

Agenda

- [1) Git Complete
- [2) Project Req
- [3) Microservices
- [4) Intro to spring
- [5) Spring boot
- [6) Spring starter project

Git — Commit
Branch
Checkout
Merge

Rebase ✓
Pull ✓
Push ✓
Add ✓
Done ✓

Project Overview

feature | bug

low level design
class diagram
schema design
DB Design

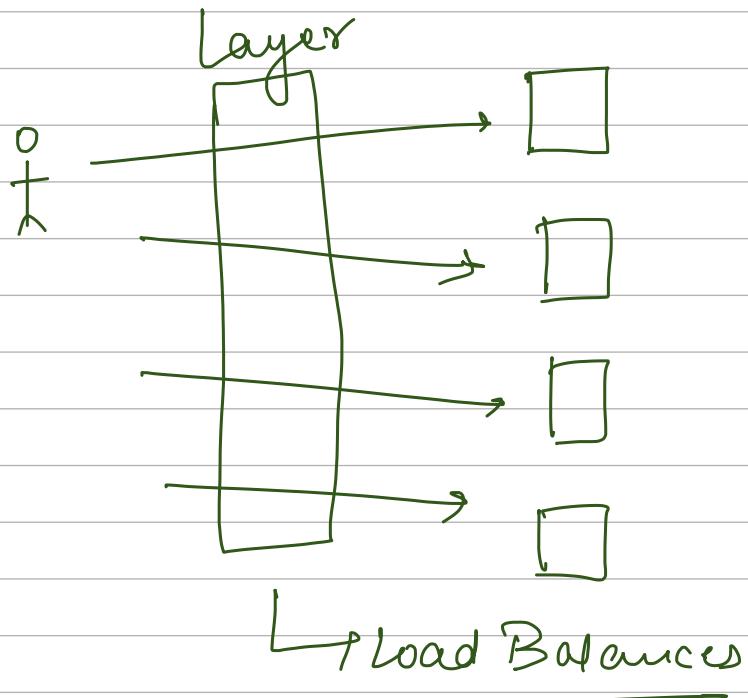
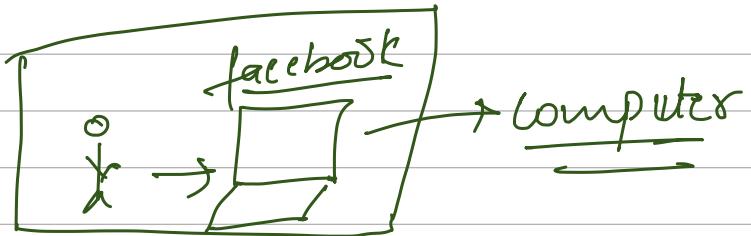
large feature

PRD

Product Req. Doc

HLD

high level design



Balances load b/w multiple
Appⁿ Server

Scalier

- Mentorship
- Classes
- Assign
- TA AND
- Career
- Topic



MONOLITH



Codebase

- It is very heavy code
- More complex
- Hard to maintain
- Impossible to exp with new tools / lang etc.

MicroServices

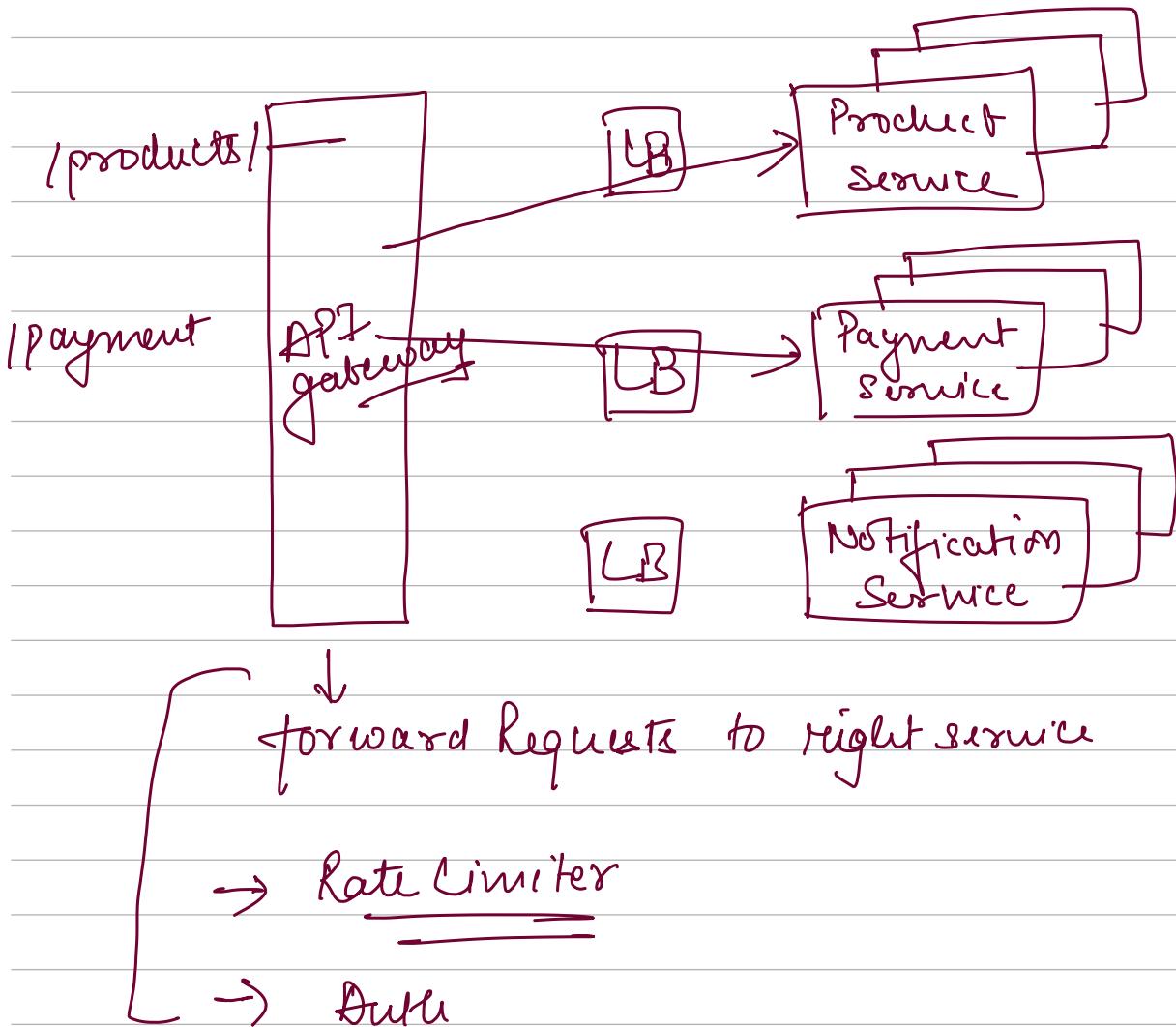
- Splitting your system into multiple apps
- Each app is called service

Amazon
Prime
Video

Product
service

Payment
Service

Subscription
Service



Introduction to Spring

Frameworks
 ↳ tools / skeletons

- Millions of lines of code
- Tens of thousands of classes

010010

language → Java | Python

↳ provides a framework to do something

"Implement common func"

- API structure
- DB connection
- Server

}

DON'T Re-invent the Wheel

"Stand on the shoulders of giants"

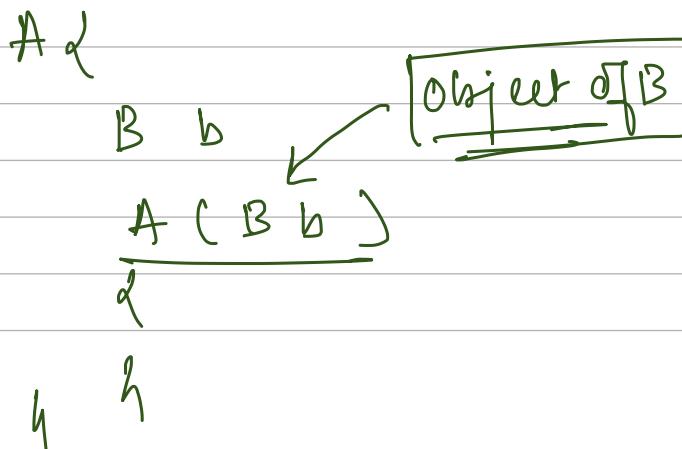
Easy way for Common func

frameworks → allows app
efficiently & faster

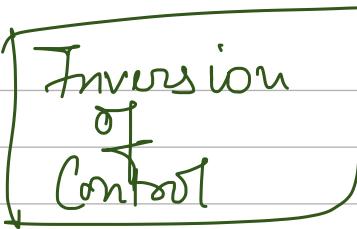
Spring Boot

Spring framework

- 1) Dependency Management
- 2) Config Management
- 3) Class Management



Ensuring objects are created in the order they require

Inversion
 of
 Control 
 ⇒ Instead of us passing the dependencies,
 framework managing those on
 our behalf

2) Config Management

} mysql.url = 
 } mysql.password = 

app.properties
app-prod.properties

Prod
 Dev
 Stage } profile

} if(stage) → exp

 else if(prod)

Suite of Spring Projects

→ spring MVC

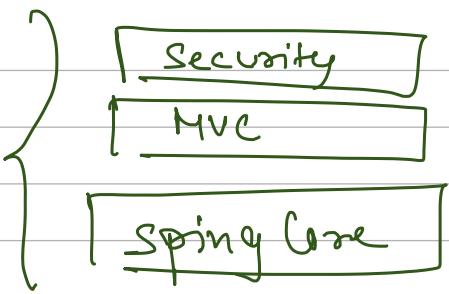
→ Create our own API's

→ Connect to external APIs

→ Spring Cloud

→ Create microservice with spring

→ Spring Data | Spring Security



Spring MVC has a lot of plug and play

pom.xml



Spring Boot

Made easy for us to develop a web application

automatically kickstart your application
with sensible defaults

- } - spring MVC
- tomcat
- rest
- Data → JDBC
 JPA