ENTERPRISE ARCHITECTURE

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LESSON 08 LAYERED ARCHITECTURE
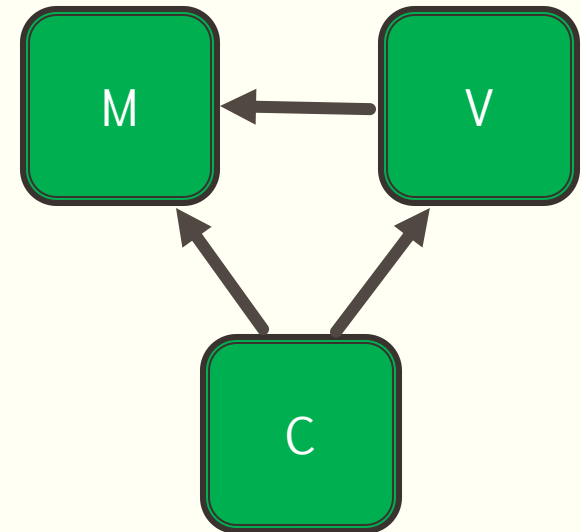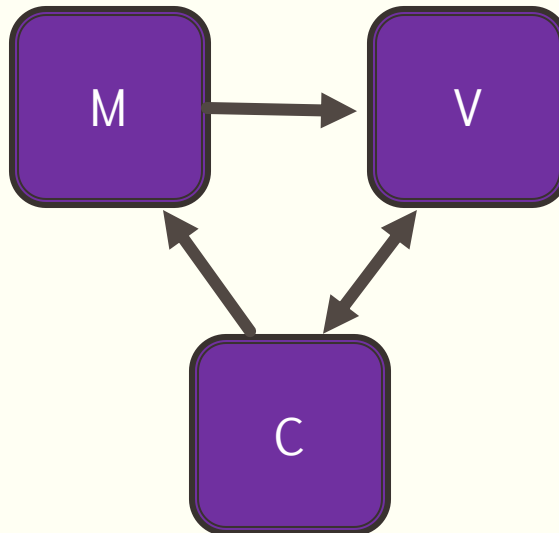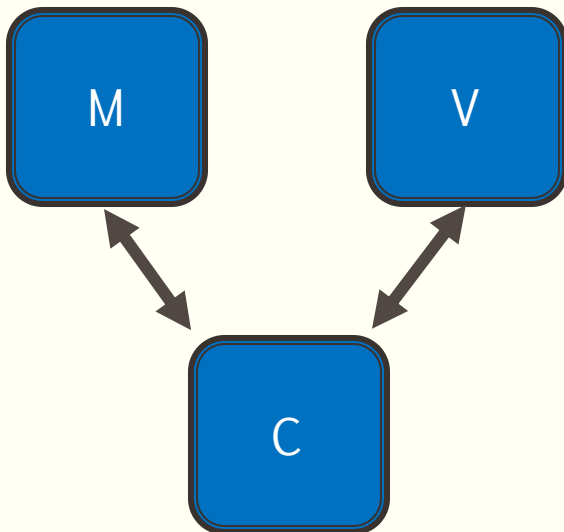
Layer VS Tier

- What is a layer?

- What is a tier?

- We mix both?

- Why do we need layers?

- Why do we need tiers?

- Example of layered architecture

MVC

MVC

- Separation of concerns

- Benefits?

- Layers? Tiers?

- MVC, MVVM, MVP, MVW

LAYERED ARCHITECTURE

MVC Layers

View

Control

Model

View

- UI Technology

- UI Validation

Controller

- Understand User Technology

- Business Rules

MVC Layers

Model

- Domain Objects (Business)

- Persistence Technology

MVC Layers

View

Control

Service

Domain

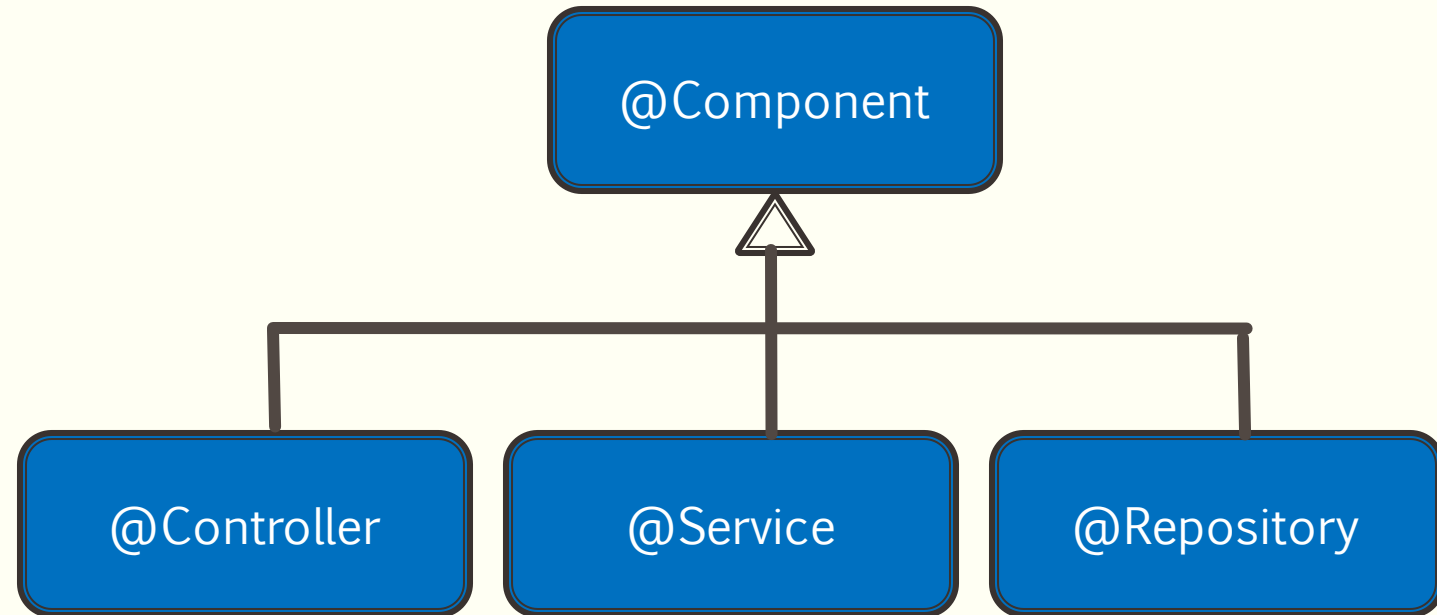| Persistence |
| --- |

COMPONENT

Using Components

- XML
  - <contex:component-scan base-package="edu.miu.cs544.najeeb" />

- Java
  - @ComponentScan(basePackages = "edu.miu.cs544.najeeb")

```
            ┌──────────────┐
            │  @Component  │
            └──────────────┘
                   △
       ┌───────────┼───────────┐
┌────────────┐ ┌──────────┐ ┌─────────────┐
│ @Controller│ │ @Service │ │ @Repository │
└────────────┘ └──────────┘ └─────────────┘
```

Main Point

- Layered architecture is very helpful to achieve separation of concern. Separation of concern (SoC) enables the faster growth of companies. SoC enables teamwork and better unit testing. By each developer focusing on their part the whole prject grows much faster.

- The Maharishi Effect states that if a group of individuals regularly practice TM at the same time, they will create a beneficiary impact for everyone and a larger group of people.