

Authentication → Authentication Vs Authorization

OAuth

JWT

2nd MS → User Authentication Server
(Auth Server)

what is Authentication ?



Validate Identity / someone
Identify someone

↳ Proof of Identity ↳

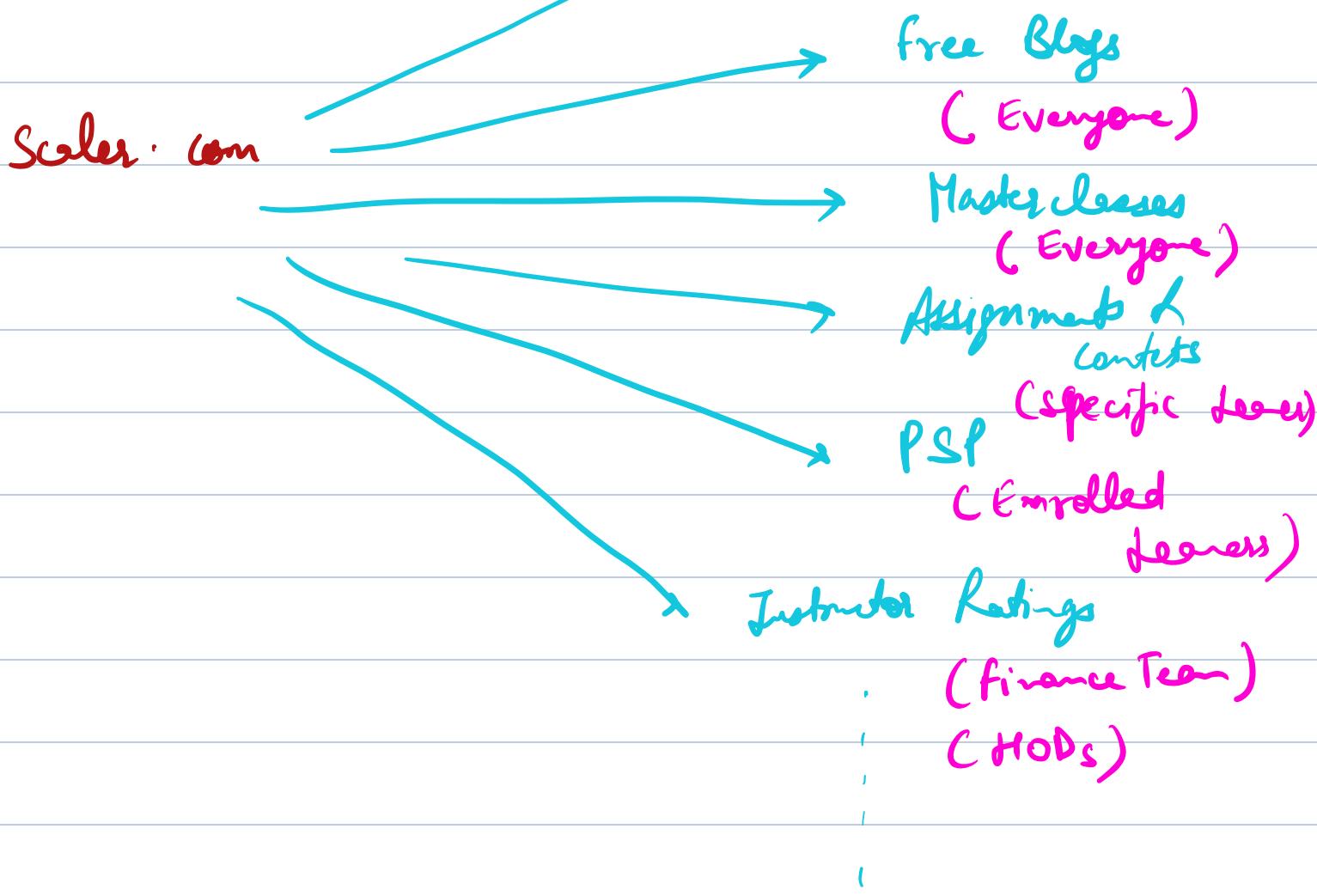
↳ passport

↳ Aadhar Card (KYC)

Know Your Customer

five lecture

(Enrolled learners)



Authentication is a process of

knowing who the person is

Authentication → Who is trying to access some resource

Authorization

Proxy Attendance

↳ IP Address ✓
+
location ✓
+
Mac Address ✓

How can we stop this?

or

How we would have
prevented this?

MFA

(2FA) → static (password)
+
dynamic
(OTP)

②

Security Questions

③

Session limit &
Alerting around
that

$$\frac{500}{200000} \times 10^{-3}$$

$$0.25 \times 10^{-2}$$

SNKRS

Travis Scott Air 1

Oauth

Open Authorization

One of first protocol used for
Authentication &
Authorization.

OAuth 2.0

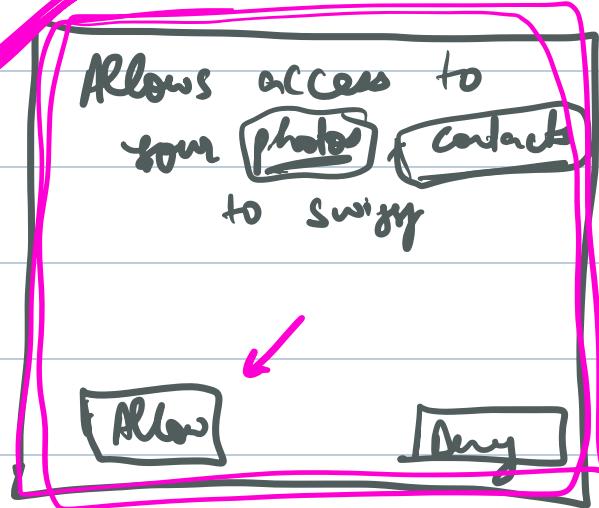
login with Google

← authentication
proof of
identity

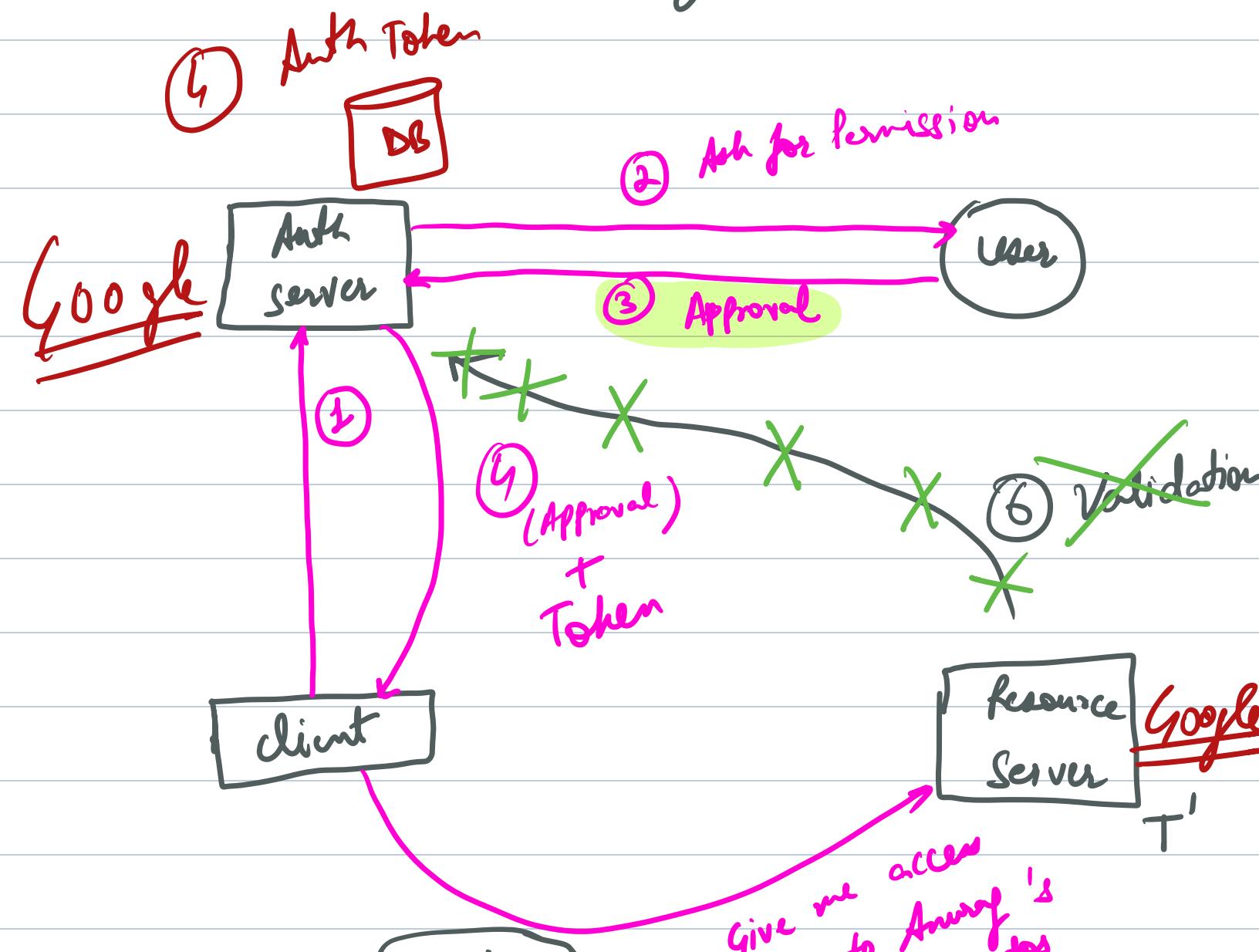
login with Facebook

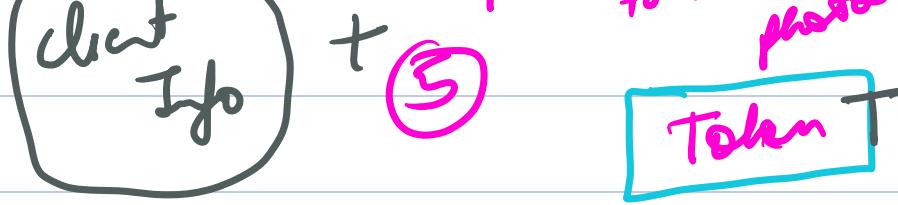
② ↗

Authorization



Flow Diagram of OAuth





student → client

letter (Application)

principal → Auth Server

Signed the letter → Token

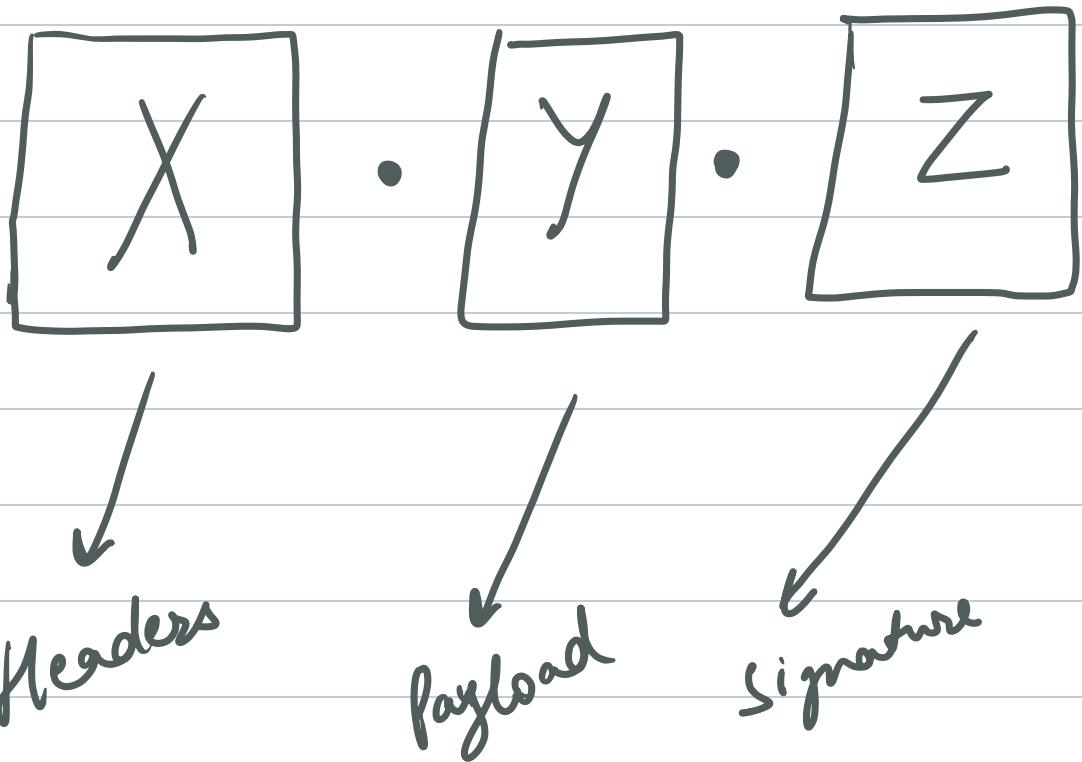
class Teacher → resources Server

Millions

Gen Tie	Exp Tie	client	user Id	Token
~	~	~	~	~

JWT

JSON Web Token



Headers is the name of some encryption Algorithms

RSA , HS256 in

64 Bit encoded payload

Headers =

"HS256"

base 64 Encoded Headers = zxz

Payload contains data of client,
user, access token etc
in Base 64 Encoded Format

Payload : {

genTime : 17 Dec 2025

expTime : 17 Jan 2026

userId : 5

client : zonato

:

:

:

}

Base 64 Encoding on payload

=yyy

Signature =

HS256 [(encoded Headers) + ":" . " " +
(encoded payload),
secret]

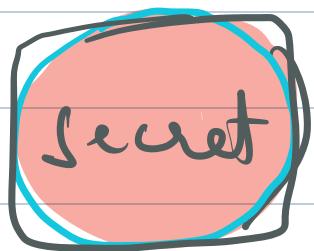


zzz

JWT

Signature →

HS256 (xxx.yyy,
 ↓
 zzz)



zzz

JWT = xxx · yyy · zzz

