

Architectural patterns

1

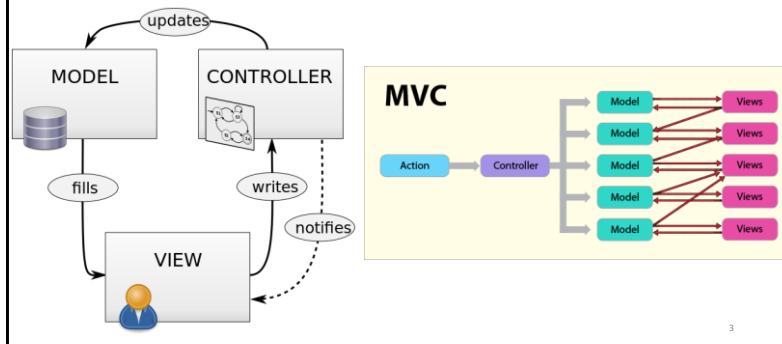
Architectural pattern

- General, reusable solution to a commonly occurring problem in software architecture within a given context.
 - Performance
 - High availability
- Some architectural patterns have been implemented within software frameworks
 - 3-layer/3-tier pattern: DotNetNuke
 - MVC pattern: Laravel, ASP.NET MVC
 - Microservices: Spring Boot, vert.x

2

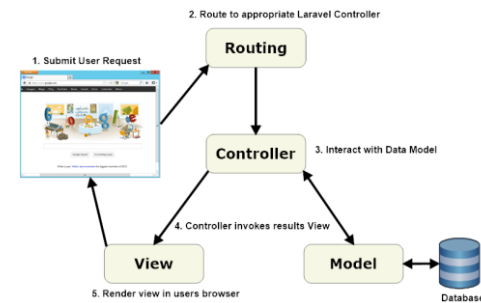
Classic MVC architecture (active)

Problems?



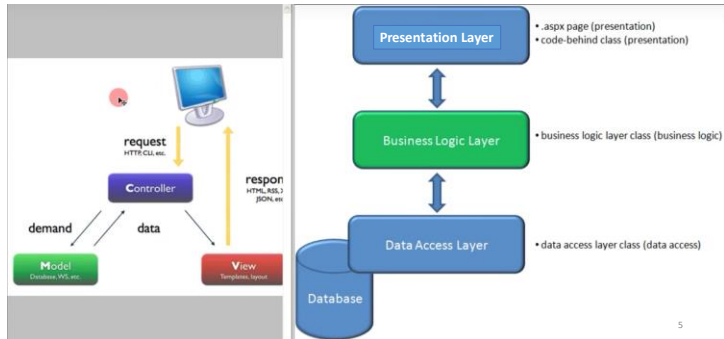
3

Passive MVC architecture

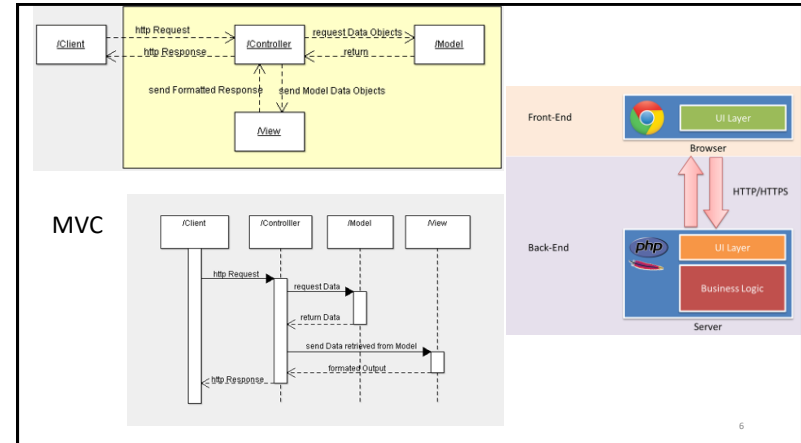


4

MVC vs 3-tier Architecture

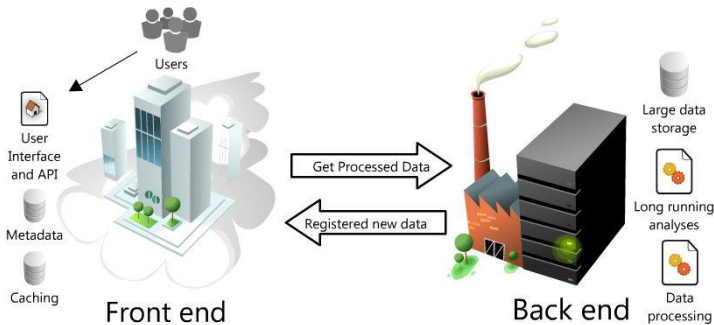


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6

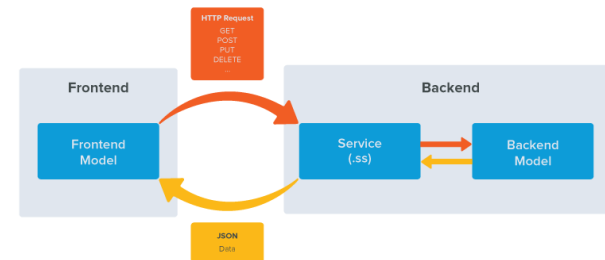
Front-end and Back-end



7

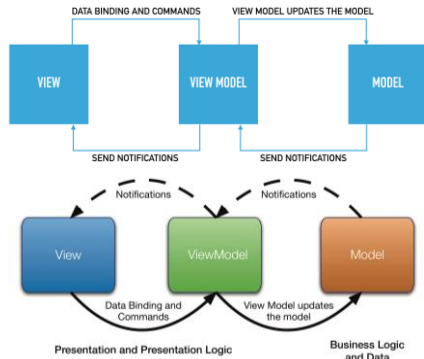
Front end and Back end

- May have different architectural patterns



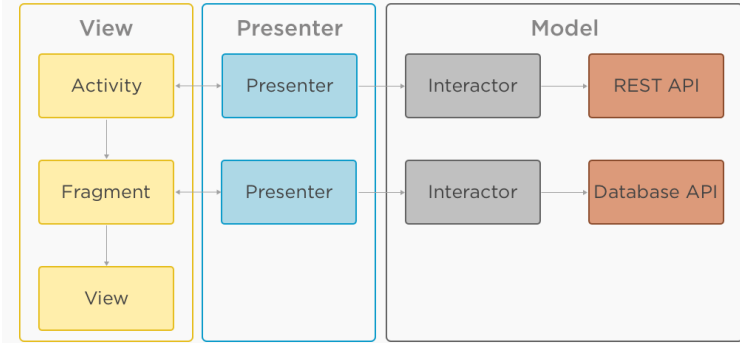
8

MVVM Architecture



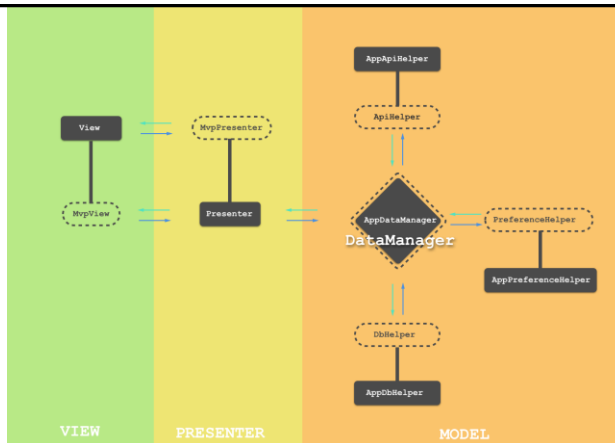
9

MVP architectural pattern in Android



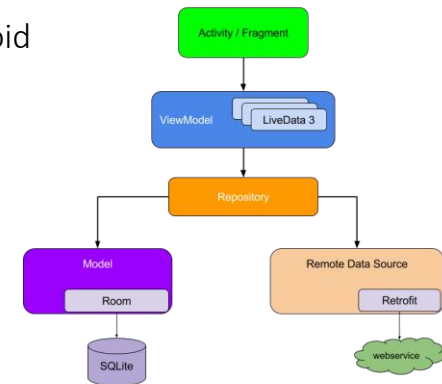
10

MVP in Android



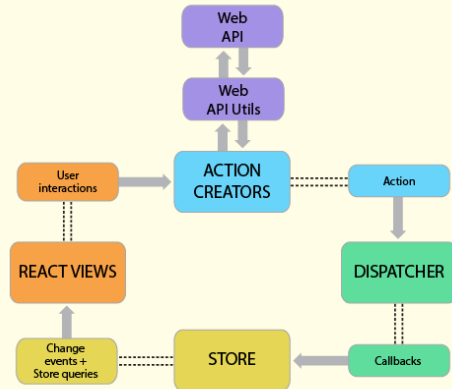
11

MVP in Android



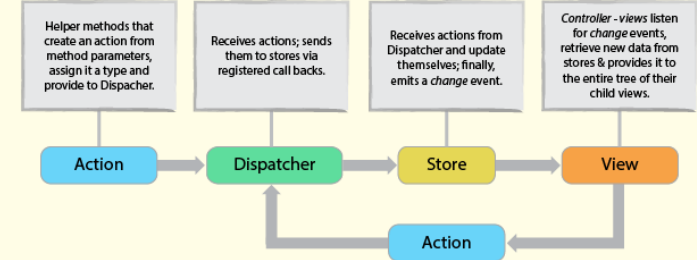
12

Flux architecture (React)



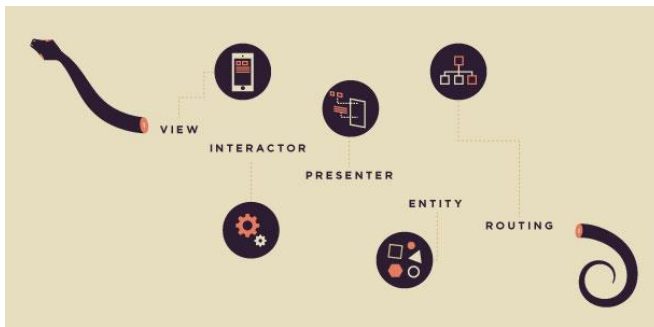
13

Flux architecture (React)



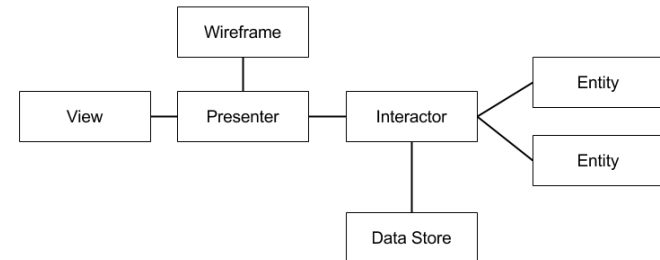
14

VIPER architecture (iOS)



15

VIPER architecture (iOS)



16