

Architecture

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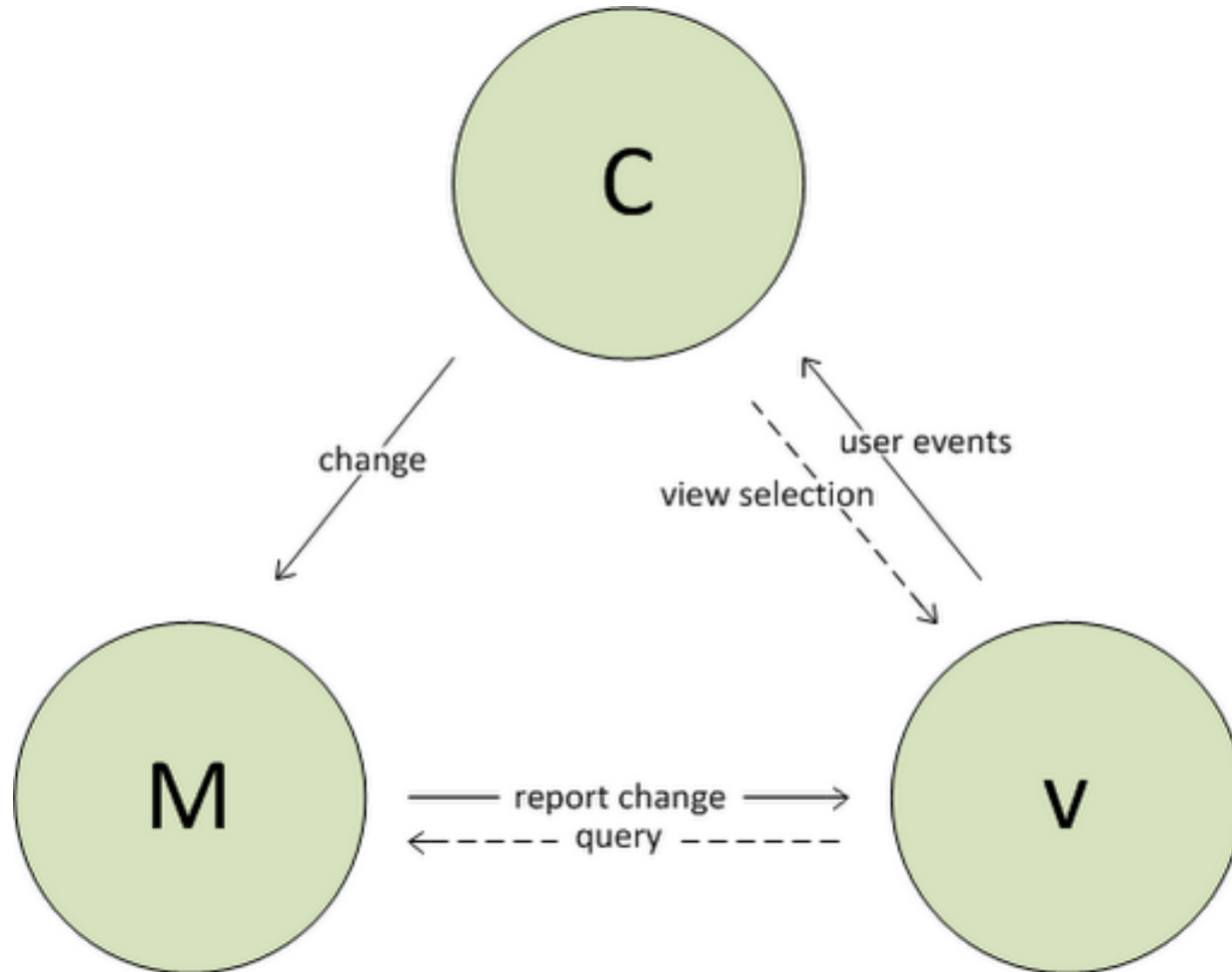
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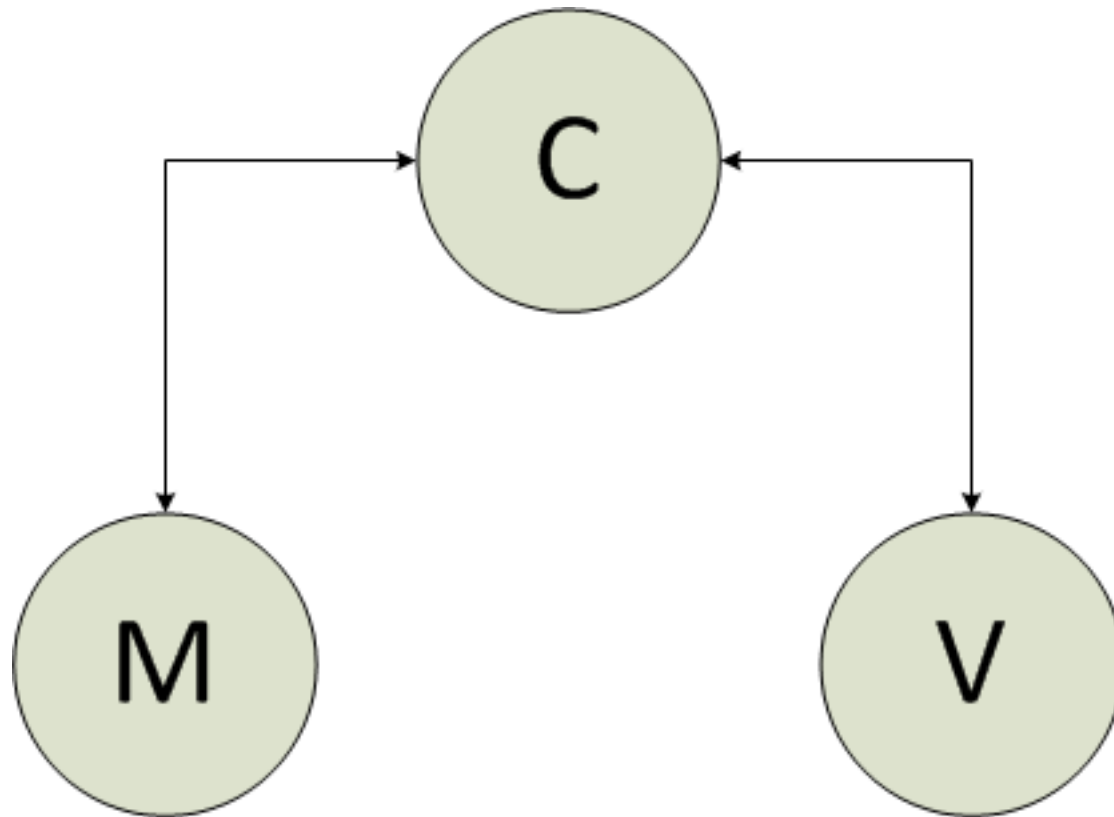
Architecture



MVC

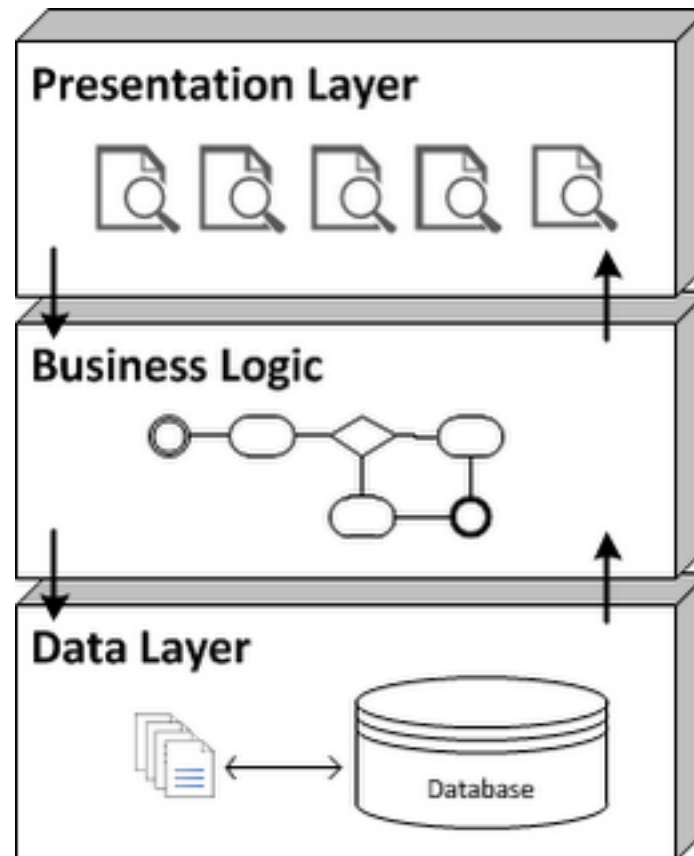


MVC Web

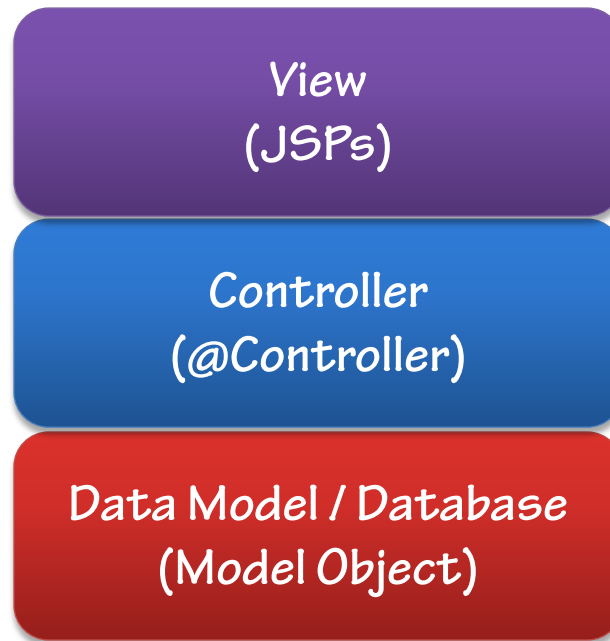


Tiered Architectures

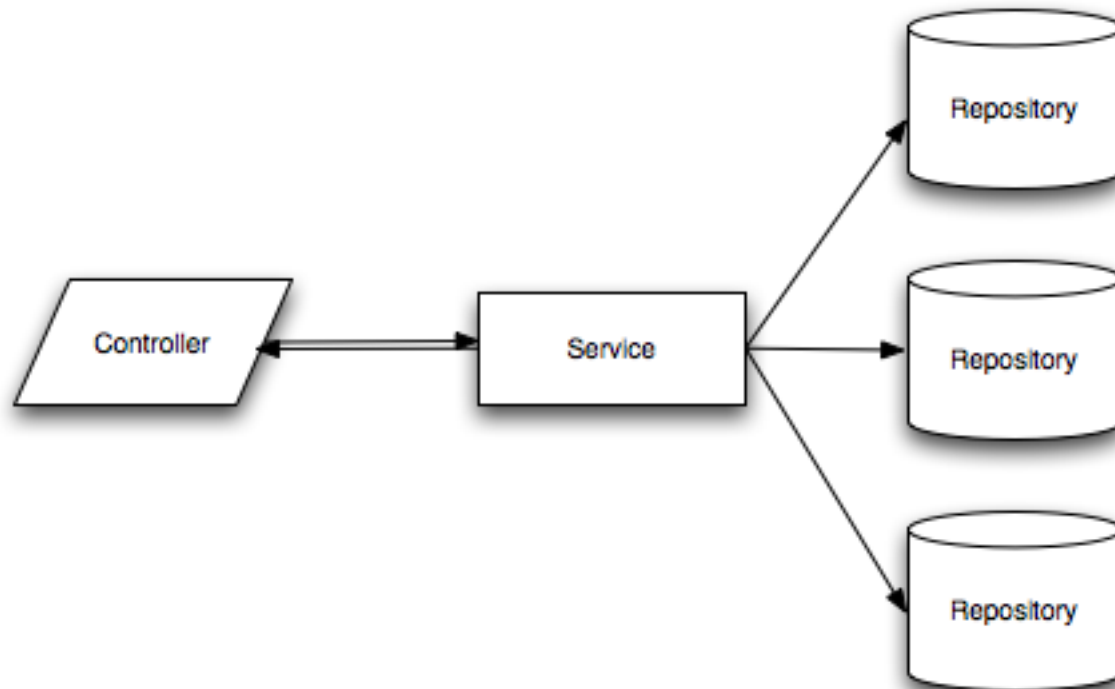
- Separation of concerns
- Reusable layers
- Maintenance



Layers

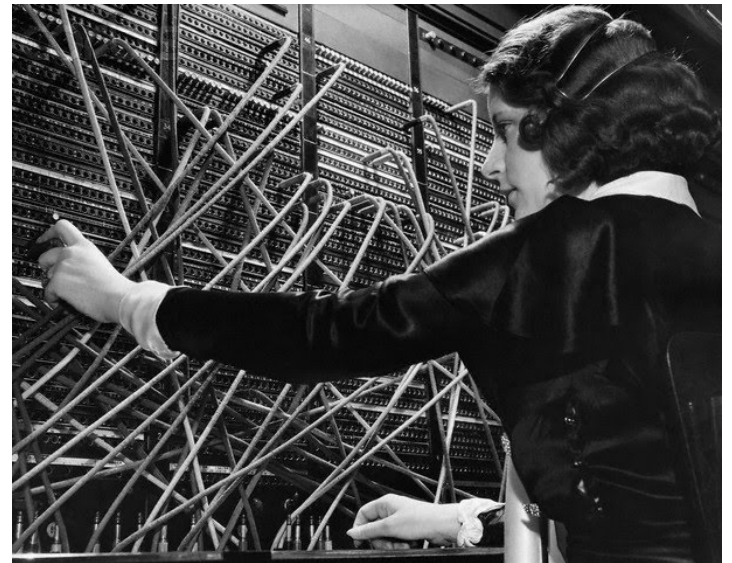


Components



Controller

- Handles incoming requests and building the response
- Business logic should not be handled here
- Works with the Service and Repository tier for business logic and data gathering
- Annotated with `@Controller`
- Handles Exceptions and routes the view accordingly



Service

- Annotated with `@Service`
- The Service tier describes the verbs (actions) of a system
- Where the business logic resides
- Ensures that the business object is in a valid state
- Where transactions often begin (two phase commits)
- Often has the same methods as the Repository, but different focus



Repository

- Annotated with `@Repository`
- The Repository tier describes the nouns (data) of a system
- Focused on persisting and interacting with the database
- One-to-one mapping with an Object
- Often a one-to-one mapping with a database table



Summary

- **Software Architecture**
- **MVC**
- **N-Tier**
- **Components**
- **Controller**
- **Service**
- **Repository**

