**Report on Technical Challenge**

**Dimitrios Vogiatzis**

*Delivered Objectives covered*: Create a REST API with Java Spring-Boot that enables user registration, login and a basic shop functionality by updating Products and return information on sales, offers and stock.

The dB is a mysql8, set up by initial script, JWT for securing endpoints and users , although migration provided, could not make it work with flyway library. No use of Stripe environment. No AWS deployment.  
  
**Setup**:

Download folder Velocity

Open a terminal in that folder

Run: **docker-compose down -v** (To reset docker)

Run: **docker-compose build --no-cache** (To build the dvomed app, this is the API )

Run: **docker-compose up** (Instantiate the docker image with mysql8 for dB, pphpmyadmin for dB manipulation and dvomed image, the actual Api)

Open a browser and visit <http://localhost:8081>, this is the phpMyAdmin portal, credentials can be found in docker-compose for mysql8 server.

Open Postman

Insert the **dvoMED.postman\_collection** that you will find in Postman folder. Example of responses also included in Postman folder.

Basic dvomed app URL is <http://localhost:8087>

Start with Post “Create and register a User” request to add a new user. By default the user has role USER , so he/she cannot have access to admin related requests. You have to go manually and change the role of that user in DB, no API for user update provided. ADMIN role has id 2.

Next, use endpoint “Post User Login “ by giving user name an d password (plain). That will return a JWT token. In DB the actual password is encrypted.

From now on you have 2 public and 2 admin endpoints.

For the public ones, no settings required, for the admin ones you have to add on Headers {Key: Authorization, Value: Bearer <token value>) to get access otherwise you receive 403.

**Endpoints:**

1. Get public Dashboard Overview:
   1. totalAvailableProducts (how many products we sell)
   2. availableProducts (list of basic info for each of those products)
   3. topSellingProducts (the top 5 products based on total item sales)
2. Get public Dashboard Offers:
   1. topSellingProducts
   2. topDiscountProducts (the top 3 products with the biggest discounts)
   3. cheapestProducts (the top 3 products with the lowest basic prices)
3. Get admin Dashboard Statistics:
   1. SalesPerItem (list of Products with sales and revenue)
   2. totalRevenue (total revenue of sales)
4. Get admin Dashboard Products Update:
   1. For specific product pass a body with the value of price,discount,description or quantity that you want to update