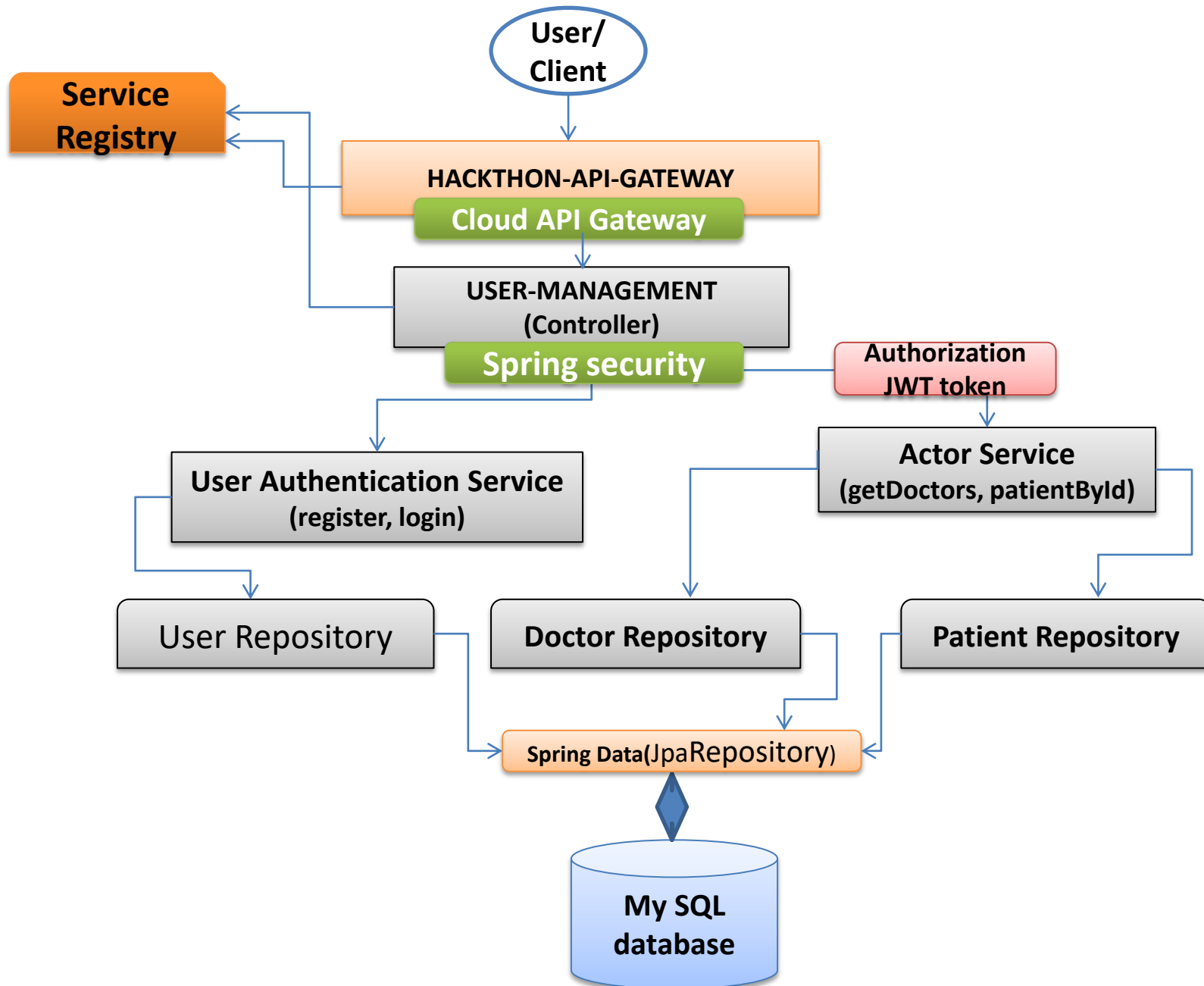


User Management & Billing Payment Service

USER MANAGEMENT - HIGH LEVEL ARCHITECTURE



User Management Service:

In order to work in cloud environment, the below 2 services are primarily used

- **service-registry-hackthon**
 - this is aureka server which register configured discovery clients
- **api-gateway-hackthon**
 - this acts as cloud API gateway, which directs respective service

- **User-management-hackthon**

This service provides the below API

Management:

- User registration -- > register new user (can be patient or doctor)
- User Login -- > return **JWT** token when it success login

Actor Service:

- List of Doctors -- > after login (using **JWT** token)
- Patient by patient Id -- > returns (after login **JWT** token) patient object if existing

- **billing-payment-hackthon**

This service provides the following API

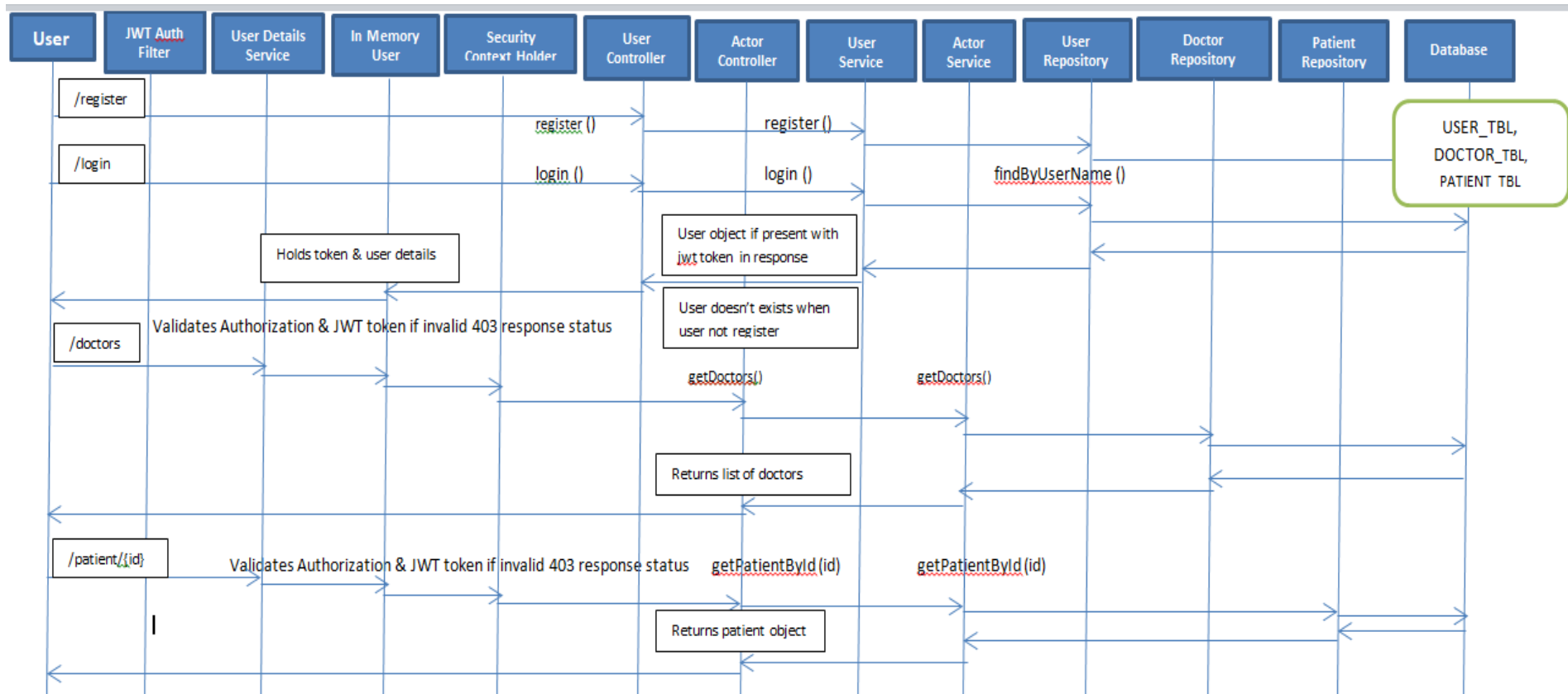
Payment:

- Payment by patient Id -- > payment can be done for specific patient
- Track payment by payment Id -- > returns the payment status and details

Billing:

- invoices -- > Generates invoice for all payments
- invoice by patient IDs -- > Generates invoice for specified patients (1 or more)

USER MANAGEMENT SEQUENCE FLOW



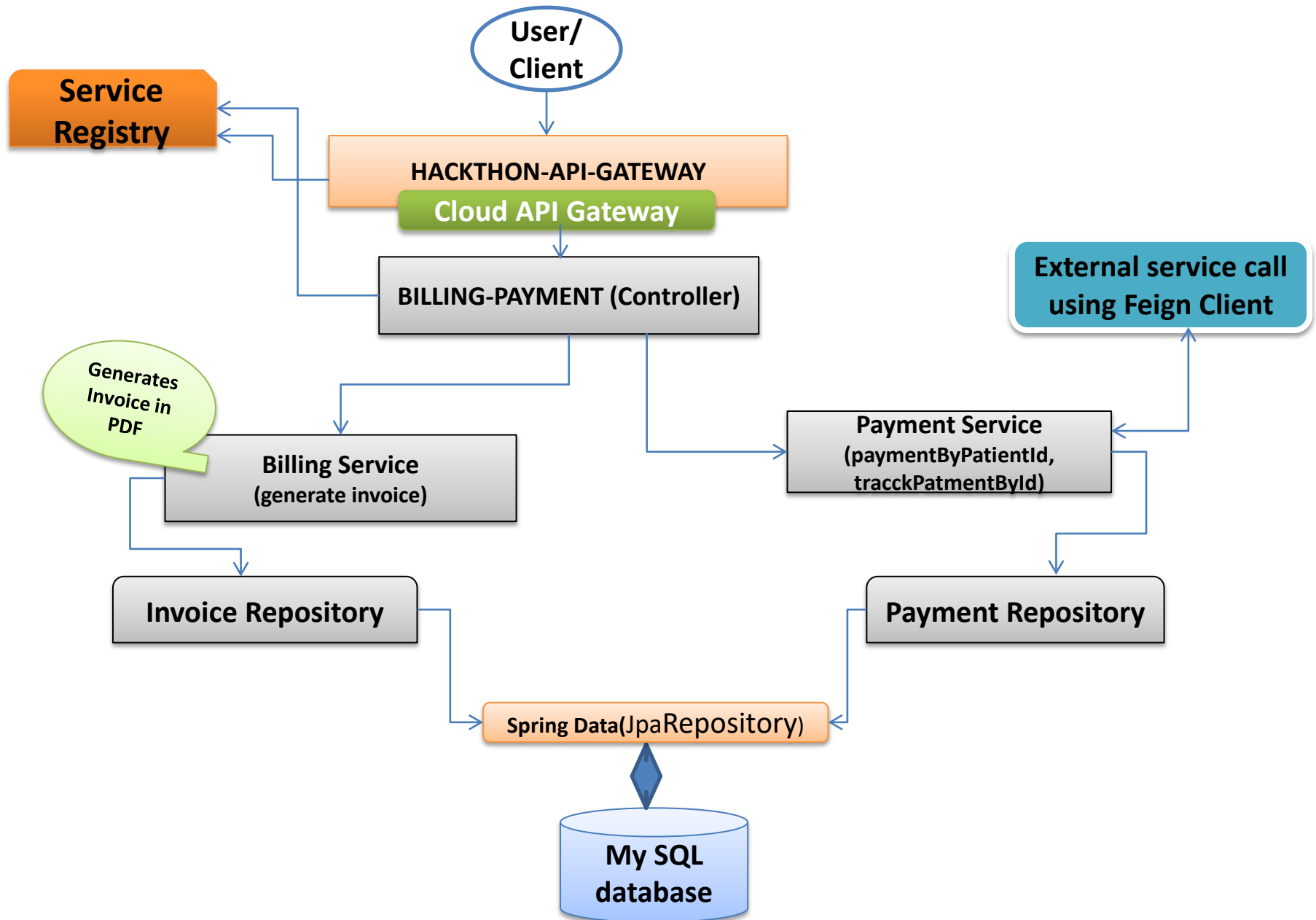
USER_TBL --> persist the register user

DOCTOR_TBL --> persist only who's user is having doctor's role

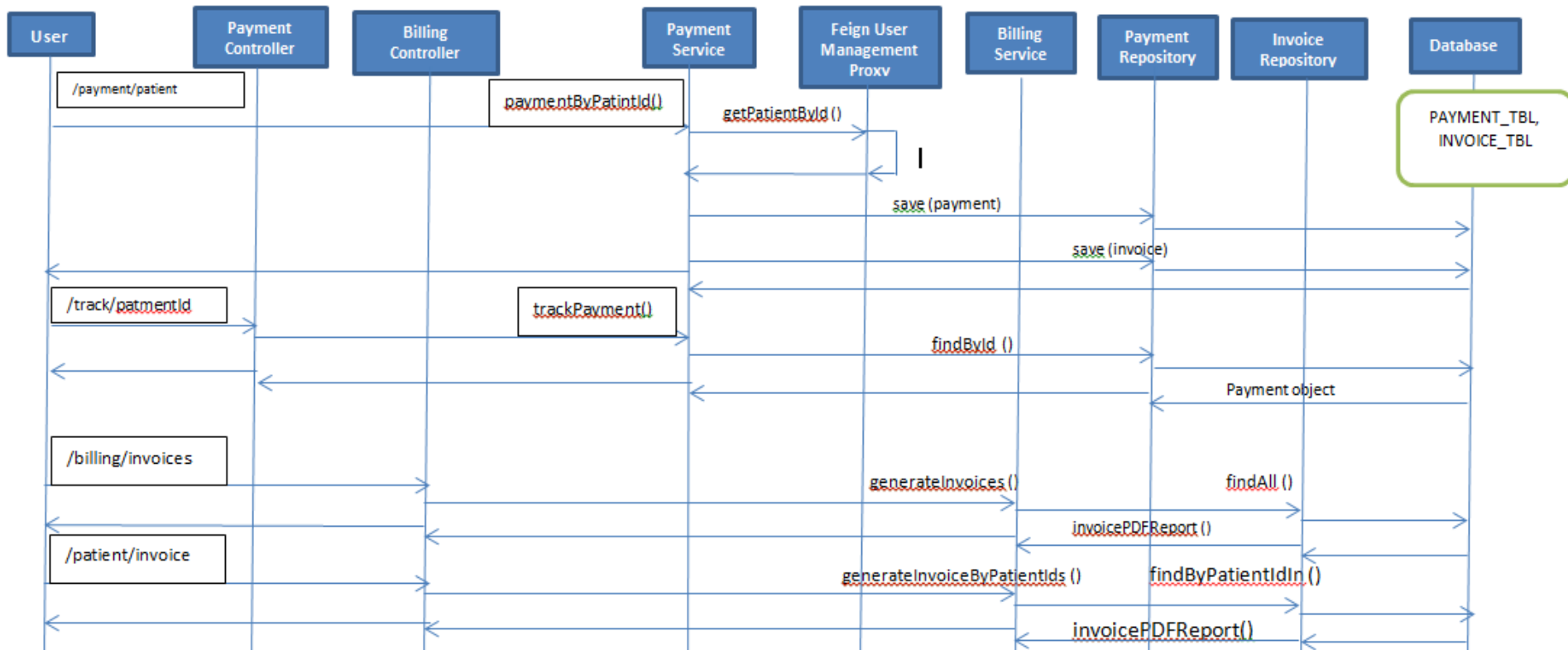
PATIENT_TBL --> persist who's user is having patient role

Patient & doctor data persisted during registration/sign up / account creation based on role after successfully persisted user data into **USER_TBL**

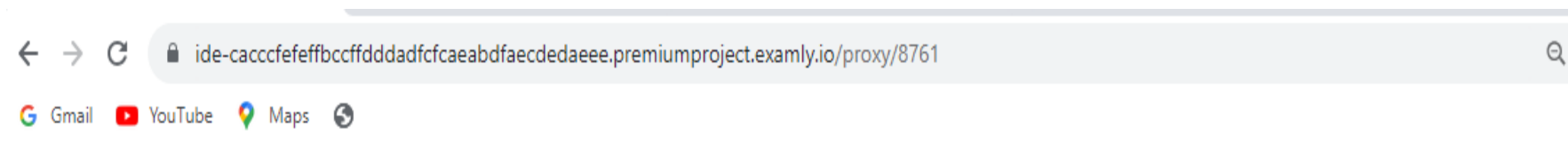
BILLING and PAYMENT - HIGH LEVEL ARCHITECTURE



BILLING and PAYMENT UML DAIGRAM



Service Registry status



- [Home](#)
- [Last 1000 since startup](#)

System Status

Environment test
Data center default
Current time 2023-08-28T04:40:26 +0000
Uptime 00:06
Lease expiration enabled true
Renews threshold 6
Renews (last min) 12

DS Replicas

- [localhost](#)

Instances currently registered with Eureka

Application	AMIs Availability Zones	Status
BILLING-PAYMENT	n/a (1) (1)	UP (1) - ide-cacccfefeffbccffdddadfcfaeabdfaecdedaeee-0.cacccfefeffbccffdddadfcfaeabdfaecdedaeee.che.svc.cluster.local:BILLING-PAYMENT:7003
HACKTHON-API-GATEWAY	n/a (1) (1)	UP (1) - ide-cacccfefeffbccffdddadfcfaeabdfaecdedaeee-0.cacccfefeffbccffdddadfcfaeabdfaecdedaeee.che.svc.cluster.local:HACKTHON-API-GATEWAY:7001
USER-MANAGEMENT	n/a (1) (1)	UP (1) - ide-cacccfefeffbccffdddadfcfaeabdfaecdedaeee-0.cacccfefeffbccffdddadfcfaeabdfaecdedaeee.che.svc.cluster.local:USER-MANAGEMENT:7002

GENERATE ALL INVOICES

Medical Billing Invoice

Invoice Id: xxxxx-xxxxx-xx0549

Invoice Date: 28-27-2023 03:27:48

PATIENT ID	PATIENT NAME	ITEM	DESCRIPTION	AMOUNT
25be3225de3 34c64a41c49 07516fa124	Vinay	General Check up	General Check up	1050.75
25be3225de3 34c64a41c49 07516fa124	Vinay	Random Sugar Test	Random Sugar Test	999.99
8105aa1b40b 94371b8fde95 6d20b851a	ramanj	General Check up	General Check up	7999.99
25be3225de3 34c64a41c49 07516fa124	Vinay	Sugar Test	Sugar Test	150.75
8105aa1b40b 94371b8fde95 6d20b851a	ramanj	General Check up	General Check up	1050.75
8105aa1b40b 94371b8fde95 6d20b851a	ramanj	General Check up	General Check up	1050.75

Total Amount: 12302.98

GENERATE INVOICE FOR PATIENT USING PAYEMNTID:

Medical Billing Invoice

Invoice Id: xxxxx-xxxxx-xx5428

Invoice Date: 28-27-2023 03:27:12

PATIENT ID	PATIENT NAME	ITEM	DESCRIPTION	AMOUNT
8105aa1b40b 94371b8fde95 6d20b851a	ramanj	General Check up	General Check up	7999.99
8105aa1b40b 94371b8fde95 6d20b851a	ramanj	General Check up	General Check up	1050.75
8105aa1b40b 94371b8fde95 6d20b851a	ramanj	General Check up	General Check up	1050.75

Total Amount: 10101.49

THANK YOU