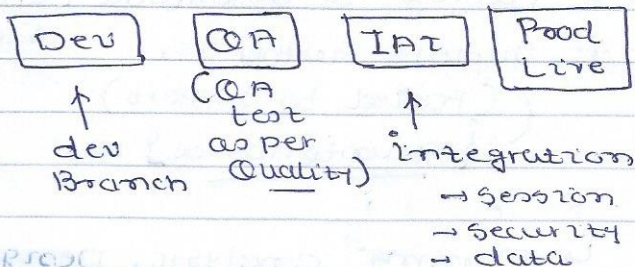
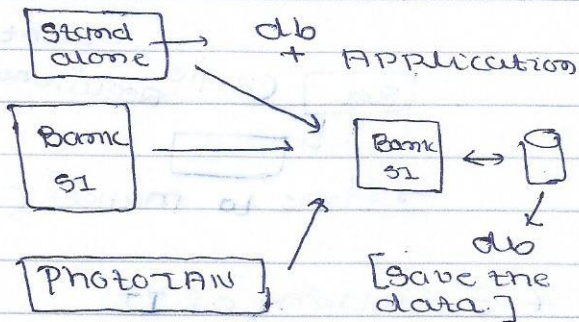


# Devops (day 1)

↳ diff. environment



\* 3-Tier Architecture



(Business Logic)  
Client tier — middle tier +  
(graph UI)  
d Bankend tier  
(Bankend layer)

(Simple)

- ↳ \* Failed Dev. (Not prepared well)
- ↳ \* Failed to Deumload (operation efficient)
- ↳ \* Support Further Fix (Failed)
- ↳ (Failed to support)
- ↳ {maintenance}

↳

↳ Planning, Analysis, Design,  
implementation, testing, deploy

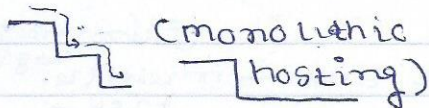
maintenance

Req. (Rigid Requirement)



→ time to market (3-month)

\* Evolution of IT.



Dev.  
Physical  
high  
space.

Applica

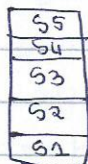
## \* Agile Development

PO → decision maker



Client (input)

write as user-story



Sprint

(Period of time)

demo ←  
to client

2-weeks

↳ 2 weeks clients Feedback.

Agile

N-Tier

Virtual  
server

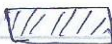
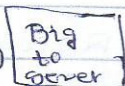
Hosted  
data

(Big server center  
to small)

Data center

↳ hosted (DBs)

↳ cloud



vm

(virtual

Hosted (By company) machine)

↳ virtual server or  
physical server)

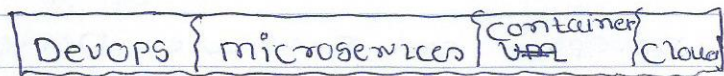
- ↳ Data Center
- ↳ Hosted Server. (diameter) ↳ (house)
- ↳ Cloud

## Challenges

- ↳ Version update on
- ↳ Infrastructure readiness (version)
- ↳ Scalability - [Capacity, increase infrastructure]
- ↳ Quality of the Product  
(testing few stuff.)  
[sunday maintenance]
- ↳ Agile (speedily) → hosting  
or Release → Dev.
- ↳ Faster Release. For New  
Feature. [shorter development cycle] - [Dev ↔ operation]  
↳ [Prod. Server on Java 9]

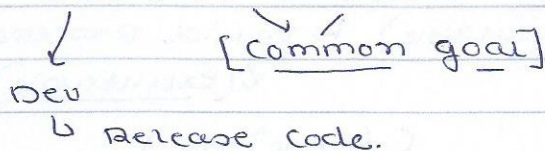
⑤

\* Communication (Dev  $\leftrightarrow$  Ops)



DevOps  $\rightarrow$  Re-organization

Dev team + OPS team



\* Dev - Operation Re Engineer.

CI/CD

$\hookrightarrow$  continuous prepare

$\hookrightarrow$  continuous Dev. (user <sup>end user</sup> should be able to get immediately)

Dev

$\hookrightarrow$  DevOps  $\rightarrow$  Speed + Stable

$\downarrow$   
[Testing with all Features.]  
 $\rightarrow$  time to market  
 $\rightarrow$  Failure.



Agile - multiple Feature  
↳ Deploy

DevOps - ~~cat~~ Feature → Deploy.  
↳ after 2 weeks.

\* SCM (Subversion)  
CI ↔ Build  
(executable) ↳ Build process  
↳ (executable)

CI (jenkins)  
(maven)  
↳ Build code  
(docker) and make executable  
↓

CD (setup infrastructure)  
↳ [Configuration Management] [CM]  
↓

- Ansible (setup env.) ↳ {quickly + easily}  
↳ containers (pack)  
↳ Docker (Kubernetes)

⑦

Monitor

Nagios  
(Monitoring  
System)  
(Prometheus)

Cloud

{AWS Instance} → {Practice /  
Practice}

[13-20]



Zeiten mobile

[8:00] an

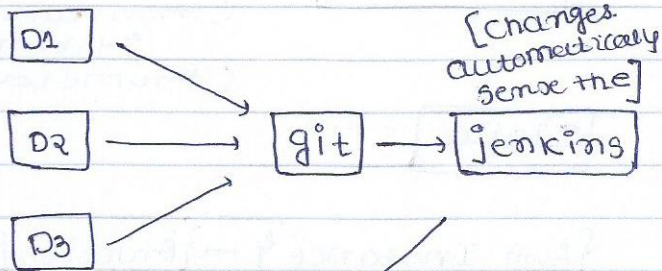
↳  
[Business  
critical]

[ ↳ Letzeweche  
↳ diese Woche ]

↳ ~~no~~ off work  
(No-short

[9th April Kurzarbeit]

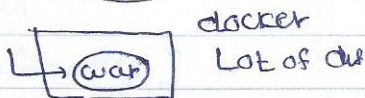
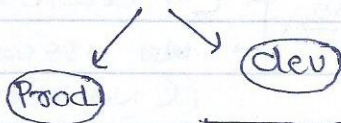
↳ → vacation - (9 day)  
day. } →



↳ job1 ( pull the code + Build )

↳ job2 ( test the Code using Selenium )

↳ job3 ( docker creation )



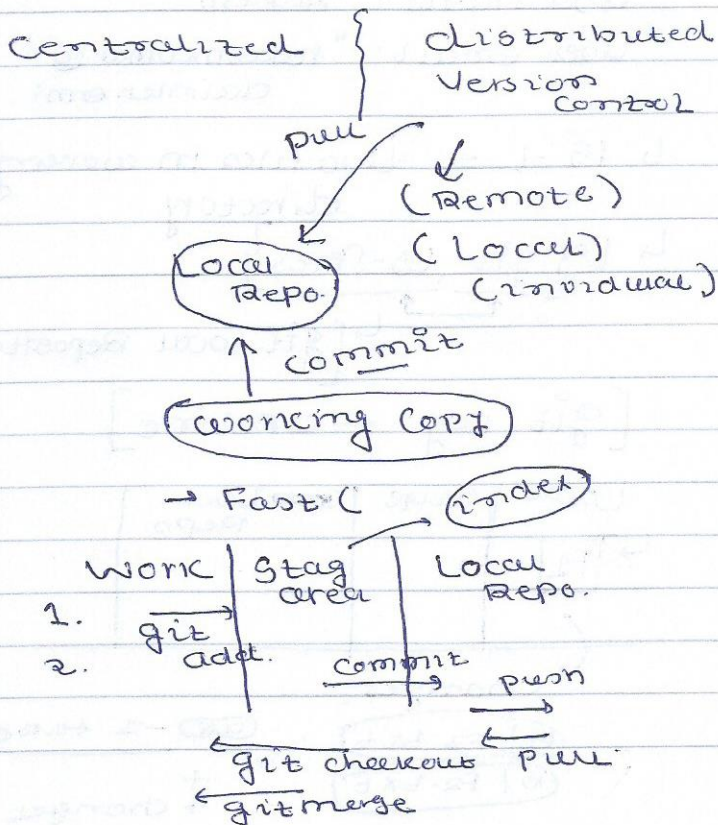
↳ Ansible ( config. manag. tools )



CI → to Build + test

⑨

CD → dockerization  
+ deployment



> 11 - a

user.name : "Rakesh"

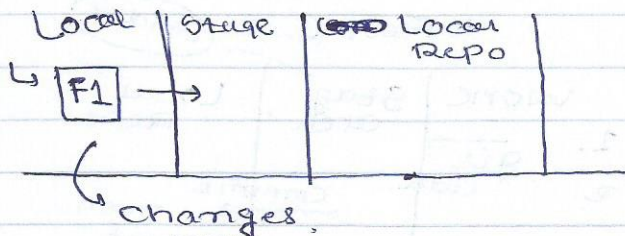
user.email : "rakeshkumar@  
clalmer.com"

↳ ls -l → two files in working  
directory

↳ b { git ls-files }

↳ [git Local Repository]

[git Log --online]



a | F1.txt

b | F2.txt

@@ -1,13 @@

+  
+ changes