For building and running the application below is needed:

- JDK 1.8
- Maven 3
- Docker

Technology Stack Server - Backend

- JDK
- Spring Boot
- Maven
- JSON Web Token

Docker Container Initialiser.

To create a docker container.

- 1. Create docker file
- 2. Create starter file to run the associated jar java -jar /opt/abhinav/app/VMW/assignment-0.0.1-SNAPSHOT.jar
- 3. Write **build.sh** in the VMWareAssignment folder.
- 4. Create file **run.sh** in the target folder and write the followingdocker run -- restart=always --name vmw-app -p 8080:8080 -d vmw:1.0.0

Load the docker image **load <vmw.tar.gz**

Testing API

Testing with Postman Runner

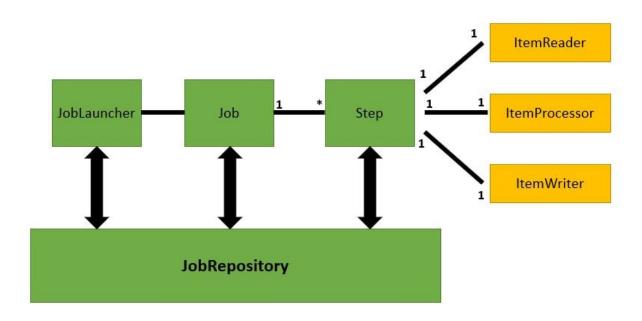
PostmanCollection

```
{"info":
{"_postman_id":"772326e8-7f32-47a1-828f-2c1a16e16504","name":"VMWA
ssignment_PostmanCollection","schema":"https:\/\/
schema.getpostman.com\/json\/collection\/v2.0.0\/
collection.json"},"item":[{"name":"http:\/\/localhost:8080\/
```

```
uploadFile","id":"e6f5772d-12ce-4bf0-8a0e-0800349c9d8b","request":
{"method":"POST", "header":[], "body": {"mode":"formdata", "formdata":
[{"key":"file", "type":"file", "src":"\/Users\/abhinav\/uploads\/
user.txt"}]}, "url":"http:\/\/localhost:8080\/
uploadFile"}, "response":[]}, {"name":"http:\/\/localhost:8080\/
getTaskStatus\/2", "id":"573c8d1a-beb5-46e9-
a2f9-0ddbf989dc5b", "protocolProfileBehavior":
{"disableBodyPruning":true}, "request": {"method":"GET", "header":
[], "body": {"mode": "formdata", "formdata":
[{"key":"", "type": "file", "src":[]}]}, "url": "http:\/\/localhost:
8080\/getTaskStatus\/2"}, "response":[]}, {"name": "http:\/\/localhost:
8080\/getTaskStatus\/2"}, "response":[]}, {"method": "POST", "header":
[], "url": "http:\/\/localhost:8080\/api\/timer\/
runbatchprocessor"}, "response":[]}]}
```

What is does?

This service allows to upload sample file which can be processed at the server to upload the data in the database. It returns task id associated with the process. User later can query the same task id and get the status of the task.



Spring Batch Working

FileStorageService:

This service is used to upload the files on the server.

TaskStatusService:

This service is used to create an entry in the task table with all the features related with it.

Quartz Scheduler:

BatchSchedulerJob is responsible for running the job at regular interval and query the task table to check if there is ay new task id with running status "submitted". It process the pending task and process those files.

Spring Batch

SpringBatchConfig class is responsible for setting the spring container with necessary information to execute the batch process to parse the file and upload the data in database.