**Microservice Exploration Project**

**Project Timelines:**

Release 1.0 - 18/01/2020 to 19/01/2020

Implement Basic Services with REST endpoints

Release 1.1 – 20/01/2020 to 24/01/2020

Release 1.2 – 25/01/2020 to 27/01/2020

**GOAL:**

Architecture: Microservice

Security: JWT tokens

Service communication: REST APIs

Database: In-memory H2 for now, integrate Postgres later

Microservice tools -

Service Discovery: Netflix eureka

Configuration:

Load Balancing:

Monitoring:

Request Tracing:

Fault Tolerance:

API Gateway:

Testing:

Unit: @DataJpa, @ , @

Integration: @SpringBootTest

Internationalization:

Localization:

Performance and Scaling:

Streaming Event: Kafka

~~UI: Angular ( Next release )~~

**Sprint 1**

Create 3 Services that expose REST APIs

1. User service
2. Product service
3. Cart Service

Testing –

Unit tests

Integration tests

Implement CI –

Bamboo

~~Implement CD (Deferred)~~

~~Bamboo~~

Integrate SCM –

GitHub

Features –

Basic functionality

Spring Boot

REST APIs

HATEOS

JPA

Security using JWT tokens

Integrate Database –

In-memory H2 for now