

# Architecture Walkthrough of a Spring JPA / Hibernate Application

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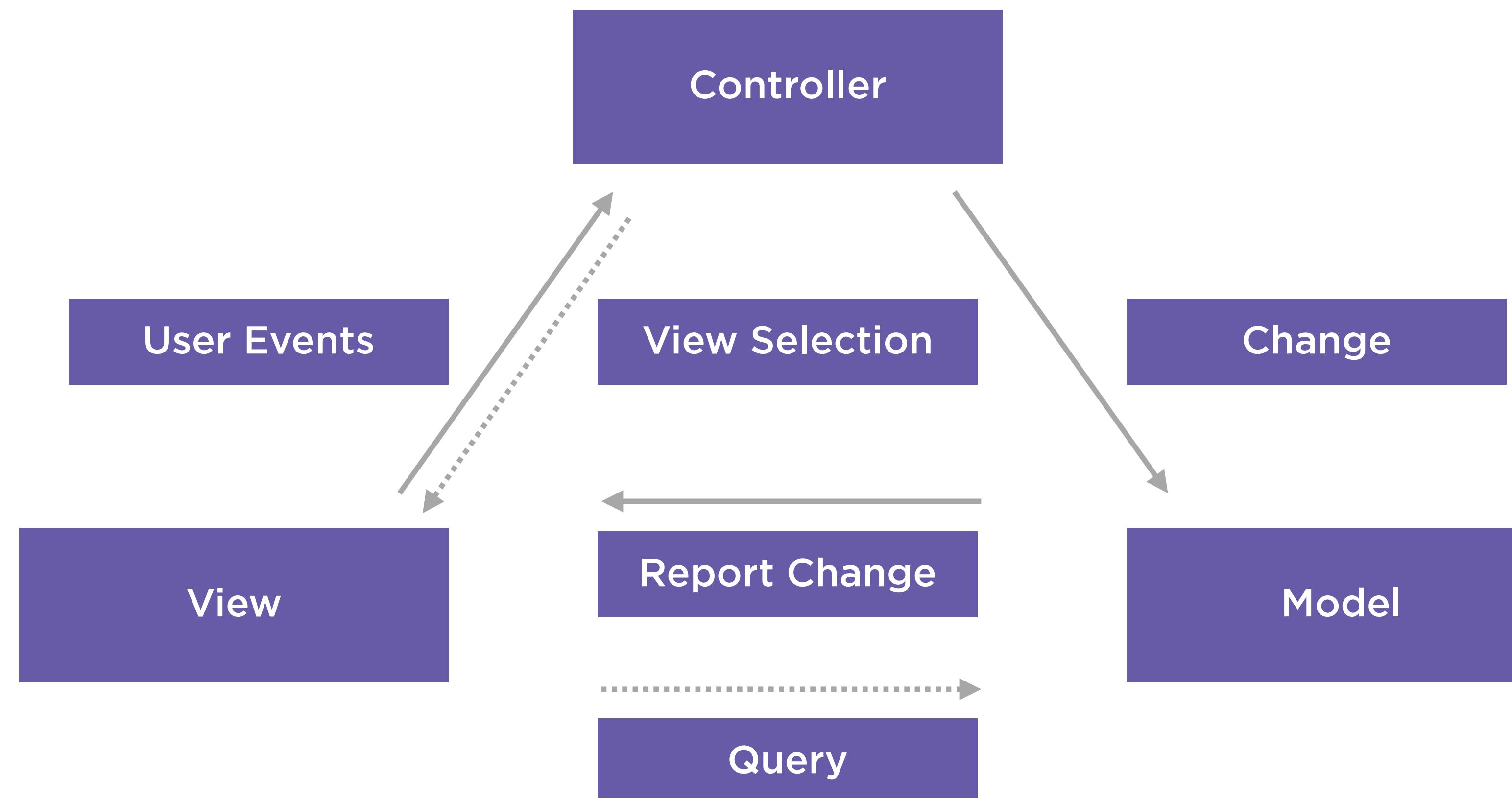


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@bh5k

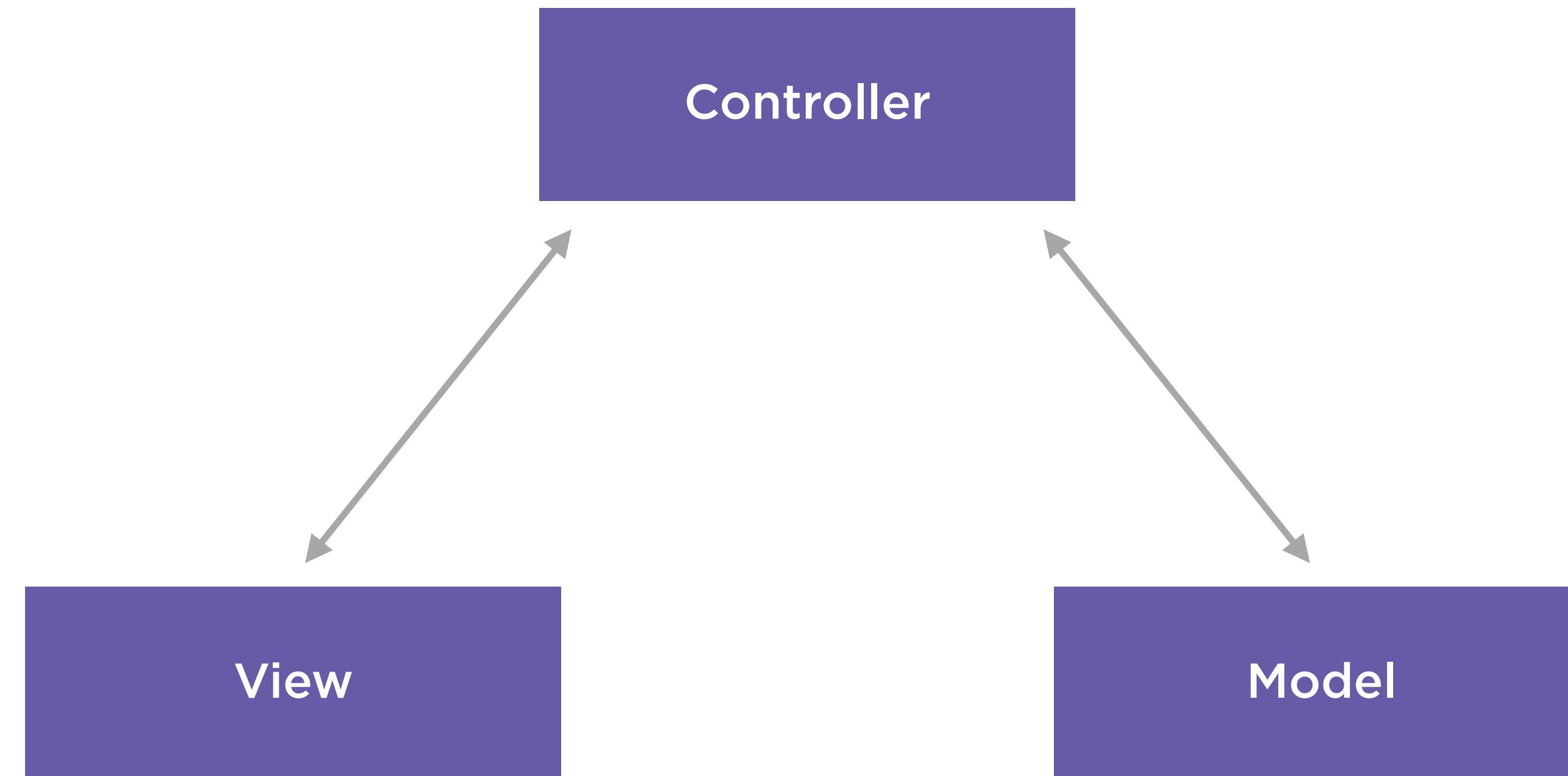
# Architecture



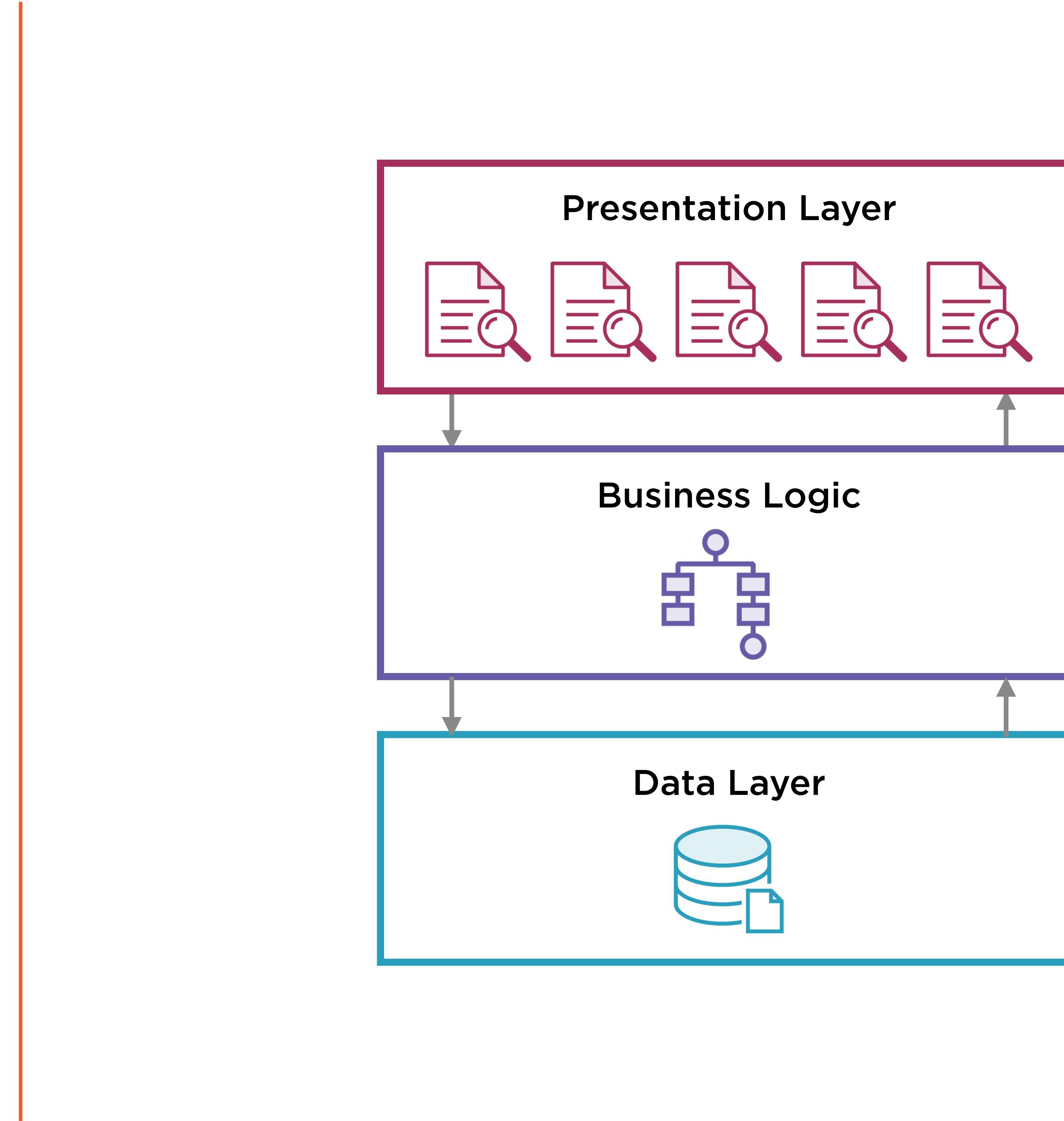
# Model-View-Controller



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**Separation of concerns**  
**Reusable layers**  
**Maintenance**

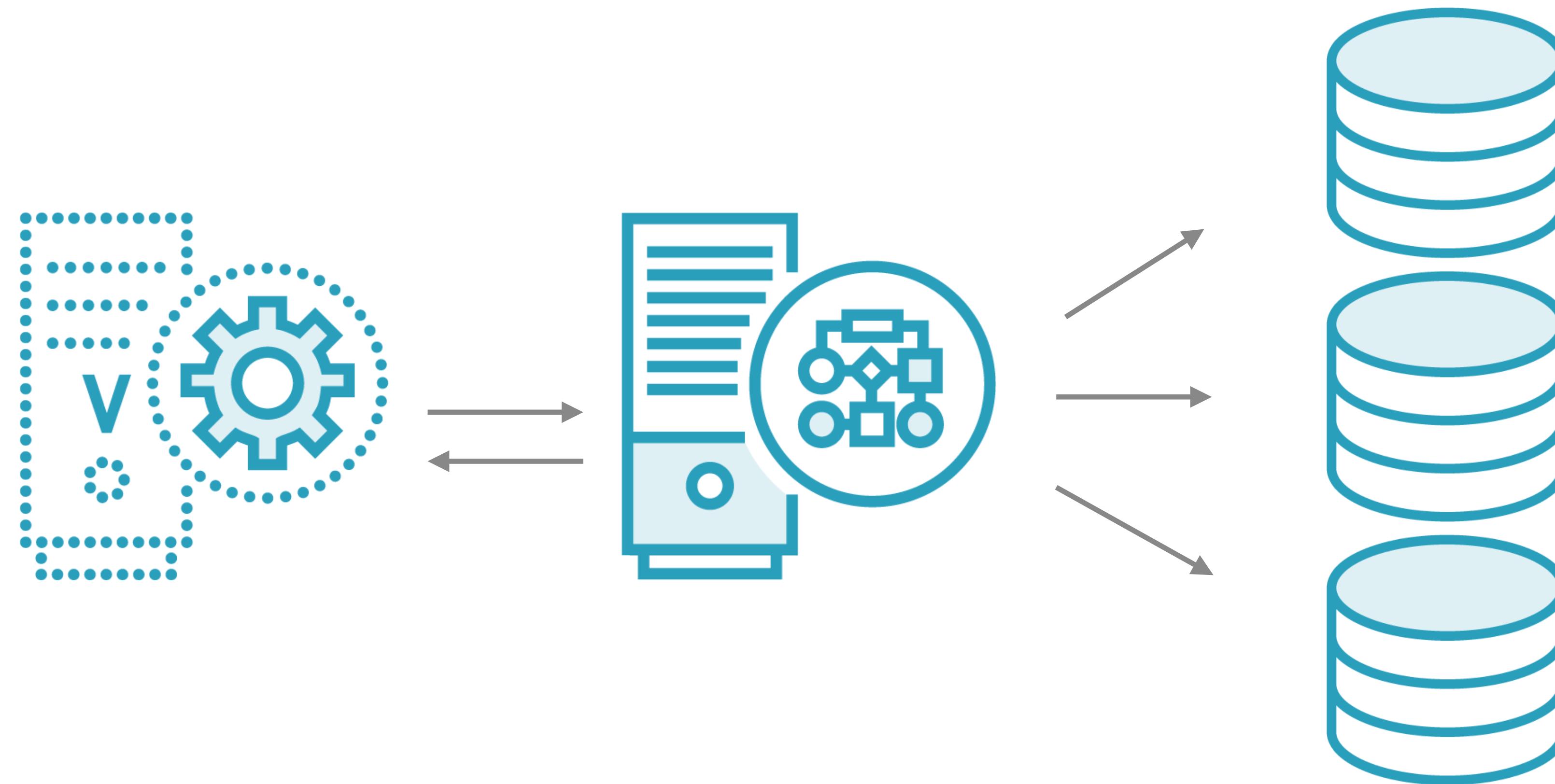


**View (JSPs)**

**Controller (@Controller)**

**Data Model / Database  
(Model Object)**

# Components





## Controller

- Handles request/response**
- No business logic**
- Coordinate with service and repository**
- Annotated with `@Controller`**
- Handles exceptions and view routing**



Service

- Annotated with `@Service`
- Describes verbs/actions of system
- Business logic belongs here
- Ensures business object state
- Transactional
- Often same methods as repository



Repository

**Annotated with `@Repository`**

**Nouns (data) of the system**

**Database interaction**

**One-to-one object mapping**

**Often one-to-one database table mapping**

# Summary

**Software architecture**

**MVC**

**N-tier**

**Components**

**Controller**

**Service**

**Repository**