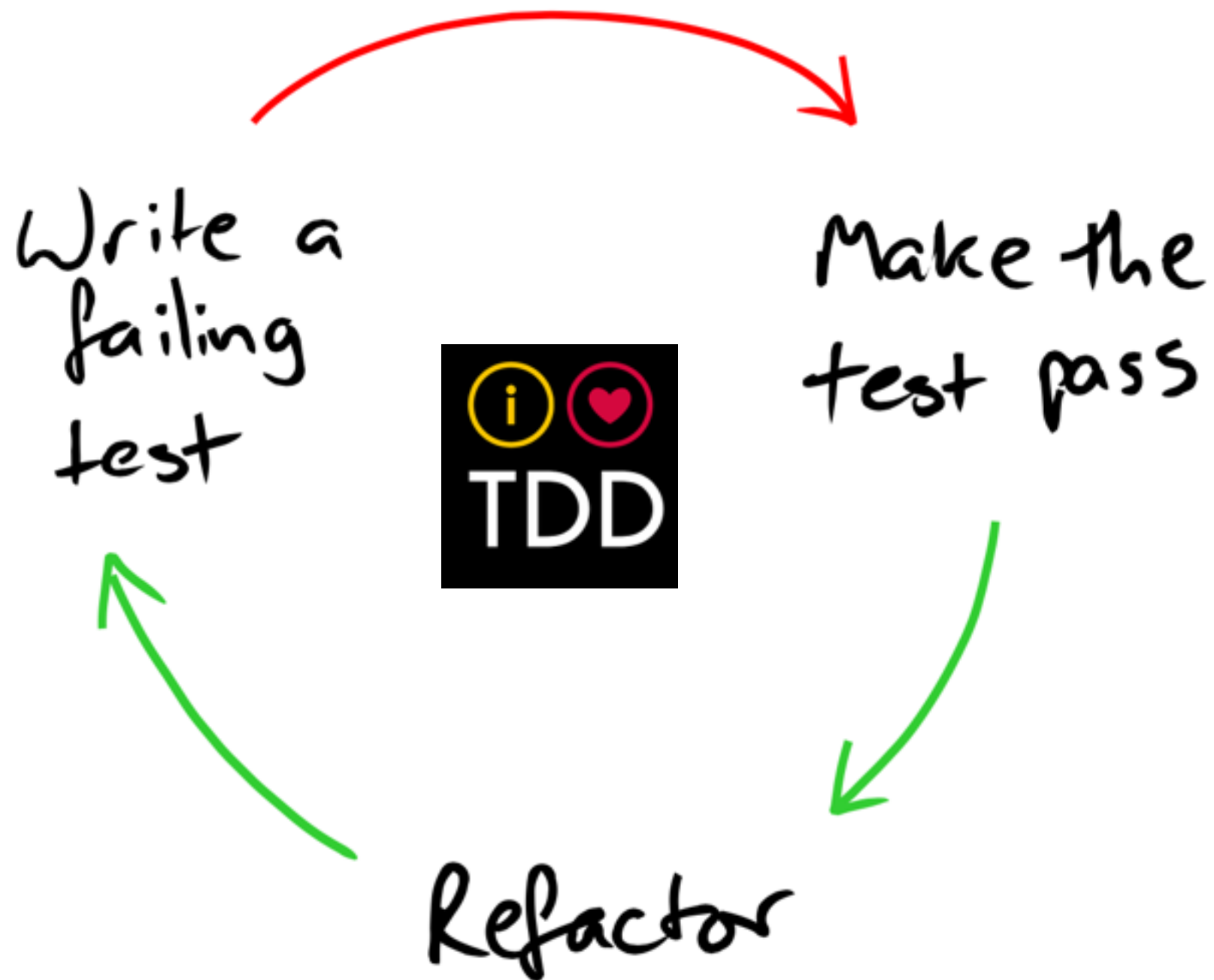
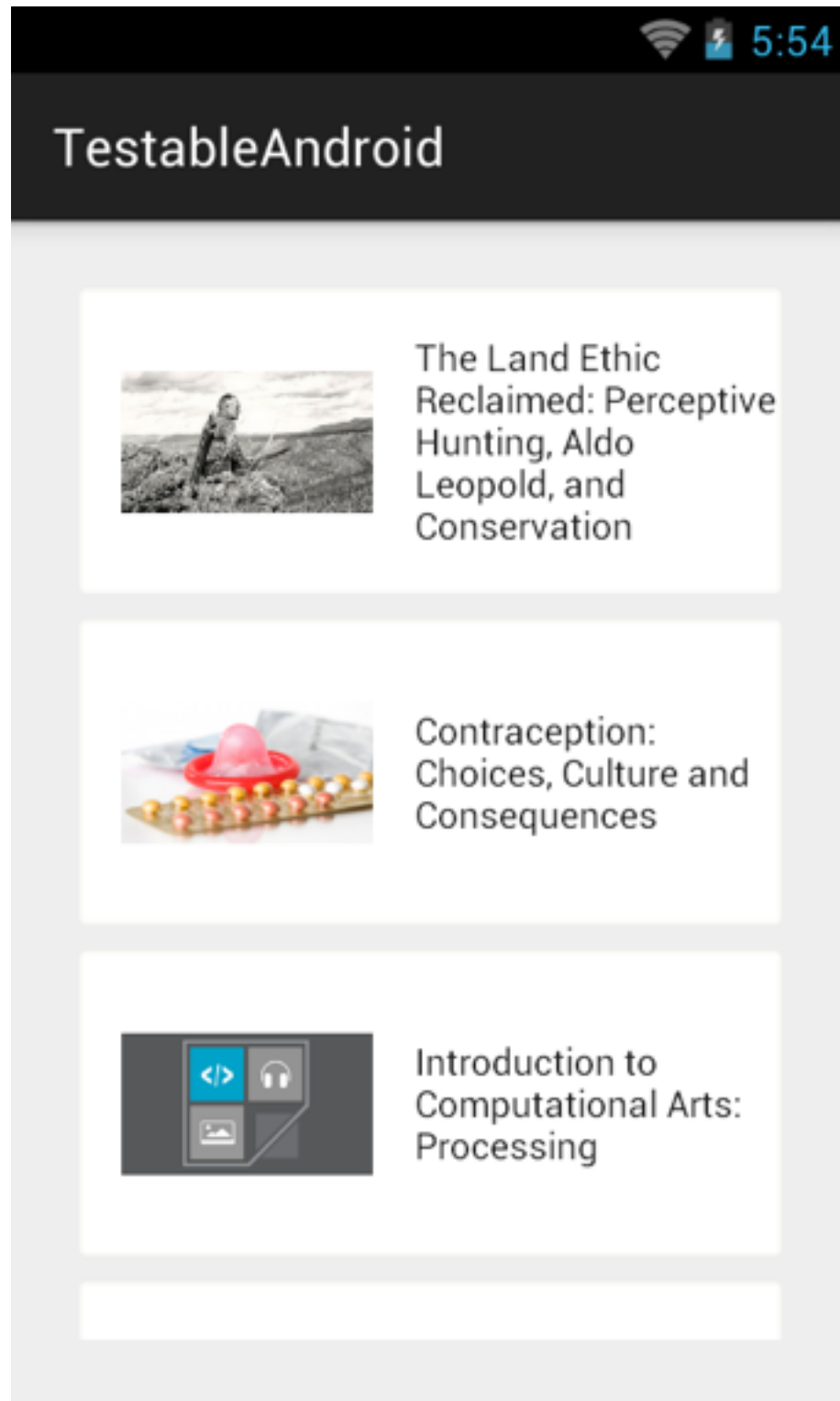


TESTABLE APP



Testable application



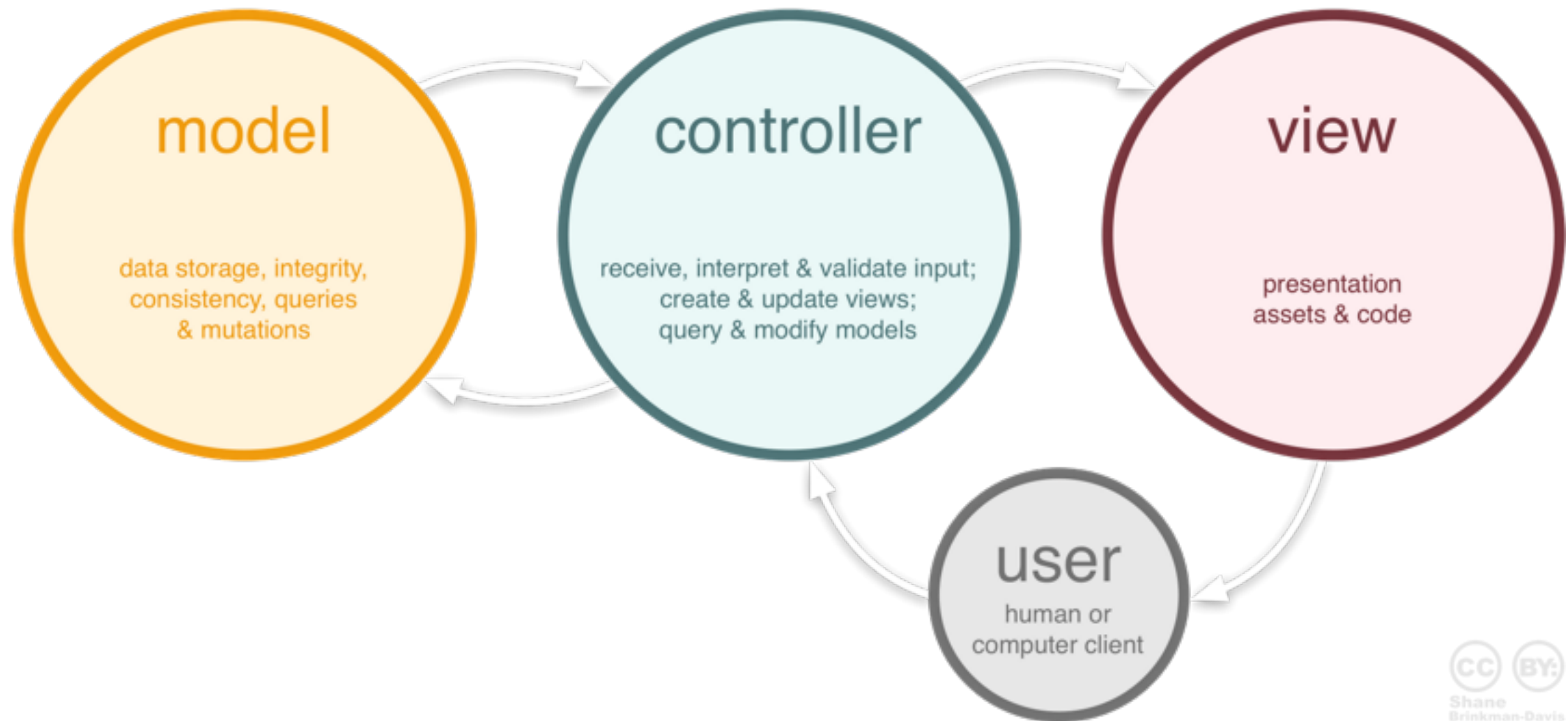
coursera



Testable application ?



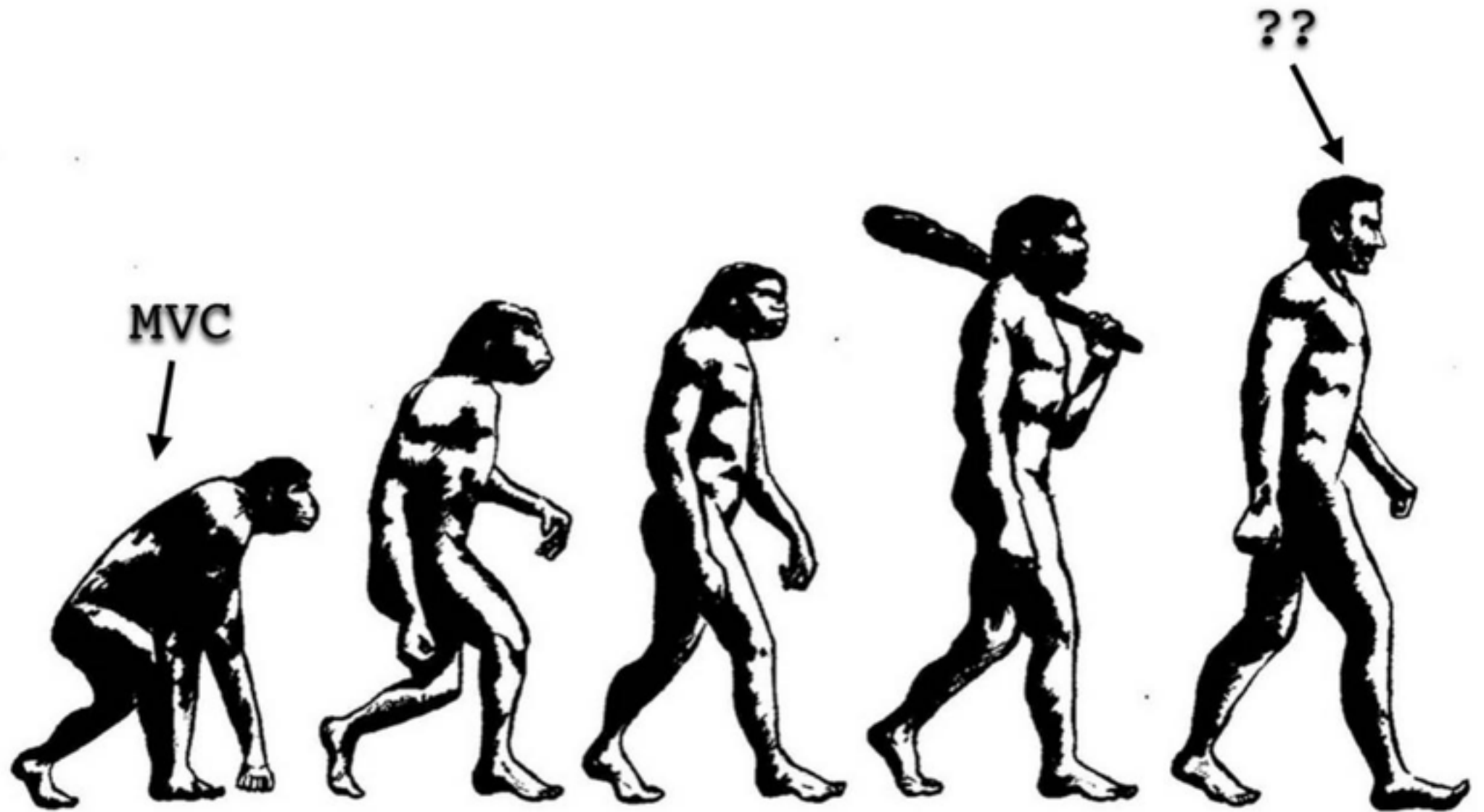
Model-View-Controller



Responsibilities

| Model | View | Controller |
|------------------------|--------------|----------------------|
| Interact with network | Render model | Handle view event |
| Interact with database | Manage state | Update model |
| | | Navigation |
| | | Interact with system |
| | | Handle system event |

Evolution



Responsibilities

| Model | View | Controller |
|-------------------------------|--------------|-----------------------------|
| Interact with network | Render model | Handle view event |
| Interact with database | Manage state | Update model |
| | | Navigation |
| | | Interact with system |
| | | Handle system event |

How to test ?

| Model | View | Controller |
|------------------------|--------------|----------------------|
| Interact with network | Render model | Handle view event |
| Interact with database | Manage state | Update model |
| | | Navigation |
| | | Interact with system |
| | | Handle system event |



Try it yourself



What is a problem ?



What is a problem ?

Network

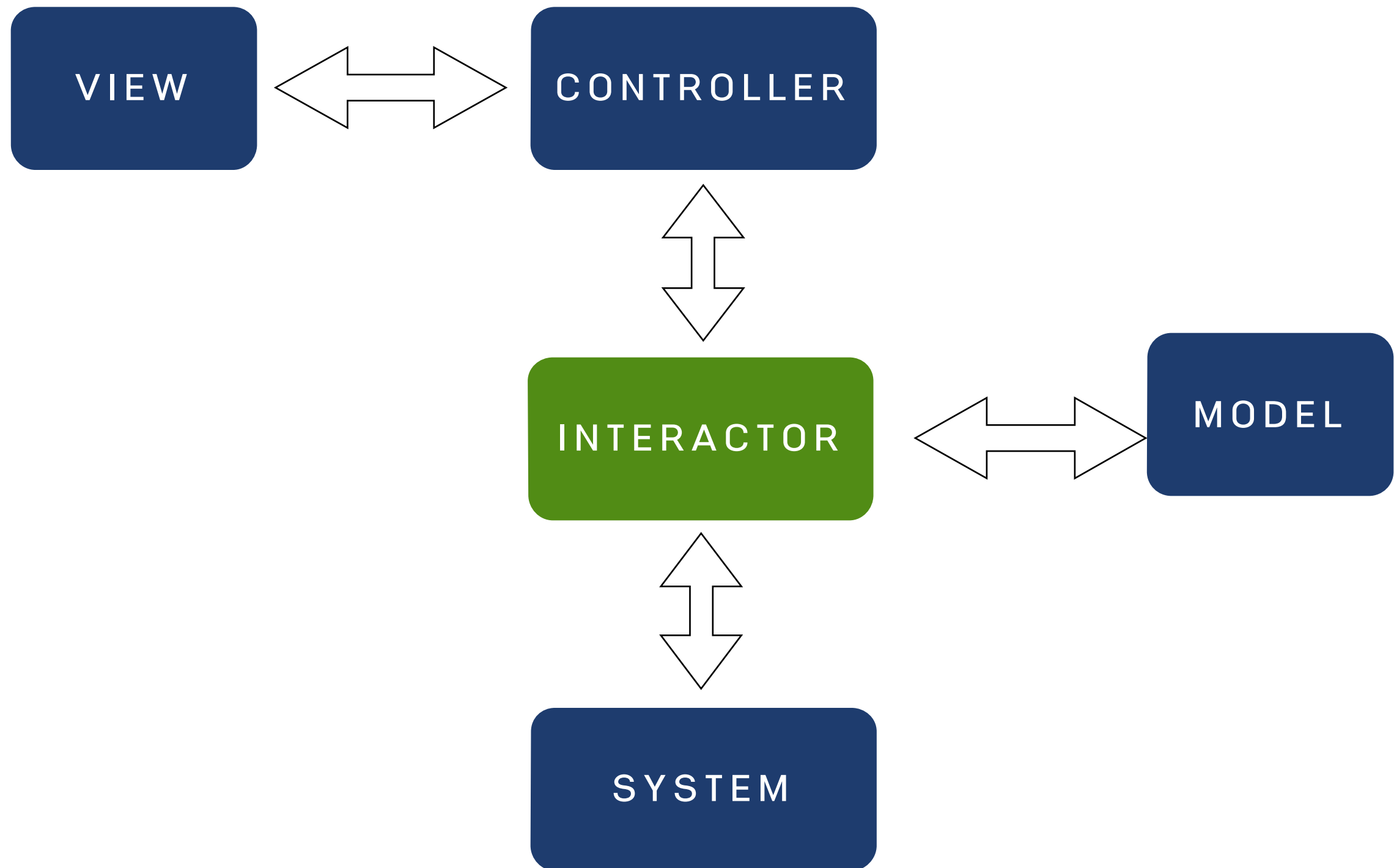
Database

System component

How to test ?

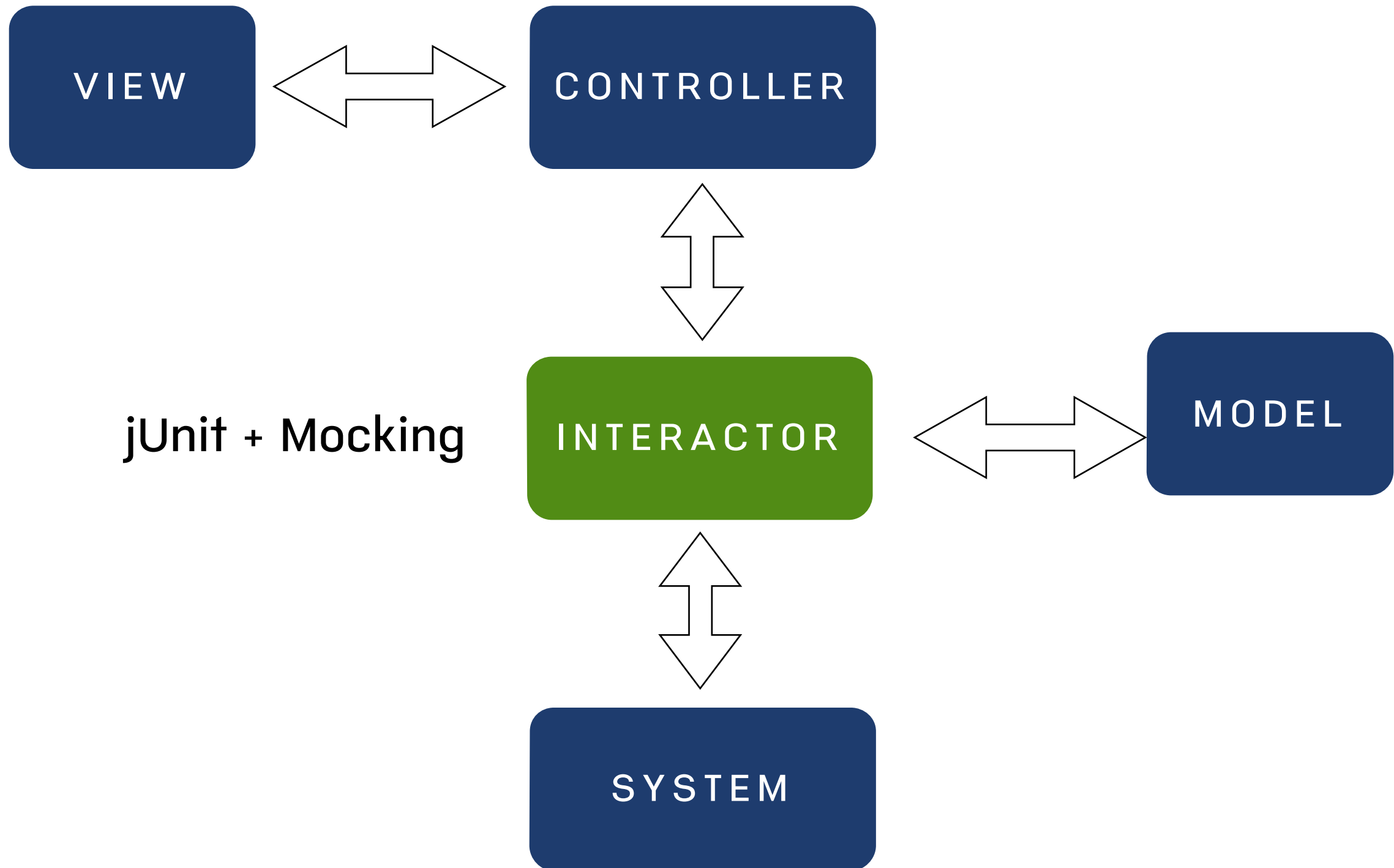
| Model | View | Controller |
|-------------------------------|--------------|-----------------------------|
| Interact with network | Render model | Handle view event |
| Interact with database | Manage state | Update model |
| | | Navigation |
| | | Interact with system |
| | | Handle system event |

Interactor



Interactor

Espresso + Mocking



jUnit + Mocking

Responsibilities

| Model | View | Controller | Interactor |
|-----------------------------|--------------|-------------------|------------------------|
| Retrieve data from network | Render model | Handle view event | Interact with external |
| Retrieve data from database | Manage state | Update model | |
| | | Navigation | |
| | | | |
| | | | |

Demo time

Network interactor