Take Home Task – Mock-a-Shop

Build a simple shopping web application for an e-commerce system.

# **Overview**

You are supposed to build an application by using Springboot web services(RESTful API) & HTML (Thymeleaf) to act as a simple e-commerce shop that used by both Customer & Shop Owner.

**Customer**

Customer will be able choose/select the item they want to purchase with different item type & quantity, perform Add to Cart , Update & Checkout action, you may simulate a dummy payment gateway to checkout, unique txn ID will be generated for successful transaction.

**Shop Owner**

Shop owner will be able to add different items to the shop for selling.

**Items**

Item should consist of at least Item No, Item Type, Item Name, Item Unit Price and etc.

Aside from the API implementation, a frontend is required to display the website and allow basic interaction. A separate spring boot web project should be used with a templating engine to achieve this. It will consume the RESTful API to interact with the Springboot H2 database.

You may assume that there will be a frontend developer responsible for styling the webpage, so basic HTML design is sufficient.

A dummy payment implementation should be used. No live payment is needed.

You may make your own decision for business logic not mentioned in the requirements.

# Timeline

* Expected to submit in 7 working days

# Technologies

1. Java Spring Boot project
2. H2 Database and JPA
3. Maven
4. Templating Engine e.g. Thymeleaf

# Expectations

* Basic Requirements
  + Implement correct OOP concepts
  + API should follow RESTful style HTTP services
  + At least basic documentation of the API endpoints
  + Inclusion of Junit or Mockito test
  + Level of completeness and clarity of documentation /readme
* Bonus (in no order)
  + Inclusion of logging framework
  + Organization of API resources
  + Ability to map out current and future user requirements
  + Understanding of pro and cons, as well as assumptions made during the design

# Submission

Please zip the finished project for submission, include “ReadMe.txt” to briefly describe how to run the project, good to have the user story and the rationale behind the implementation.