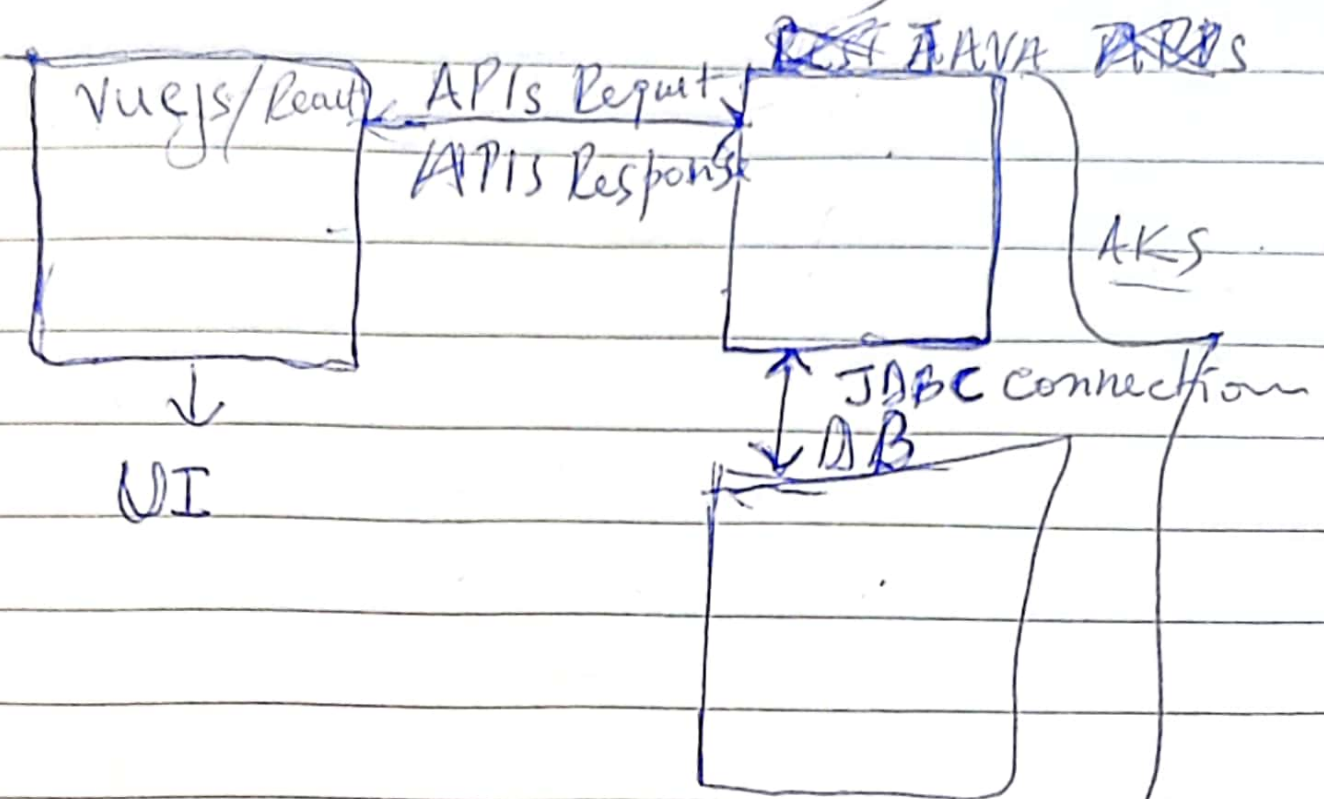


Consumer: Send a API request to get data

Provider: Execute the request send by the consumer and provide the response.

Req API (get, post, ...)



✓ **maven**: It manages all the processes such as releasing, build, documentation and distribution in project management,

System model: synchrony (timing) assumptions

- * Synchronous: Message latency no greater than a known upper bound. Nodes execute algorithm at a known speed.
- * Partially synchronous: The system is asynchronous for some finite (but unknown) periods of time, synchronous otherwise.
- * Asynchronous:
 - Messages can be delayed arbitrarily
 - Nodes can pause execution arbitrarily.
 - No timing guarantees at all

* For better Performance get data from a nearby node rather than one halfway round the world.
| here we are about keep data close / avoid long distance

* To solve bigger Problems:
Such as huge amount of data,
Can't fit on one machine.

⚠ Disadvantage is when the internet is down, Communication may fail, Processes may crash.

All of this may happen nondeterministically.
Cally { Producing a different result each time the same piece of data is entered

Spring @

IP Vy

Distributed Software

Data Persistence

design and w/Use ORM Framework

It is multiple computers communicating via a network / trying to achieve some task together / consists of "nodes" (Computers, Phone, Car, robot, ---)

Why make a system distributed?

- * It's inherently distributed: such as sending a message from your mobile phone to your friend's phone.

- * For better reliability:

Even if one node fails, the system as a whole keeps functioning.

- Security: (API) Check user exist (connection to DB and check records of user)

1. Integrate Front-end & Backend (service)

3. Integrate Backend & Database

2. Implementation. front-end UI

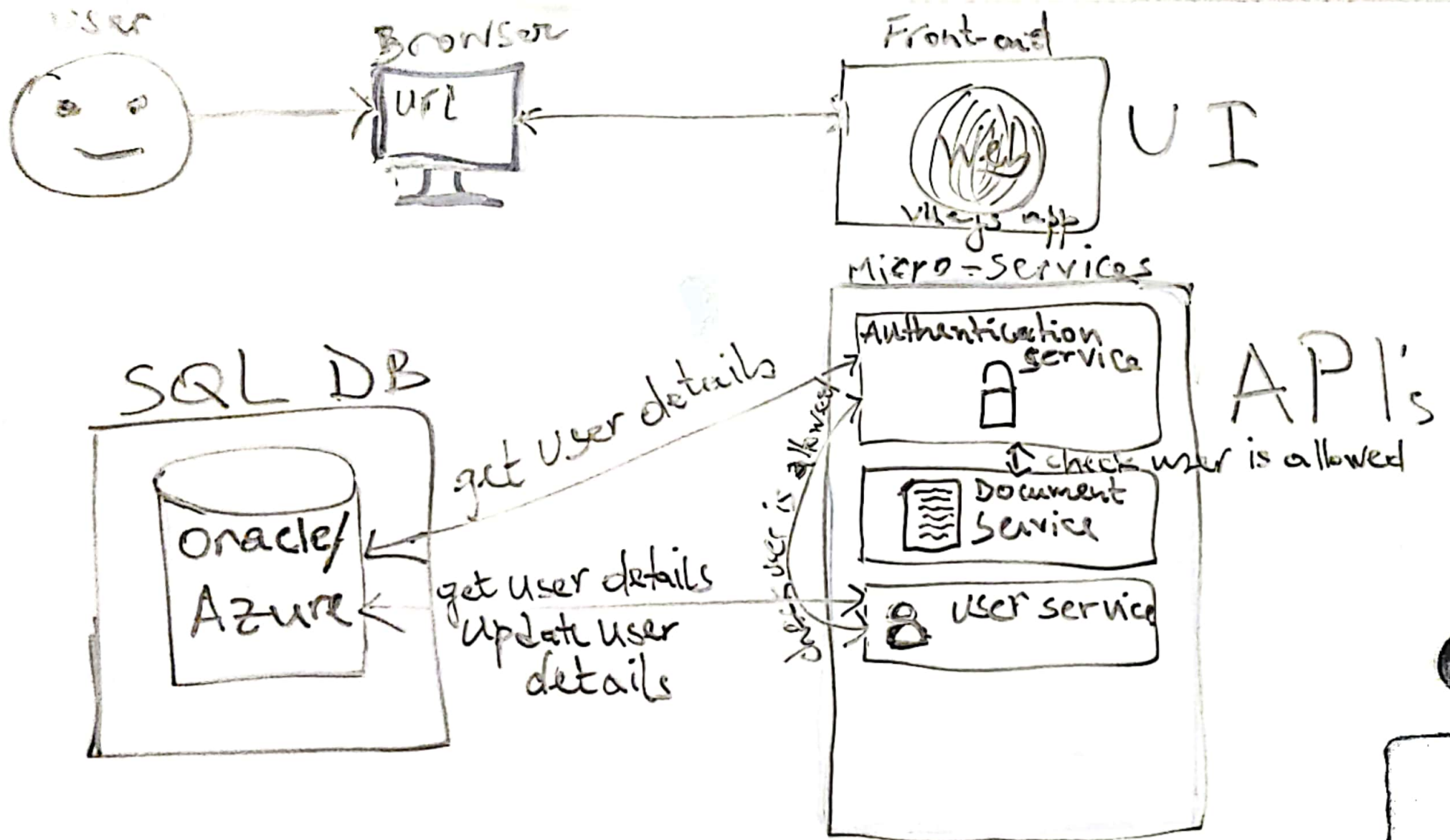
Get: Employee name,

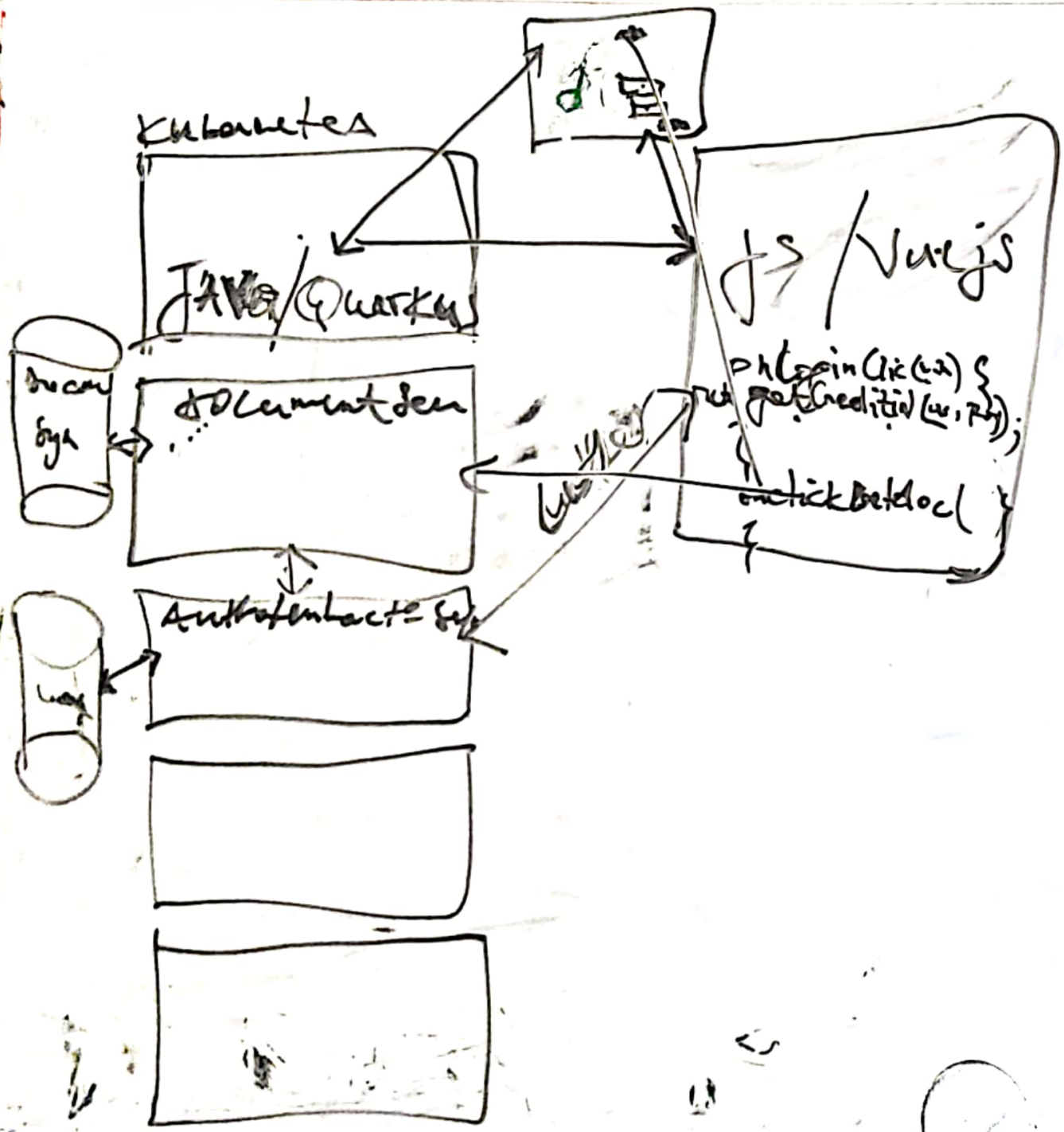
Get: Read

Post: Write

PUT: Write

DELETE: Remove





API



Vue.js
Angular
React

JS, HTML, CSS
Front

IntelliJ
IDE

VS Ext
VS code
IntelliJ
Eclipse

JAVA, C#

Resources
Get
Post
Put
Delete

Maven

List 4.0 → JDK 9

JDK

1.8 Hello() { }