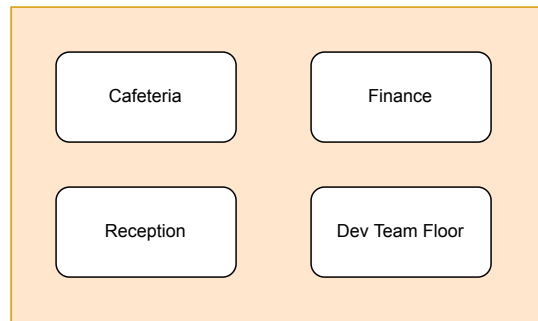
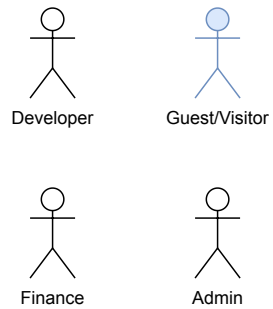


Security**Authentication vs Authorization**

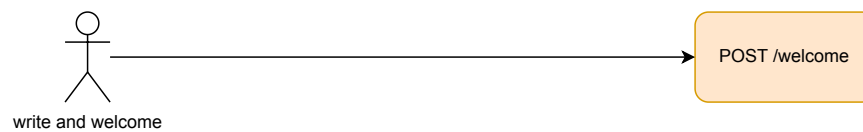
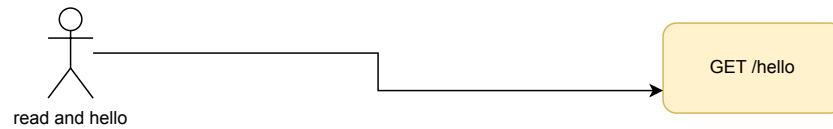
Basic Security or Multi-Factor Authentication, OAuth2, SAML

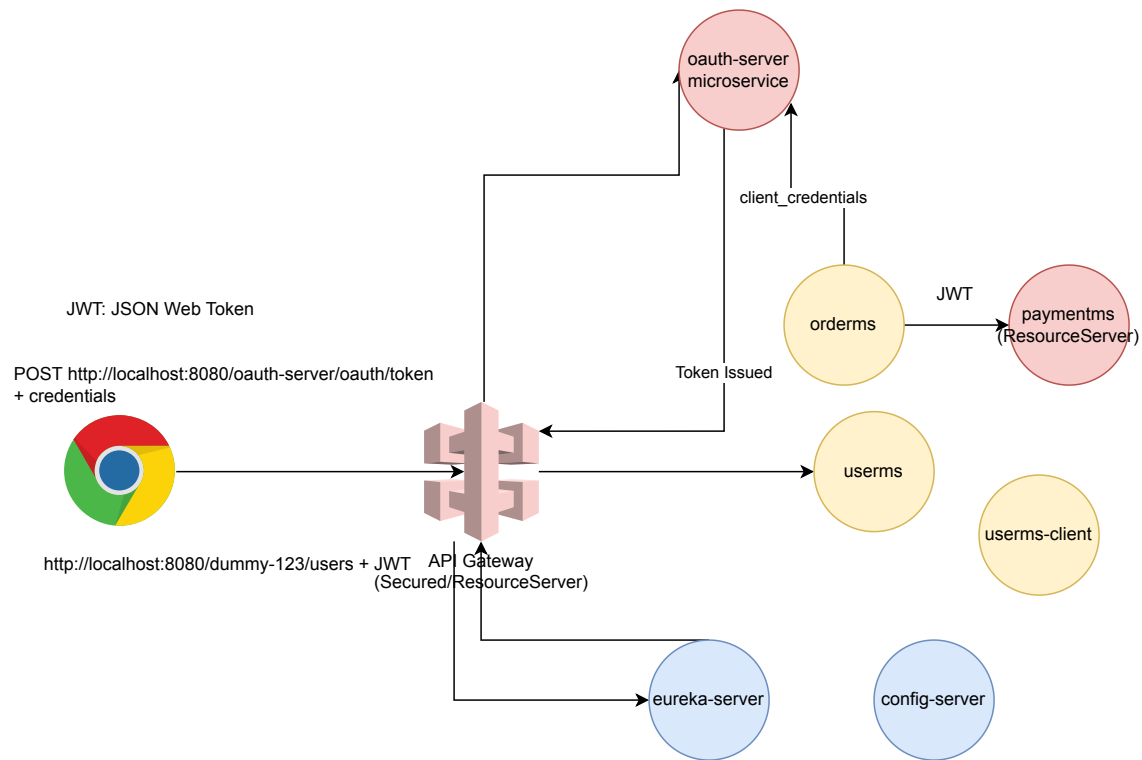
401: Authentication Issue

403: Authorization Issue

URL level security and Method level security

```
@PreAuthorize("Payor_role")  
public void pay(Amount amount, Payee payee) {}
```



Microservices (Bigger Picture)

```
{
  "access_token": "97684cbe-6b36-4f4d-a0cd-b0029998e3ce",
  "token_type": "bearer",
  "expires_in": 89911,
  "scope": "read write"
}
```


OAuth2

OAuth2 Players:

1. Resource Owner(Human User)
2. Client (candy)
3. Authorization Server (oauth-server)
4. Resource Server (APIGateway)

Grant Types:

1. Authorization Code (SSO)
2. Implicit (Deprecated)
3. Password
4. Client Credentials (No Human User)
5. Refresh Token

