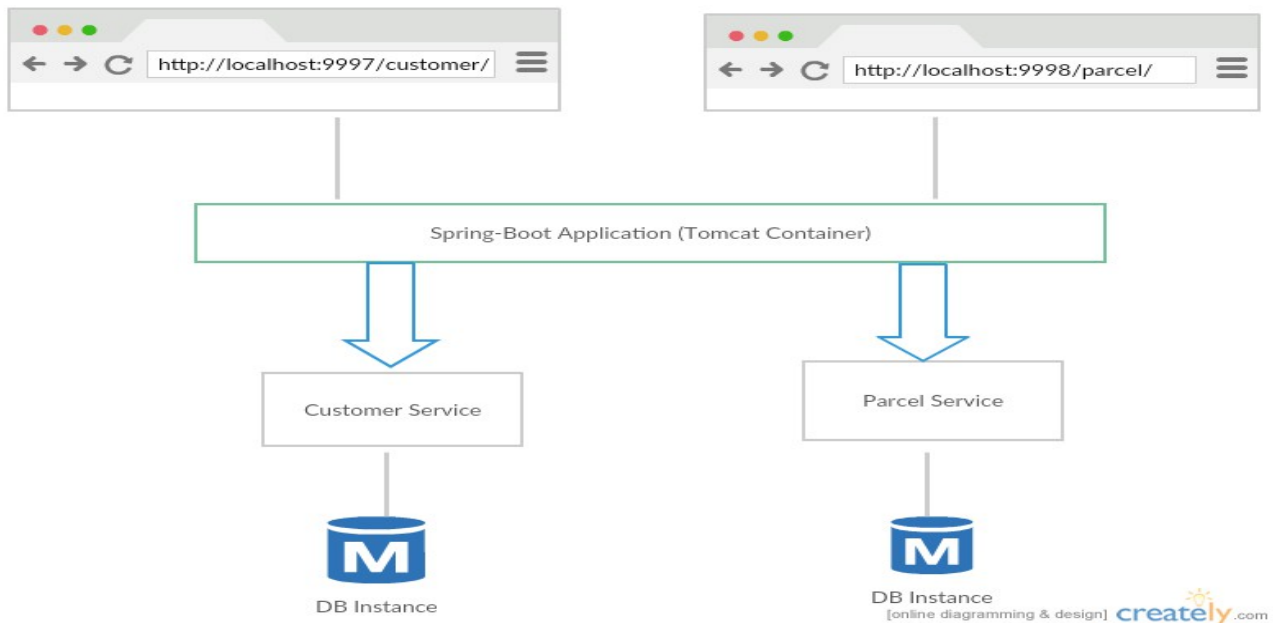This document is to elaborate the microservice architecture I implemented regarding the task. The abstract diagram is as following:

Not to be redundant, I am not reiterating the problem statement here, there are two services namely; customer and parcel. Customer service is responsible for check In and Out a Customer where the Parcel is responsible for accepting the parcel if a Customer resides.

The technology used to make this assignments are:
1. Spring-Boot
2. H2 in mem DB
3. Swagger2

To run the application, use the following command:
1. $ java -jar parceltracker customer-service # For running customer-service
2. $ java -jar parceltracker parcel-service # For running parcel-service

By default customer-service is running on port 9997 and parcel-service is running on port 9998. To run open a terminal and run first command, open another window and run the second command.

Testing Curl Commands for Customer-Service :
$ curl -X POST http://localhost:9997/customer/checkin -H "Content-Type: application/json" -d "@customer2.json" # For Checking in a Customer

$ curl -X POST http://localhost:9997/customer/checkout -H "Content-Type: application/json" -d "@customer2checkout.json" # For Checking out a Customer

Testing Curl Commands for Parcel-service:
$ curl -X POST http://localhost:9998/parcel/accept -H "Content-Type: application/json" -d "@parcel1.json" # For accepting a parcel

$ curl -X http://localhost:9998/parcel/clear/<roomNumber>/passportId

Both Apis are documented via Swagger can be viewed by ui interface at:
http://localhost:9997/swagger-ui.html
http://localhost:9998/swagger-ui.html