

## Getir Case Study Documentation

1. Technologies
  - a. Java 17
  - b. Maven
  - c. Spring-Boot
  - d. MongoDB Atlas
  - e. Docker

2. How to Start Project

```
$ docker-compose -f docker-compose-mongo.yml up -d
$ mvn clean package -DskipTests
$ docker-compose build
$ docker-compose up -d
```

And create customer -> <http://localhost:8080/api/customer/signup>

3. Credentials
  - a. Spring Security JWT Authentication
4. Design

I used Domain Driven Design for packaging

- a. Controllers
  - i. They receive request from user and send it to facade layer.
  - ii. Getting result from facade layer and creates ResponseEntity based on that result.
  - iii. If any exception happens, Controller advisor will catch the exceptions and throw ErrorResponse, which contains errorMessage, HttpStatus code and requested url.
- b. Facade
  - i. Responsible with Dto to Entity, Entity to Dto conversions and simple validations.
  - ii. EntityServices only used by EntityFacades.
  - iii. Facades can call other Facades methods.
  - iv. Main purpose of Facade layers is simplifying Service layers and make service layers only responsible with repository operations.
- c. Service
  - i. Responsible with repository CRUD operations.
  - ii. EntityRepositories only used by EntityServices.
  - iii. Can't call other Service or other Repository methods.

### Expandable features

- Spring security config can be used for configuration.
- Elastic search can be used for search services.
- Microservice architecture can be used.
- Kafka can be used for microservices to communicate with each other.