Name: SAHANA BHAT Date: 01/10/2023	
------------------------------------	--

Corptec Assignment - Documentation

Execution:

- 1. **Out of 9** Tasks mentioned in the question (code-challenge-requirement.pdf) I have completed **8** tasks apart from the Reactive Programming due to time constraints.
- 2. This documentation contains executing the project and you import the postman collection attached down below for testing the API's (I have mentioned the flow of API endpoints in the postman screenshot at the end of this documentation)
- 3. I have used MYSQL as the RDBMS and the respective configuration is in application.properties file, also attached SQL dump down below in the document
- 4. For Salesforce Integration I have created a salesforce test account, created the custom object called **CorpCustomer_c** which will be used to synch our application MySQL data. Note the respective authentication username, password, client secrets, and client id wll be mentioned in CONSTANTS.JAVA in the com.corptech.com.config package.
- 5. I have sent the project in zip file also in the **EMAIL** and also find the same in the below githublink Github link: https://github.com/sahanabhatb/CorpTechAssignment.git
- 6. For Spring Boot Web application I have used Springboot with spring security/JWT authentication and authorization, JPA, MYSQL as DB instead of SQL Server, Salesforce Integration, etc.
- 7. Import the Spring boot Project into Eclipse (which I used) -> Maven Update Project then Right click on project and RUN As Maven build configuration with Goals:"Clean install", uncheck skip test -> then once build success then Run CorptechApplication.java as Java Application.
- 8. Then go to http://localhost:8080/swagger-ui/ for swagger documentation, and go to last section for the detailed execution of the api's in the postman, also attached postman collection below

9. Following is the Project folder structure with controller, entity, repositories



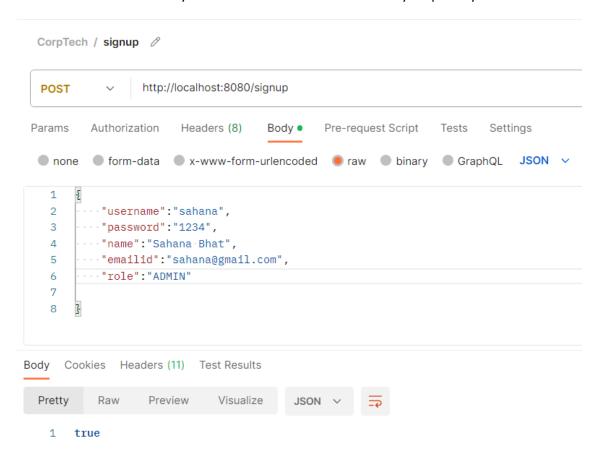
10. Please find the mysql and dump and the postman collection to quickly import.



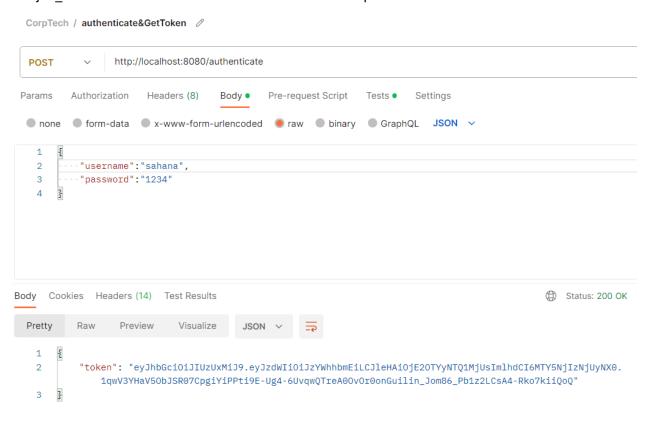
- 11. Once the project has been successfully run as java application open POSTMAN and check the following api's and the respective responses (Also attached the screenshot of the same at the end of this doc)
 - a. Signup API to create new users => POST /signup
 - b. Login api to get access token => POST /auhtenticate
 - c. listing of customer => GET /api/ customer , Both admin and normal user can access
 - d. retrieve single customer => GET /api/ customer /{Id}, Both admin and normal user
 - e. create new customer => POST /api/ customer { request body in JSON } , ADMIN user
 - f. update customer => PUT /api/ customer /{Id} { request body in JSON }, ADMIN user
 - g. delete customer => DELETE /api/ customer /{Id}, ADMIN user
 - h. MySQL to Salesforce Data Synch API => **POST /api/customers/sync** , ADMIN user Request and Responses are in JSON.

Execution of API's Step by step output screenshots (POSTMAN) - PostmanCollection Attached

1. First need to create an user into database using the /signup api, the user-roles can be given as ADMIN or USER, If given Admin role then user can access all the api's whereas if given USER role then can access only GetAllCustomer and GetCustomerByID apis only



2. After signup use the same username password to /authenticate to the app, which will provide the jwt token that will be used to authenticate the other api's

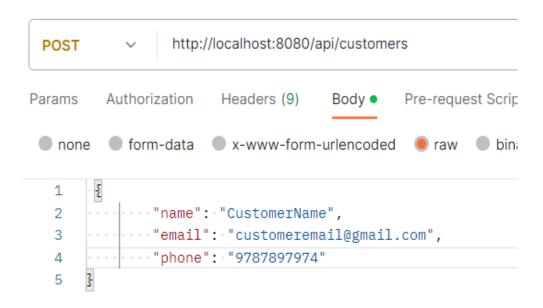


Actually we need to Copy this token and use in below apis, but to make it automatically after hitting the authenticate the token will be stored automatically to the jwt_token global variable of the postman, the respective script is written in the Tests section of authenticate request. So no need to manually copy paste to other api headers. Just hit authenticate api and go to next api



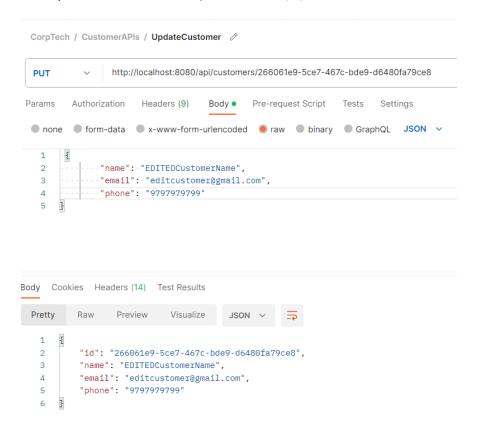
3. Create Customer API – POST /api/customers

CorpTech / CustomerAPIs / CreateCustomer Ø

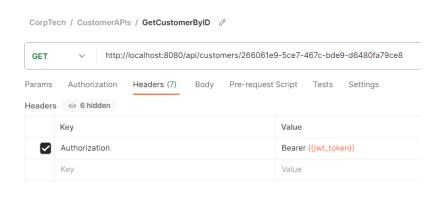




4. Edit/update customer: PUT /api/customers/{id}



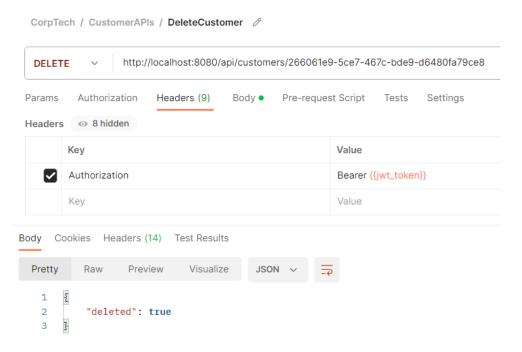
5. Get particular customer by ID GET - /api/customer/{id}



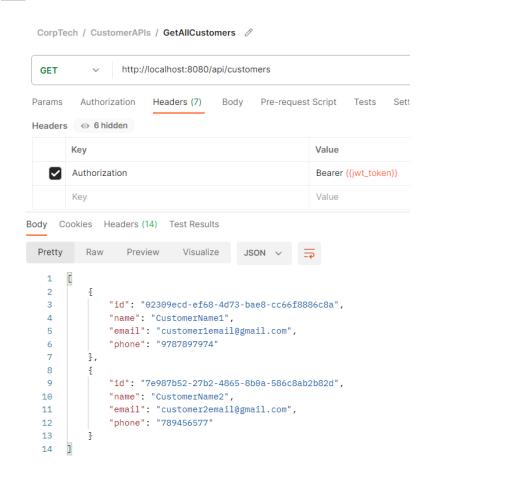
```
Pretty Raw Preview Visualize JSON V

1
2
"id": "266061e9-5ce7-467c-bde9-d6480fa79ce8",
"name": "EDITEDCustomerName",
"email": "editcustomer@gmail.com",
"phone": "9797979799"
```

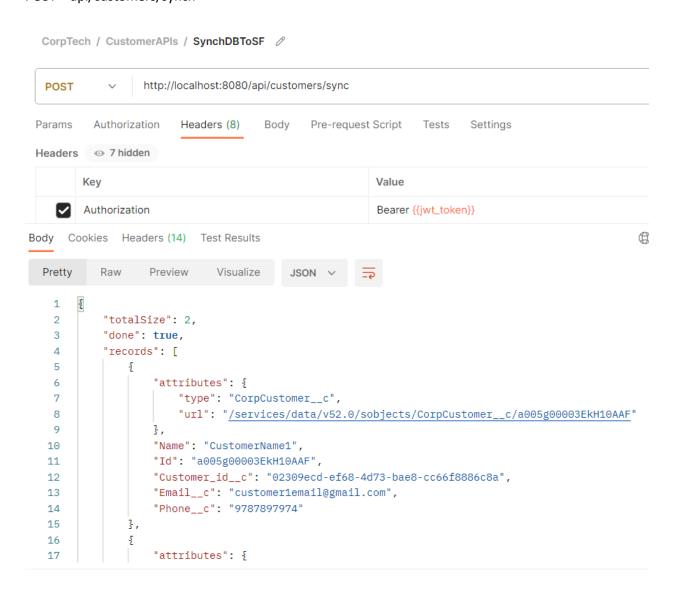
6. Delete particular customer by id – DELETE /api/ customer/{id}



7. Get all customer GET /api/customers



 Synch Data from Mysql database to salesforce account, Note that I have created a custom object named CorpCustomer_c in the salesforce and the data from customer table will be synched with salesforce in this custom object POST – api/customers/synch



ADDITIONAL USER CREATION

You can create addition user from signup api as USER role and you can access only GET API's and other API's will show as forbidden as below in the screenshot

