

Docker Cloud & REST APIs

PART I - Setup

- **Install Docker Toolbox:**
 - <https://www.docker.com/products/docker-toolbox> (Links to an external site.)Links to an external site.
 - <https://www.docker.com/docker-mac> (Links to an external site.)Links to an external site.
 - <https://www.docker.com/docker-windows> (Links to an external site.)Links to an external site.
 - <https://www.docker.com/docker-ubuntu> (Links to an external site.)Links to an external site.
- **Register for Docker Hub and Docker Cloud Accounts:**
 - <https://hub.docker.com/> (Links to an external site.)Links to an external site.
 - <https://cloud.docker.com> (Links to an external site.)Links to an external site.
- **Link Docker Cloud to your AWS Account:**
 - <https://docs.docker.com/docker-cloud/getting-started/> (Links to an external site.)Links to an external site.
 - **Notes:** Micro Free-Tier Instance in any AZ
- **Download and Install Postman Desktop App:**
 - <https://www.getpostman.com/> (Links to an external site.)Links to an external site.

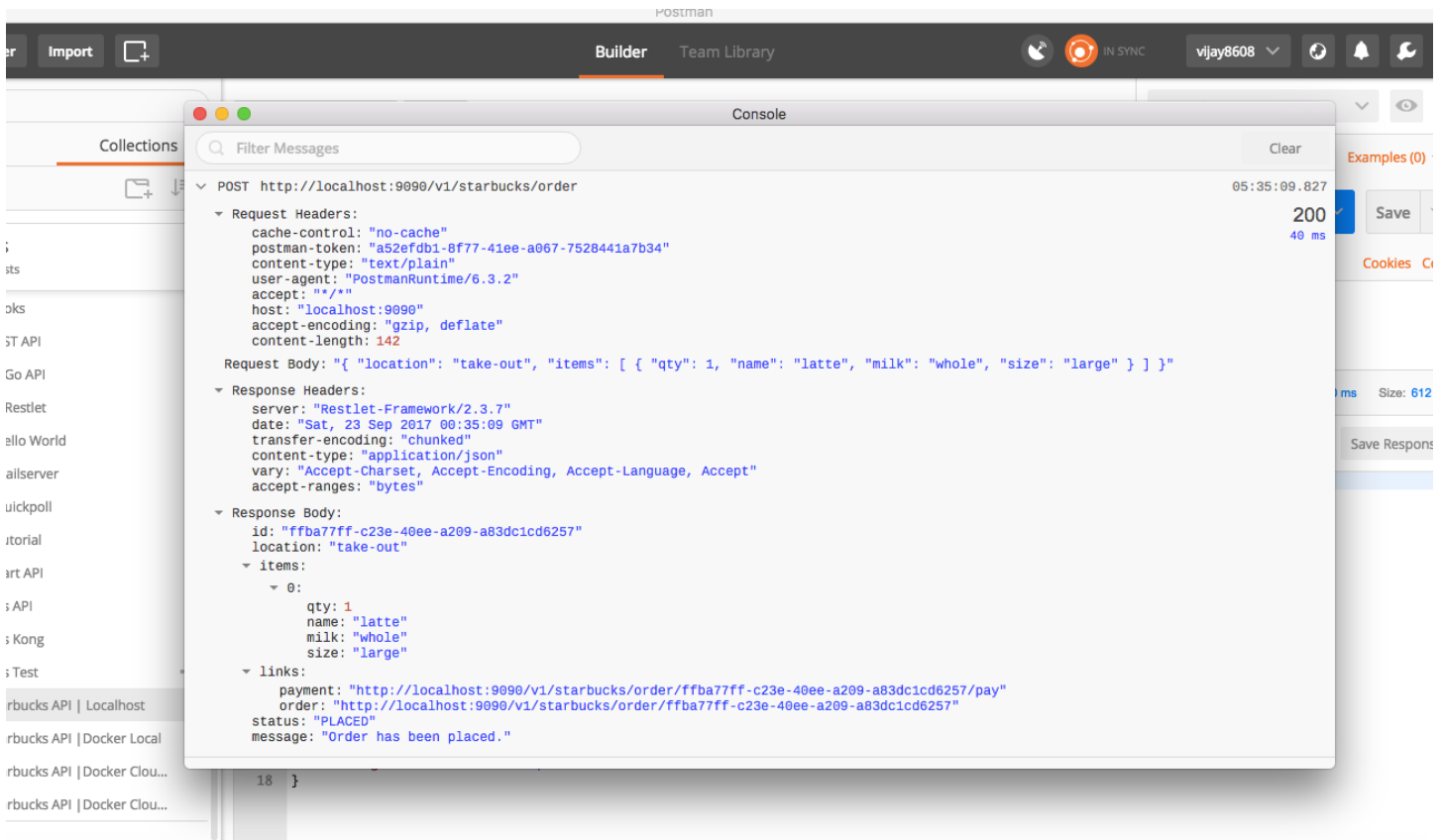
PART II - LOCAL HOST

Compile, Build JAR and Run Local Instance on port 9090 using Makefile Targets:

```
compile:
    gradle build

jar: compile
    gradle shadowJar

run:
    echo Starting Service at: http://localhost:9090
    java -cp build/libs/starbucks-all.jar api.StarbucksServer
```



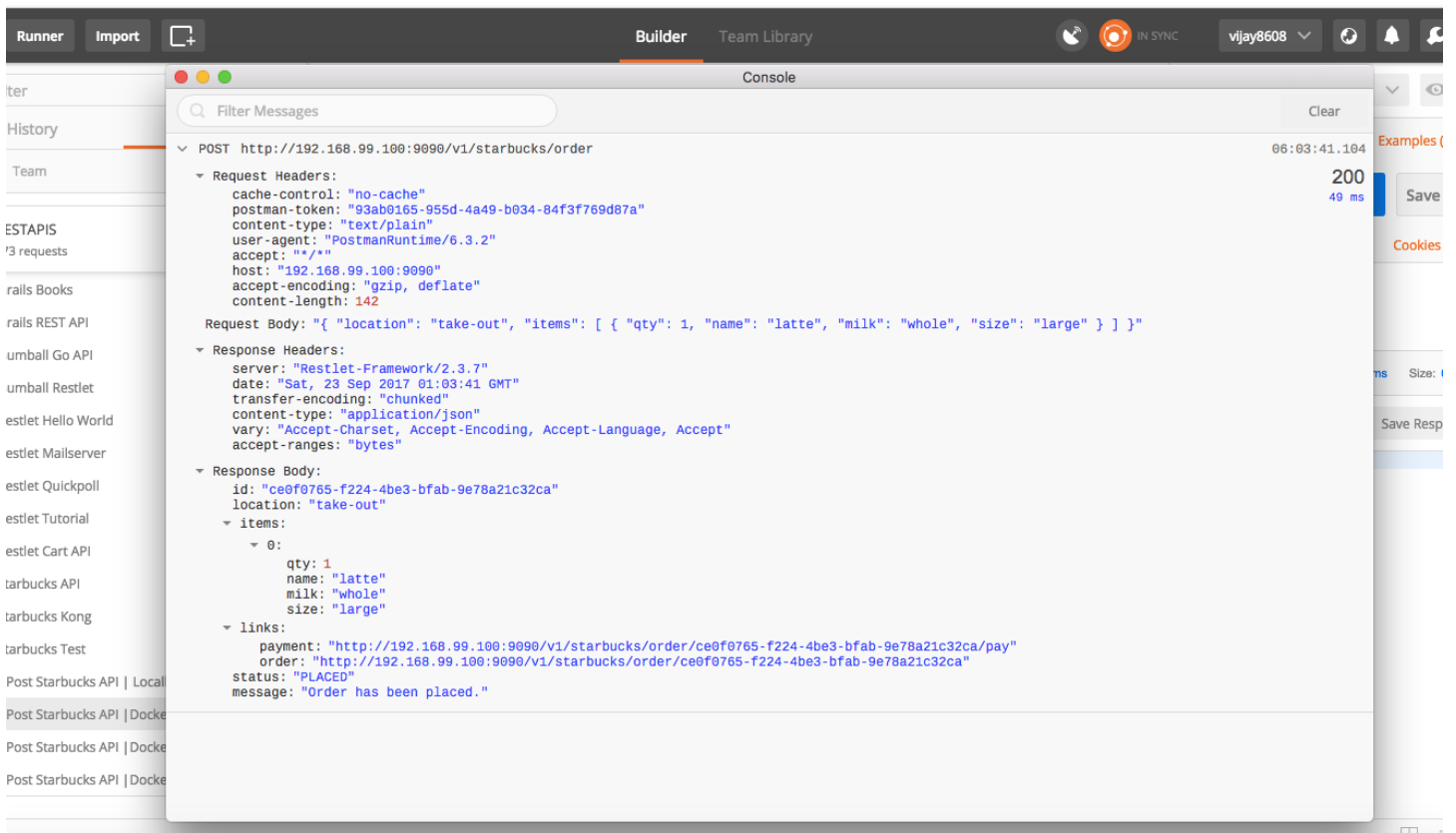
PART III - LOCAL DOCKER

Compile, Build JAR and Run Local Docker Instance on port 9090 using Makefile Targets:

```
docker-build:
  docker build -t starbucks .
  docker images
```

```
docker-run:
  docker run --name starbucks -td starbucks
  docker ps
```

```
docker-run-host:
  docker run --name starbucks -td --net=host starbucks
  docker ps
```



PART IV - DOCKER CLOUD

Using the **docker.sh** script, build and push a release to Docker Hub and then Deploy to Docker Cloud.

Note: When deploying to Docker Cloud, map the Container's Exported Port 9090 to Docker Cloud's **Port 90**.

Postman

Runner Import

Builder Team Library

IN SYNC vijay8608

Console

Filter Messages

Clear

POST http://54.193.117.131:90/v1/starbucks/order 07:48:27.656 200 151 ms

Request Headers:

- cache-control: "no-cache"
- postman-token: "e43bf943-147e-4d54-88bb-c115287c1591"
- content-type: "text/plain"
- user-agent: "PostmanRuntime/6.3.2"
- accept: "*//*"
- host: "54.193.117.131:90"
- accept-encoding: "gzip, deflate"
- content-length: 142

Request Body: "{ \"location\": \"take-out\", \"items\": [{ \"qty\": 1, \"name\": \"latte\", \"milk\": \"whole\", \"size\": \"large\" }] }"

Response Headers:

- server: "Restlet-Framework/2.3.7"
- date: "Sat, 23 Sep 2017 02:48:27 GMT"
- transfer-encoding: "chunked"
- content-type: "application/json"
- vary: "Accept-Charset, Accept-Encoding, Accept-Language, Accept"
- accept-ranges: "bytes"

Response Body:

- id: "36bcf725-8d0e-48cb-8965-c963813e8afd"
- location: "take-out"
- items:
 - 0:
 - qty: 1
 - name: "latte"
 - milk: "whole"
 - size: "large"
- links:
 - payment: "http://54.193.117.131:90/v1/starbucks/order/36bcf725-8d0e-48cb-8965-c963813e8afd/pay"
 - order: "http://54.193.117.131:90/v1/starbucks/order/36bcf725-8d0e-48cb-8965-c963813e8afd"
- status: "PLACED"
- message: "Order has been placed."

Secure https://cloud.docker.com/app/vijay1991/service/61962a25-40af-498f-92bc-221f6d5c9b1a/logs

docker cloud

Get Help vijay1991

Services

General Logs Timeline

[starbucks-94a1ff80-1] 2017-09-23T02:41:25.548683725Z Starting the internal [HTTP/1.1] server on port 9090

[starbucks-94a1ff80-1] 2017-09-23T02:41:25.548898096Z Starting api.StarbucksServer application

[starbucks-94a1ff80-1] 2017-09-23T02:48:03.344387923Z Order Placed: 0d9c7e61-2da8-4c5c-ab6e-dfbc5b8e6ce8

[starbucks-94a1ff80-1] 2017-09-23T02:48:03.363599245Z 2017-09-23 02:48:03 67.180.191.219 - - 9090 POST /v1/starbucks/order - 200 - 142 574 http://54.193.117.131:90/v1/starbucks/order

[starbucks-94a1ff80-1] 2017-09-23T02:48:27.835930611Z Order Placed: 36bcf725-8d0e-48cb-8965-c963813e8afd

[starbucks-94a1ff80-1] 2017-09-23T02:48:27.836874361Z 2017-09-23 02:48:27 67.180.191.219 - - 9090 POST /v1/starbucks/order - 200 - 142 8 http://54.193.117.131:90/v1/starbucks/order