Technical Specifications

# Software Packages:

Following are the packages/frameworks used while developing Order Service API.

1. Flask framework to develop API.
2. Flask-restx to extend flask functionalities.
3. Swagger to design API and for documentation purpose.
4. Waitress WSGI server to make production ready API.
5. MySQL db to store Order data.
6. Pika is used to connect to RabbitMQ.
7. Pytest, Mock libraries to run test cases.

Modules

The following modules are created in github repository “[HFtest-backend-python-Uma](https://github.com/hellofreshdevtests/HFtest-backend-python-Uma)” to develop the service.

1. api – This module contains routing code for Order service POST method implementation.
2. serializers - This module contains serializers to design api request and response formats.
3. database – This module comprises database connection and query execution code.
4. service - This module is designed to implement the actual business logic (Get product, user data and publish create order message to RabbitMQ).
5. main.py - This module registers api route and run flask server.
6. settings.py - This module contains all environment variables.
7. tests - This module contains test cases with success and failure scenarios mocked.

TimeSpent

Timespent on different modules approximately:

1. Requirement Analysis: **1 hour**
2. Downloading pre-requisites and other softwares: **30min**
3. Design (Choosing which framework and packages to use): **30min**
4. Implementation (api,service modules) : **2 hours**
5. RabbitMQ (I don’t have prior knowledge on it, so this part took more time): **1.5 hours**
6. Tests: **30min**
7. Documentation: **30min**