

CAPSTONE PROJECT

E-COMMERCE APPLICATION

BATCH-8-JAVA J2EE

Name:- PAYANI DHANA SEKHAR

Batch:- 8 (JAVA J2EE)

Group-4(ecommerce-application):

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TEAM LEADER :- Ankit Chauhan

Objective:

Develop a comprehensive eCommerce application using Spring Microservices with features for authentication, product management, cart management (including item entry), order processing, and customer management.

Phases & Tasks:

Planning:

- **Requirements Gathering (1 day):**
 - Identify required microservices: Auth-Service, Customer-Service, Product-Service, Cart-Service, Order-Service.
 - Define the interactions between services via API Gateway.
- **Architecture Design (1 day):**
 - Design the microservices architecture.
 - Set up the Eureka Server for Service Registry and Discovery.
 - Set up the API Gateway for routing requests.

Development:

- **Day 1:**
 - **Eureka Server & API Gateway Setup:**
 - Set up Eureka Server for service registration and discovery.
 - Implement API Gateway to route requests to microservices.
- **Day 2:**
 - **Customer-Service Development:**
 - Develop CRUD operations for customer profiles.
 - Integrate with Auth-Service to handle customer data upon registration.
- **Day 3:**
 - **Product-Service Development:**
 - Build functionalities for managing products, including categories and search.
 - Implement APIs for product CRUD operations.
- **Day 4-5:**
 - **Cart-Service Development:**
 - Develop features for managing the shopping cart, including adding, updating, and deleting items.
 - Integrate with Product-Service to fetch product details.
 - Implement the `item_entry` table to store individual cart items.
- **Day 6:**

- **Order-Service Development:**
 - Implement order processing functionalities, including placing orders and tracking status.
 - Integrate with Cart-Service to process the cart items during order placement.
- **Day 7-8:**
 - **Auth-Service Development:**
 - Create registration and login functionalities.
 - Implement JWT token generation and validation for secure access.

Microservices

1. E-commerce Service Registry (Eureka Server)

- **Service Discovery:** Enables dynamic discovery and registration of microservices.
- **Load Balancing:** Distributes requests across available service instances.
- **Monitoring:** Provides a UI for tracking service health and status.

2. E-commerce API Gateway

- **Centralized Routing:** Directs client requests to the appropriate microservices.
- **Security:** Implements authentication and authorization at the gateway level.
- **Traffic Management:** Handles load balancing, rate limiting, and API monitoring.

3. E-commerce Config Server

- **Centralized Configuration:** Manages and serves externalized configurations for microservices.
- **Environment Support:** Provides environment-specific configurations (e.g., dev, prod).
- **Dynamic Updates:** Allows microservices to refresh configurations without downtime.

4. Customer Service

- **Profile Management:** Manages customer profiles, including personal details and addresses.
- **Order History:** Provides access to customer order history and status updates.

- Authentication Integration: Secures customer data through integration with the Authentication Service.

5. Authentication Service

- User Management: Handles user registration, login, and role-based access.
- JWT Security: Secures API access with JWT-based authentication.
- Password and Session Management: Manages user sessions and password resets.

6. Product Service

- Product Catalogue: Manages product listings, categories, and details.
- Search & Filter: Provides search and filtering options for products.
- Inventory Check: Ensures product availability before purchase.

7. Cart Service

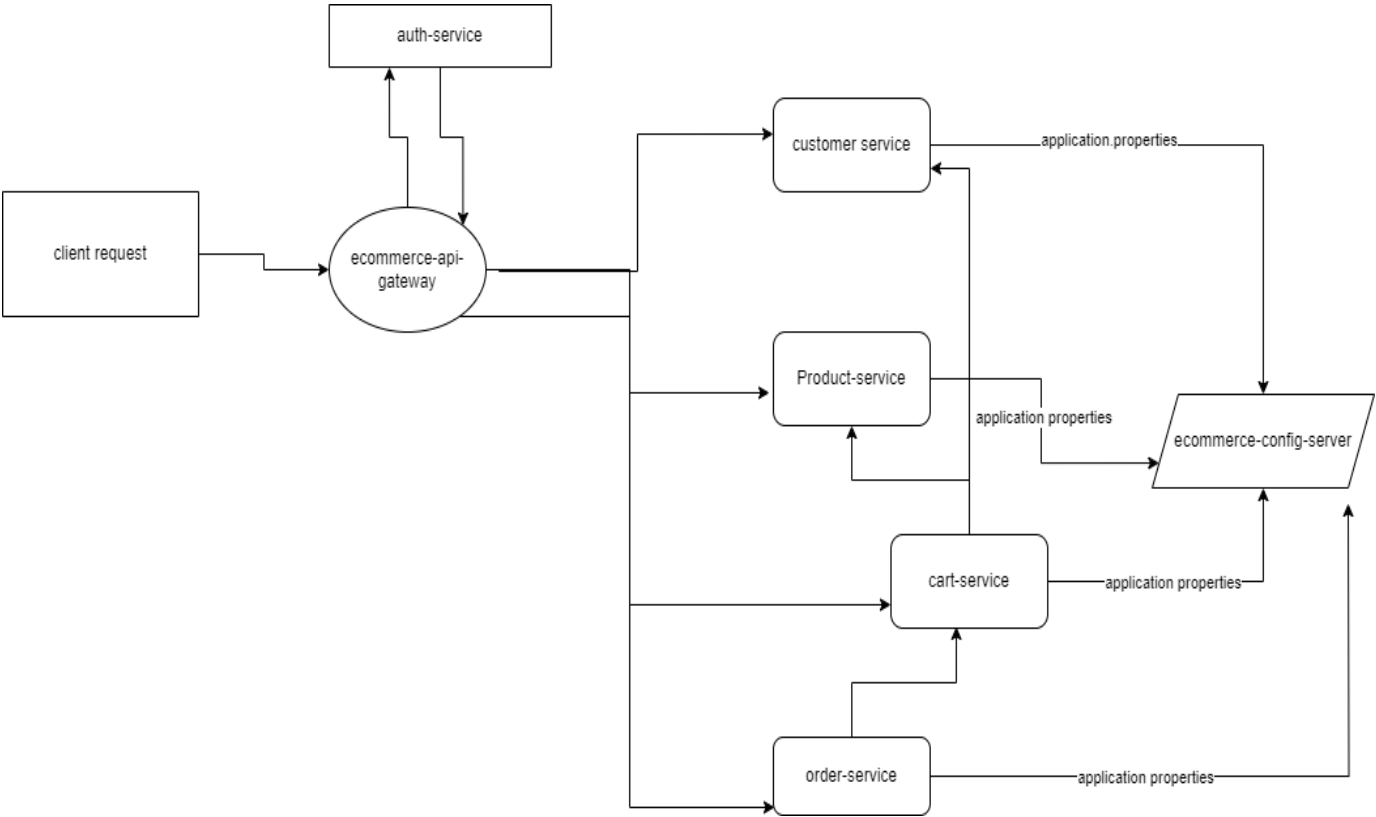
- Cart Management: Manages the user's shopping cart, including adding, updating, and removing items.
- Persistent Cart: Maintains the cart state across user sessions.
- Checkout Preparation: Prepares the cart for the order placement process.

8. Order Service

- Order Lifecycle Management: Oversees order placement, payment, and status updates.
- Payment Integration: Processes payments securely.
- Order Tracking: Provides real-time order tracking and history.

use case diagrams:-

Flow Diagram:-



Running E-commerce-service-registry:-

```
ECommerceServiceReg... × | ECommerceApiGate... | EcommerceConfigSe... | AuthServiceApplic... | CustomerServiceA... | ProductServicAp...  
1 package com.wipro;  
  
[Problems] [Servers] [Terminal] [Data Source Explorer] [Properties] [Console]  
ECommerceServiceRegistryApplication [Java Application] C:\Program Files\Java\jdk-22\bin/javaw.exe (Sep 1, 2024, 12:00:01 PM) [pid: 3824]  
Standard Commons Logging discovery in action with spring-jcl: please remove commons-logging.jar from classpath in order to avoid potential conflict  
  
(((((O)))>))<>=====  
:: Spring Boot ::      (v3.3.2)  
  
2024-09-01T12:00:05.057+05:30 INFO 3824 --- [E-commerce-service-registry] [main] c.w.ECommerceServiceRegistryApplication : Starting EC  
2024-09-01T12:00:05.062+05:30 INFO 3824 --- [E-commerce-service-registry] [main] c.w.ECommerceServiceRegistryApplication : No active p  
2024-09-01T12:00:07.154+05:30 INFO 3824 --- [E-commerce-service-registry] [main] o.s.cloud.context.scope.GenericScope : BeanFactor  
2024-09-01T12:00:07.276+05:30 WARN 3824 --- [E-commerce-service-registry] [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.s  
2024-09-01T12:00:07.282+05:30 WARN 3824 --- [E-commerce-service-registry] [main] trationDelegate$BeanPostProcessorChecker : Bean 'defer  
2024-09-01T12:00:07.827+05:30 INFO 3824 --- [E-commerce-service-registry] [main] o.a.b.w.embedded.tomcat.TomcatWebServer : Tomcat init  
2024-09-01T12:00:07.846+05:30 INFO 3824 --- [E-commerce-service-registry] [main] o.apache.catalina.core.StandardService : Starting se  
2024-09-01T12:00:07.847+05:30 INFO 3824 --- [E-commerce-service-registry] [main] o.apache.catalina.core.StandardEngine : Starting Se  
2024-09-01T12:00:07.971+05:30 INFO 3824 --- [E-commerce-service-registry] [main] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializin  
2024-09-01T12:00:07.973+05:30 INFO 3824 --- [E-commerce-service-registry] [main] w.s.c.ServletWebServerApplicationContext : Root WebApp  
Standard Commons Logging discovery in action with spring-jcl: please remove commons-logging.jar from classpath in order to avoid potential conflict  
2024-09-01T12:00:09.483+05:30 INFO 3824 --- [E-commerce-service-registry] [main] c.n.d.provider.DiscoveryJerseyProvider : Using JSON  
2024-09-01T12:00:09.484+05:30 INFO 3824 --- [E-commerce-service-registry] [main] c.n.d.provider.DiscoveryJerseyProvider : Using JSON  
2024-09-01T12:00:09.759+05:30 INFO 3824 --- [E-commerce-service-registry] [main] c.n.d.provider.DiscoveryJerseyProvider : Using XML e  
2024-09-01T12:00:09.759+05:30 INFO 3824 --- [E-commerce-service-registry] [main] c.n.d.provider.DiscoveryJerseyProvider : Using XML d  
2024-09-01T12:00:11.133+05:30 WARN 3824 --- [E-commerce-service-registry] [main] iguration$LoadBalancerCaffeineWarnLogger : Spring Clou  
2024-09-01T12:00:11.174+05:30 INFO 3824 --- [E-commerce-service-registry] [main] o.s.c.n.eureka.InstanceInfoFactory : Setting ini  
2024-09-01T12:00:11.214+05:30 INFO 3824 --- [E-commerce-service-registry] [main] com.netflix.discovery.DiscoveryClient : Initializing  
2024-09-01T12:00:11.214+05:30 INFO 3824 --- [E-commerce-service-registry] [main] com.netflix.discovery.DiscoveryClient : Client conf  
2024-09-01T12:00:11.218+05:30 INFO 3824 --- [E-commerce-service-registry] [main] com.netflix.discovery.DiscoveryClient : Discovery C  
2024-09-01T12:00:11.290+05:30 INFO 3824 --- [E-commerce-service-registry] [main] c.n.eureka.DefaultEurekaServerContext : Initializin  
2024-09-01T12:00:11.293+05:30 INFO 3824 --- [E-commerce-service-registry] [main] c.n.eureka.cluster.PeerEurekaNodes : Adding new
```

Running E-commerce-ApiGateway:-

```
CommerceServiceR...  CommerceApiGate...  EcommerceConfigSe...  AuthServiceApplic...  ProductServiceApp...
1 package com.wipro;

=====|=====|/=/

:: Spring Boot ::                (v3.3.2)

2024-09-01T12:02:05.393+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:05.398+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:07.670+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:07.807+05:30 WARN 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:07.812+05:30 WARN 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:07.818+05:30 WARN 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:07.820+05:30 WARN 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:07.825+05:30 WARN 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.320+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.321+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.321+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.321+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
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2024-09-01T12:02:09.321+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.321+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.322+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.322+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.322+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.323+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.323+05:30 INFO 2204 --- [E-commerce-Api-gateway] [
2024-09-01T12:02:09.796+05:30 INFO 2204 --- [E-commerce-Api-gateway] [

main] c.wipro.ECommerceApiGatewayApplication : Starting ECommer
main] c.wipro.ECommerceApiGatewayApplication : No active profil
main] o.s.cloud.context.scope.GenericScope : BeanFactory id=5
main] trationDelegate$BeanPostProcessorChecker : Bean 'org.spring
main] trationDelegate$BeanPostProcessorChecker : Bean 'defferingL
main] trationDelegate$BeanPostProcessorChecker : Bean 'org.spring
main] trationDelegate$BeanPostProcessorChecker : Bean 'org.spring
main] trationDelegate$BeanPostProcessorChecker : Bean 'reactorDef
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
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main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.c.g.r.RouteDefinitionRouteLocator : Loaded RoutePred
main] o.s.b.a.e.web.EndpointLinksResolver : Exposing 1 endpo
```

Running Ecommerce-config-server:-

```
ECommerceServiceR... ECommerceApiGate... EcommerceConfigSe... X AuthServiceApplic... CustomerServiceA... ProductServiceAp...

1 package com.wipro;

Problems Servers Terminal Data Source Explorer Properties Console X

EcommerceConfigServerApplication [Java Application] C:\Program Files\Java\jdk-22\bin\javaw.exe (Sep 1, 2024, 12:03:11 PM) [pid: 7040]

:: Spring Boot :: (v3.3.3)

2024-09-01T12:03:14.964+05:30 INFO 7040 --- [ecommerce-config-server] [main] c.w.EcommerceConfigServerApplication : Starting Ecomm
2024-09-01T12:03:14.970+05:30 INFO 7040 --- [ecommerce-config-server] [main] c.w.EcommerceConfigServerApplication : No active profi
2024-09-01T12:03:17.448+05:30 INFO 7040 --- [ecommerce-config-server] [main] o.s.cloud.context.scope.GenericScope : BeanFactory id=
2024-09-01T12:03:17.582+05:30 WARN 7040 --- [ecommerce-config-server] [main] trationDelegate$BeanPostProcessorChecker : Bean 'org.sprin
2024-09-01T12:03:17.588+05:30 WARN 7040 --- [ecommerce-config-server] [main] trationDelegate$BeanPostProcessorChecker : Bean 'deffering
2024-09-01T12:03:18.169+05:30 INFO 7040 --- [ecommerce-config-server] [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initiali
2024-09-01T12:03:18.191+05:30 INFO 7040 --- [ecommerce-config-server] [main] o.apache.catalina.core.StandardService : Starting servic
2024-09-01T12:03:18.191+05:30 INFO 7040 --- [ecommerce-config-server] [main] o.apache.catalina.core.StandardEngine : Starting Servle
2024-09-01T12:03:18.335+05:30 INFO 7040 --- [ecommerce-config-server] [main] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Sp
2024-09-01T12:03:18.336+05:30 INFO 7040 --- [ecommerce-config-server] [main] w.s.c.ServletWebServerApplicationContext : Root WebApplica
2024-09-01T12:03:23.123+05:30 INFO 7040 --- [ecommerce-config-server] [main] DiscoveryClientOptionalArgsConfiguration : Eureka HTTP Cli
2024-09-01T12:03:23.294+05:30 WARN 7040 --- [ecommerce-config-server] [main] igation$LoadBalancerCaffeineWarnLogger : Spring Cloud Lo
2024-09-01T12:03:23.314+05:30 INFO 7040 --- [ecommerce-config-server] [main] o.s.b.a.e.web.EndpointLinksResolver : Exposing 1 endp
2024-09-01T12:03:23.413+05:30 INFO 7040 --- [ecommerce-config-server] [main] o.s.c.n.eureka.InstanceInfoFactory : Setting initial
2024-09-01T12:03:23.453+05:30 INFO 7040 --- [ecommerce-config-server] [main] com.netflix.discovery.DiscoveryClient : Initializing Eu
2024-09-01T12:03:23.461+05:30 INFO 7040 --- [ecommerce-config-server] [main] c.n.d.s.r.aws.ConfigClusterResolver : Resolving eurek
2024-09-01T12:03:23.478+05:30 INFO 7040 --- [ecommerce-config-server] [main] com.netflix.discovery.DiscoveryClient : Disable delta p
2024-09-01T12:03:23.478+05:30 INFO 7040 --- [ecommerce-config-server] [main] com.netflix.discovery.DiscoveryClient : Single vip regi
2024-09-01T12:03:23.478+05:30 INFO 7040 --- [ecommerce-config-server] [main] com.netflix.discovery.DiscoveryClient : Force full regi
2024-09-01T12:03:23.478+05:30 INFO 7040 --- [ecommerce-config-server] [main] com.netflix.discovery.DiscoveryClient : Application is
2024-09-01T12:03:23.478+05:30 INFO 7040 --- [ecommerce-config-server] [main] com.netflix.discovery.DiscoveryClient : Registered Appl
2024-09-01T12:03:23.478+05:30 INFO 7040 --- [ecommerce-config-server] [main] com.netflix.discovery.DiscoveryClient : Application ver
2024-09-01T12:03:23.478+05:30 INFO 7040 --- [ecommerce-config-server] [main] com.netflix.discovery.DiscoveryClient : Getting all ins
```

Running Auth-service:-

```
ECommerceServiceR... ECommerceApiGate... EcommerceConfigSe... X AuthServiceApplic... CustomerServiceA... ProductServiceAp...

1 package com.wipro;

Problems Servers Terminal Data Source Explorer Properties Console X

AuthServiceApplication [Java Application] C:\Program Files\Java\jdk-22\bin\javaw.exe (Sep 1, 2024, 12:07:00 PM) [pid: 4308]

:: Spring Boot :: (v3.3.2)

2024-09-01T12:07:04.301+05:30 INFO 4308 --- [auth-service] [restartedMain] com.wipro.AuthServiceApplication : Starting AuthServiceApplic
2024-09-01T12:07:04.306+05:30 INFO 4308 --- [auth-service] [restartedMain] com.wipro.AuthServiceApplication : No active profile set, fal
2024-09-01T12:07:04.418+05:30 INFO 4308 --- [auth-service] [restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaults
2024-09-01T12:07:04.419+05:30 INFO 4308 --- [auth-service] [restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web related
2024-09-01T12:07:06.039+05:30 INFO 4308 --- [auth-service] [restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data
2024-09-01T12:07:06.258+05:30 INFO 4308 --- [auth-service] [restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repos
2024-09-01T12:07:06.846+05:30 INFO 4308 --- [auth-service] [restartedMain] o.s.cloud.context.scope.GenericScope : BeanFactory id=50dadb0a-54
2024-09-01T12:07:07.125+05:30 WARN 4308 --- [auth-service] [restartedMain] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework
2024-09-01T12:07:07.128+05:30 WARN 4308 --- [auth-service] [restartedMain] trationDelegate$BeanPostProcessorChecker : Bean 'defferingLoadBalance
2024-09-01T12:07:07.779+05:30 INFO 4308 --- [auth-service] [restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with po
2024-09-01T12:07:07.803+05:30 INFO 4308 --- [auth-service] [restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2024-09-01T12:07:07.803+05:30 INFO 4308 --- [auth-service] [restartedMain] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [
2024-09-01T12:07:07.890+05:30 INFO 4308 --- [auth-service] [restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedd
2024-09-01T12:07:07.128+05:30 INFO 4308 --- [auth-service] [restartedMain] w.s.c.ServletWebServerApplicationContext : Bean 'WebApplicationContext
2024-09-01T12:07:08.197+05:30 INFO 4308 --- [auth-service] [restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing Pers
2024-09-01T12:07:08.311+05:30 INFO 4308 --- [auth-service] [restartedMain] org.hibernate.Version : HHH000412: Hibernate ORM c
2024-09-01T12:07:08.374+05:30 INFO 4308 --- [auth-service] [restartedMain] o.h.c.internal.RegionFactoryInitiator : HHH000026: Second-level ca
2024-09-01T12:07:08.920+05:30 INFO 4308 --- [auth-service] [restartedMain] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setup: i
2024-09-01T12:07:08.966+05:30 INFO 4308 --- [auth-service] [restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2024-09-01T12:07:09.502+05:30 INFO 4308 --- [auth-service] [restartedMain] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added conne
2024-09-01T12:07:09.505+05:30 INFO 4308 --- [auth-service] [restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start compl
2024-09-01T12:07:10.706+05:30 INFO 4308 --- [auth-service] [restartedMain] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000489: No JTA platform
2024-09-01T12:07:10.759+05:30 INFO 4308 --- [auth-service] [restartedMain] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityMana
```

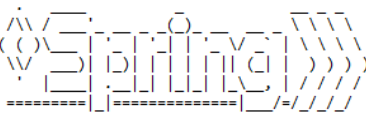

Running customer-service:-

ECommerceServiceR...ECommerceApiGate...EcommerceConfigSe...AuthServiceApplic...CustomerServiceA...ProductServiceAp...

1package com.wipro;

ProblemsServersTerminalData Source ExplorerPropertiesConsole

CustomerServiceApplication [Java Application] C:\Program Files\Java\jdk-22\bin\javaw.exe (Sep 1, 2024, 12:05:49 PM) [pid: 9888]



:: Spring Boot ::

(v3.3.3)

2024-09-01T12:05:54.576+05:30INFO 9888 --- [customer-service] [restartedMain] com.wipro.CustomerServiceApplication : Starting CustomerServiceApplication : No active profile set, s

2024-09-01T12:05:54.580+05:30INFO 9888 --- [customer-service] [restartedMain] o.s.c.c.c.ConfigServerConfigDataLoader : Fetching config from s

2024-09-01T12:05:54.669+05:30INFO 9888 --- [customer-service] [restartedMain] o.s.c.c.c.ConfigServerConfigDataLoader : Located environment: n

2024-09-01T12:05:54.673+05:30INFO 9888 --- [customer-service] [restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defa

2024-09-01T12:05:54.673+05:30INFO 9888 --- [customer-service] [restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web rel

2024-09-01T12:05:56.663+05:30INFO 9888 --- [customer-service] [restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring D

2024-09-01T12:05:56.844+05:30INFO 9888 --- [customer-service] [restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data r

2024-09-01T12:05:57.317+05:30INFO 9888 --- [customer-service] [restartedMain] o.s.cloud.context.scope.GenericScope : BeanFactory id=27a1d4a

2024-09-01T12:05:57.955+05:30WARN 9888 --- [customer-service] [restartedMain] trationDelegate\$BeanPostProcessorChecker : Bean 'org.springframew

2024-09-01T12:05:57.960+05:30WARN 9888 --- [customer-service] [restartedMain] trationDelegate\$BeanPostProcessorChecker : Bean 'deferringLoadBal

2024-09-01T12:05:58.761+05:30INFO 9888 --- [customer-service] [restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized wit

2024-09-01T12:05:58.782+05:30INFO 9888 --- [customer-service] [restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomc

2024-09-01T12:05:58.782+05:30INFO 9888 --- [customer-service] [restartedMain] o.apache.catalina.core.StandardEngine : Starting Servlet engin

2024-09-01T12:05:58.865+05:30INFO 9888 --- [customer-service] [restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring em

2024-09-01T12:05:58.867+05:30INFO 9888 --- [customer-service] [restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationCon

2024-09-01T12:05:59.522+05:30INFO 9888 --- [customer-service] [restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing

2024-09-01T12:05:59.663+05:30INFO 9888 --- [customer-service] [restartedMain] org.hibernate.Version : HHH000412: Hibernate O

2024-09-01T12:05:59.758+05:30INFO 9888 --- [customer-service] [restartedMain] o.h.c.internal.RegionFactoryInitiator : HHH000026: Second-leve

2024-09-01T12:05:59.758+05:30INFO 9888 --- [customer-service] [restartedMain] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setu

2024-09-01T12:06:00.344+05:30INFO 9888 --- [customer-service] [restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Startin

2024-09-01T12:06:00.779+05:30INFO 9888 --- [customer-service] [restartedMain] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added c

2024-09-01T12:06:00.784+05:30INFO 9888 --- [customer-service] [restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start c

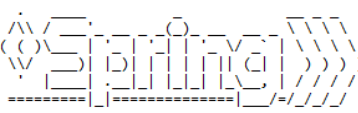
Running Product-service:-

ECommerceServiceR...ECommerceApiGate...EcommerceConfigSe...AuthServiceApplic...CustomerServiceA...ProductServiceAp... X

2

ProblemsServersTerminalData Source ExplorerPropertiesConsole

ProductServiceApplication [Java Application] C:\Program Files\Java\jdk-22\bin\javaw.exe (Sep 1, 2024, 12:08:06 PM) [pid: 824]



:: Spring Boot ::

(v3.3.3)

2024-09-01T12:08:11.366+05:30INFO 824 --- [Product-service] [restartedMain] com.wipro.ProductServiceApplication : Starting ProductServiceA

2024-09-01T12:08:11.371+05:30INFO 824 --- [Product-service] [restartedMain] com.wipro.ProductServiceApplication : No active profile set, f

2024-09-01T12:08:11.455+05:30INFO 824 --- [Product-service] [restartedMain] o.s.c.c.c.ConfigServerConfigDataLoader : Fetching config from ser

2024-09-01T12:08:11.456+05:30INFO 824 --- [Product-service] [restartedMain] o.s.c.c.c.ConfigServerConfigDataLoader : Located environment: nam

2024-09-01T12:08:11.460+05:30INFO 824 --- [Product-service] [restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaul

2024-09-01T12:08:11.460+05:30INFO 824 --- [Product-service] [restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web relat

2024-09-01T12:08:13.060+05:30INFO 824 --- [Product-service] [restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Dat

2024-09-01T12:08:13.278+05:30INFO 824 --- [Product-service] [restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data rep

2024-09-01T12:08:13.723+05:30INFO 824 --- [Product-service] [restartedMain] o.s.cloud.context.scope.GenericScope : BeanFactory id=437a8d30-

2024-09-01T12:08:13.947+05:30WARN 824 --- [Product-service] [restartedMain] trationDelegate\$BeanPostProcessorChecker : Bean 'org.springframewor

2024-09-01T12:08:13.951+05:30WARN 824 --- [Product-service] [restartedMain] trationDelegate\$BeanPostProcessorChecker : Bean 'deferringLoadBalan

2024-09-01T12:08:14.714+05:30INFO 824 --- [Product-service] [restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with

2024-09-01T12:08:14.736+05:30INFO 824 --- [Product-service] [restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat

2024-09-01T12:08:14.737+05:30INFO 824 --- [Product-service] [restartedMain] o.apache.catalina.core.StandardEngine : Starting Servlet engine:

2024-09-01T12:08:14.902+05:30INFO 824 --- [Product-service] [restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embe

2024-09-01T12:08:14.905+05:30INFO 824 --- [Product-service] [restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationConte

2024-09-01T12:08:15.156+05:30INFO 824 --- [Product-service] [restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing Pe

2024-09-01T12:08:15.245+05:30INFO 824 --- [Product-service] [restartedMain] org.hibernate.Version : HHH000412: Hibernate ORM

2024-09-01T12:08:15.295+05:30INFO 824 --- [Product-service] [restartedMain] o.h.c.internal.RegionFactoryInitiator : HHH000026: Second-level

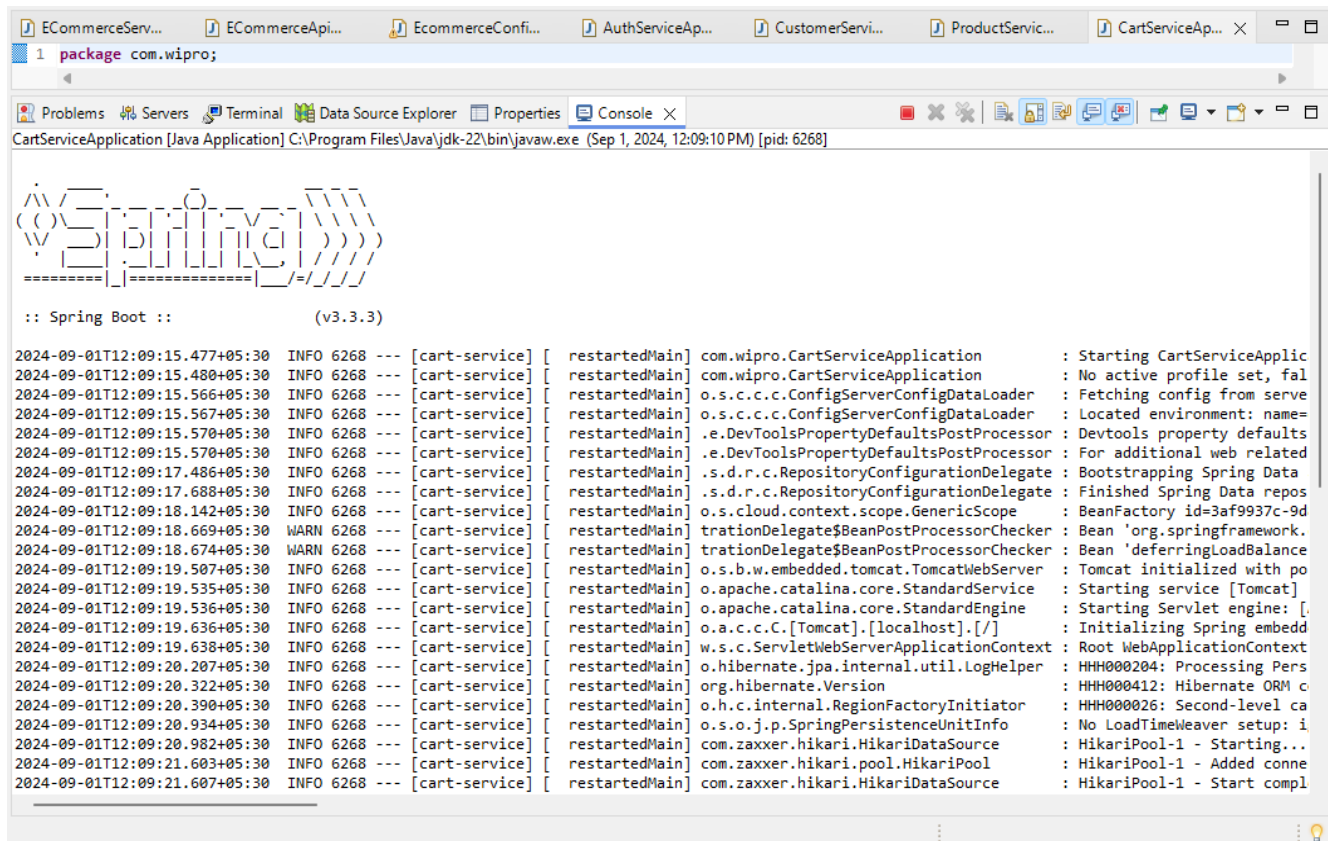
2024-09-01T12:08:15.804+05:30INFO 824 --- [Product-service] [restartedMain] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setup:

2024-09-01T12:08:15.845+05:30INFO 824 --- [Product-service] [restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting-

2024-09-01T12:08:16.358+05:30INFO 824 --- [Product-service] [restartedMain] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added con

2024-09-01T12:08:16.363+05:30INFO 824 --- [Product-service] [restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start com

Running Cart-service:-



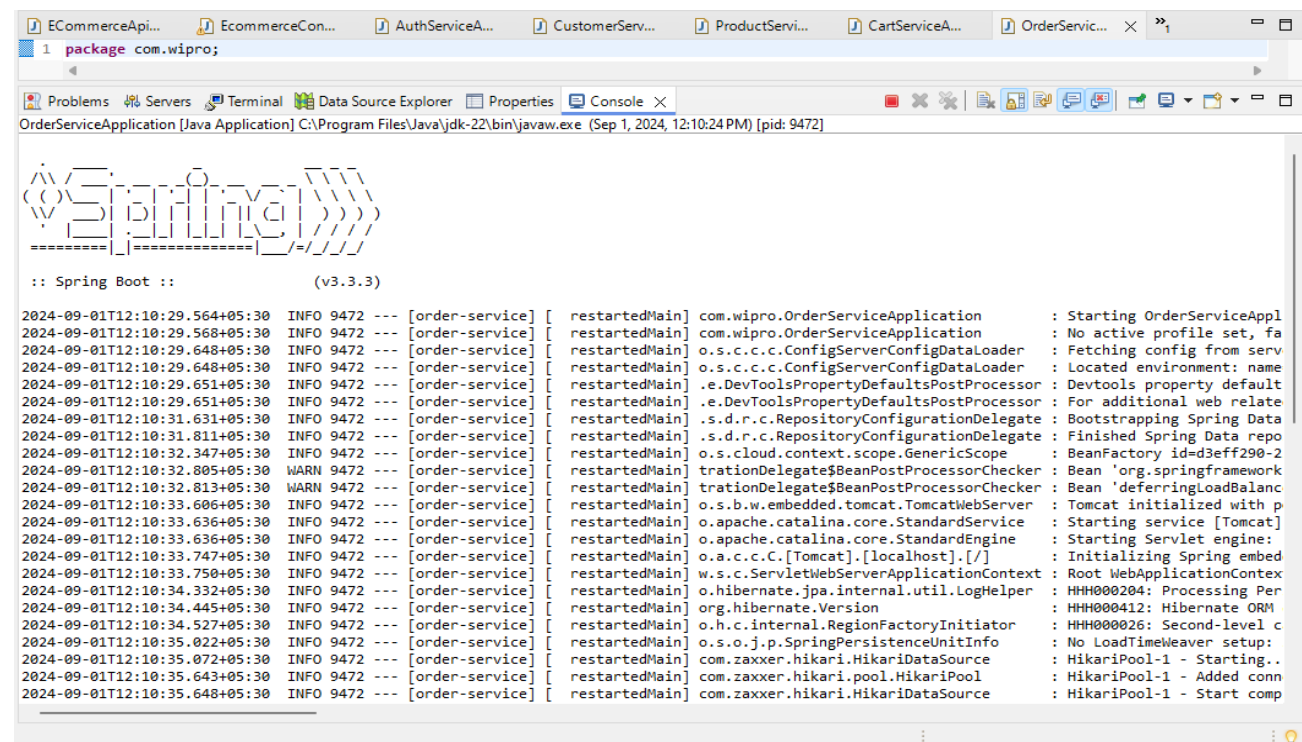
```
1 package com.wipro;

CartServiceApplication [Java Application] C:\Program Files\Java\jdk-22\bin\javaw.exe (Sep 1, 2024, 12:09:10 PM) [pid: 6268]

:: Spring Boot :: (v3.3.3)

2024-09-01T12:09:15.477+05:30 INFO 6268 --- [cart-service] [ restartedMain] com.wipro.CartServiceApplication : Starting CartServiceAppl
2024-09-01T12:09:15.480+05:30 INFO 6268 --- [cart-service] [ restartedMain] com.wipro.CartServiceApplication : No active profile set, fal
2024-09-01T12:09:15.566+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.s.c.c.c.ConfigServerConfigDataLoader : Fetching config from serve
2024-09-01T12:09:15.567+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.s.c.c.c.ConfigServerConfigDataLoader : Located environment: name=
2024-09-01T12:09:15.570+05:30 INFO 6268 --- [cart-service] [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaults
2024-09-01T12:09:15.570+05:30 INFO 6268 --- [cart-service] [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web related
2024-09-01T12:09:17.486+05:30 INFO 6268 --- [cart-service] [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data
2024-09-01T12:09:17.688+05:30 INFO 6268 --- [cart-service] [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repos
2024-09-01T12:09:18.142+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.s.cloud.context.scope.GenericScope : BeanFactory id=3af9937c-9d
2024-09-01T12:09:18.669+05:30 WARN 6268 --- [cart-service] [ restartedMain] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework
2024-09-01T12:09:18.674+05:30 WARN 6268 --- [cart-service] [ restartedMain] trationDelegate$BeanPostProcessorChecker : Bean 'deferringLoadBalance
2024-09-01T12:09:19.507+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with po
2024-09-01T12:09:19.535+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2024-09-01T12:09:19.536+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [
2024-09-01T12:09:19.636+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedd
2024-09-01T12:09:19.638+05:30 INFO 6268 --- [cart-service] [ restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext
2024-09-01T12:09:20.207+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing Pers
2024-09-01T12:09:20.322+05:30 INFO 6268 --- [cart-service] [ restartedMain] org.hibernate.Version : HHH000412: Hibernate ORM c
2024-09-01T12:09:20.390+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.h.c.internal.RegionFactoryInitiator : HHH00026: Second-level ca
2024-09-01T12:09:20.934+05:30 INFO 6268 --- [cart-service] [ restartedMain] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setup: i
2024-09-01T12:09:20.982+05:30 INFO 6268 --- [cart-service] [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2024-09-01T12:09:21.603+05:30 INFO 6268 --- [cart-service] [ restartedMain] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added conn
2024-09-01T12:09:21.607+05:30 INFO 6268 --- [cart-service] [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start compl
```

Running Order-service:-



```
1 package com.wipro;

OrderServiceApplication [Java Application] C:\Program Files\Java\jdk-22\bin\javaw.exe (Sep 1, 2024, 12:10:24 PM) [pid: 9472]

:: Spring Boot :: (v3.3.3)

2024-09-01T12:10:29.564+05:30 INFO 9472 --- [order-service] [ restartedMain] com.wipro.OrderServiceApplication : Starting OrderServiceAppl
2024-09-01T12:10:29.568+05:30 INFO 9472 --- [order-service] [ restartedMain] com.wipro.OrderServiceApplication : No active profile set, fa
2024-09-01T12:10:29.648+05:30 INFO 9472 --- [order-service] [ restartedMain] o.s.c.c.c.ConfigServerConfigDataLoader : Fetching config from serv
2024-09-01T12:10:29.648+05:30 INFO 9472 --- [order-service] [ restartedMain] o.s.c.c.c.ConfigServerConfigDataLoader : Located environment: name
2024-09-01T12:10:29.651+05:30 INFO 9472 --- [order-service] [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property default
2024-09-01T12:10:29.651+05:30 INFO 9472 --- [order-service] [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web relate
2024-09-01T12:10:31.811+05:30 INFO 9472 --- [order-service] [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data
2024-09-01T12:10:32.813+05:30 INFO 9472 --- [order-service] [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repo
2024-09-01T12:10:32.895+05:30 WARN 9472 --- [order-service] [ restartedMain] o.s.cloud.context.scope.GenericScope : BeanFactory id=d3eff290-2
2024-09-01T12:10:32.895+05:30 WARN 9472 --- [order-service] [ restartedMain] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework
2024-09-01T12:10:32.895+05:30 WARN 9472 --- [order-service] [ restartedMain] trationDelegate$BeanPostProcessorChecker : Bean 'deferringLoadBalanc
2024-09-01T12:10:33.606+05:30 INFO 9472 --- [order-service] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with p
2024-09-01T12:10:33.636+05:30 INFO 9472 --- [order-service] [ restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2024-09-01T12:10:33.636+05:30 INFO 9472 --- [order-service] [ restartedMain] o.apache.catalina.core.StandardEngine : Starting Servlet engine:
2024-09-01T12:10:33.747+05:30 INFO 9472 --- [order-service] [ restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embed
2024-09-01T12:10:33.750+05:30 INFO 9472 --- [order-service] [ restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext
2024-09-01T12:10:34.332+05:30 INFO 9472 --- [order-service] [ restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing Per
2024-09-01T12:10:34.445+05:30 INFO 9472 --- [order-service] [ restartedMain] org.hibernate.Version : HHH000412: Hibernate ORM
2024-09-01T12:10:34.527+05:30 INFO 9472 --- [order-service] [ restartedMain] o.h.c.internal.RegionFactoryInitiator : HHH00026: Second-level c
2024-09-01T12:10:35.022+05:30 INFO 9472 --- [order-service] [ restartedMain] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTimeWeaver setup: i
2024-09-01T12:10:35.072+05:30 INFO 9472 --- [order-service] [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting..
2024-09-01T12:10:35.643+05:30 INFO 9472 --- [order-service] [ restartedMain] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added conn
2024-09-01T12:10:35.648+05:30 INFO 9472 --- [order-service] [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start comp
```

This is the Eureka Service where we show all Microservices:

DS Replicas			
localhost			
Instances currently registered with Eureka			
Application	AMIs	Availability Zones	Status
AUTH-SERVICE	n/a (1)	(1)	UP (1) - anabolic:auth-service:9092
CART-SERVICE	n/a (1)	(1)	UP (1) - anabolic:cart-service:9097
CUSTOMER-SERVICE	n/a (1)	(1)	UP (1) - anabolic:customer-service:9096
E-COMMERCE-API-GATEWAY	n/a (1)	(1)	UP (1) - anabolic:E-commerce-Api-gateway:9098
E-COMMERCE-CONFIG-SERVER	n/a (1)	(1)	UP (1) - anabolic:ecommerce-config-server:8888
ORDER-SERVICE	n/a (1)	(1)	UP (1) - anabolic:order-service:9094
PRODUCT-SERVICE	n/a (1)	(1)	UP (1) - anabolic:Product-service:9093
General Info			
Name	Value		
total-avail-memory	74mb		

JUnit Testing

eclipse-workspace - Product-service/src/test/java/com/wipro/repository/ProductRepositoryTest.java - Eclipse IDE

File Edit Source Refactor Source Navigate Search Project Run Window Help

Project Explorer X Debug

- auth-service
- cart-service
- customer-service
- E-commerce-Api-gateway
- E-commerce-service-registry
- employee-demo
- onlineBookstore
- order-service
- Product-service

```
4  import static org.junit.jupiter.api.Assertions.assertEquals;
19
20
21 @ExtendWith(SpringExtension.class)
22 @DataJpaTest
23 @AutoConfigureTestDatabase(replace = AutoConfigureTestDatabase.Replace.NONE)
24 public class ProductRepositoryTest {
25
26     @Autowired
27     private ProductRepository productRepo;
28     private List<Product> productList;
29
30     @BeforeEach
31     public void setUp() throws Exception{
32         productList = new ArrayList<Product>();
33     }
34
35     @AfterEach
36     public void tearDown() throws Exception{
37         productList.clear();
38     }
39
40     @Test
41     public void findByAvailable1Test() {
42         productList = productRepo.findByAvailable(true);
43         assertNotNull(productList,"No available Products");
44     }
45
46     @Test
47     public void findByAvailable2Test() {
48         productList = productRepo.findByAvailable(false);
49         assertNotNull(productList,"No available Products");
50     }
51
52     @Test
53     public void findByCategory1Test() {
54         productList = productRepo.findByCategory("Electronics");
55         assertNotNull(productList,"No available Products");
56     }
57
58     @Test
59     public void findByCategory2Test() {
60         productList = productRepo.findByCategory("MOBILES");
61         assertNotNull(productList,"No available Products");
62     }
63
64     @Test
65     public void findByCategory3Test() {
66         productList = productRepo.findByCategory("ABC");
67         int size = productList.size();
68         assertEquals(0, size);
69     }
70 }
```

JUnit

Finished after 11.809 seconds

Runs: 5/5 Errors: 0 Failures: 0

ProductRepositoryTest [Runner: JUnit 5] (1.689 s)

- findByCategory1Test() (1.583 s)
- findByCategory2Test() (0.018 s)
- findByCategory3Test() (0.019 s)
- findByAvailable1Test() (0.048 s)
- findByAvailable2Test() (0.013 s)

Failure Trace

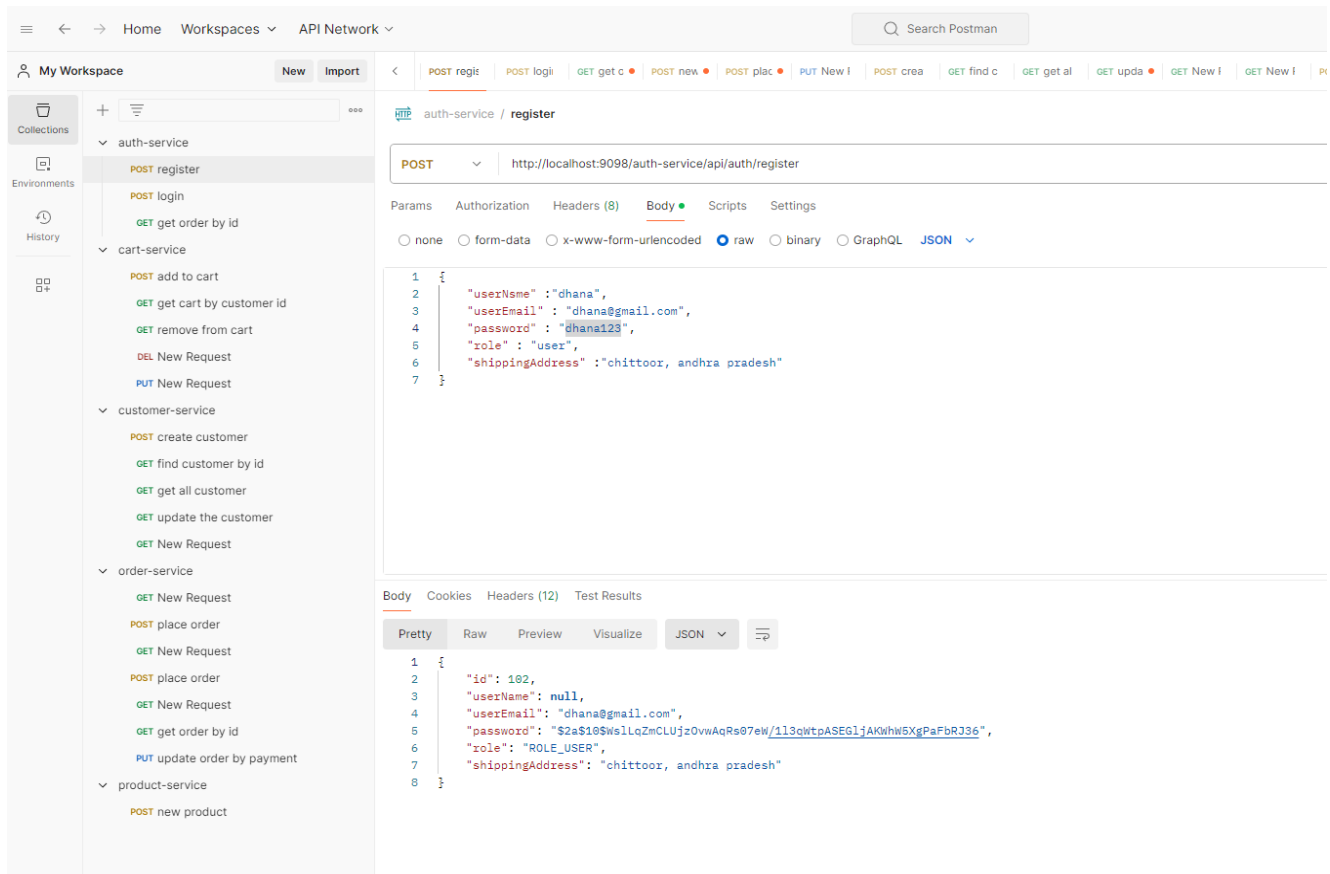
Console

```
<terminated> ProductRepositoryTest [JUnit] C:\Users\sekhap2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v20240426-1149
2024-09-01T16:56:05.051+05:30 INFO 23000 --- [Product-service] [ionShutdownHook] com.zaxxer.hikari.HikariDataSou
```

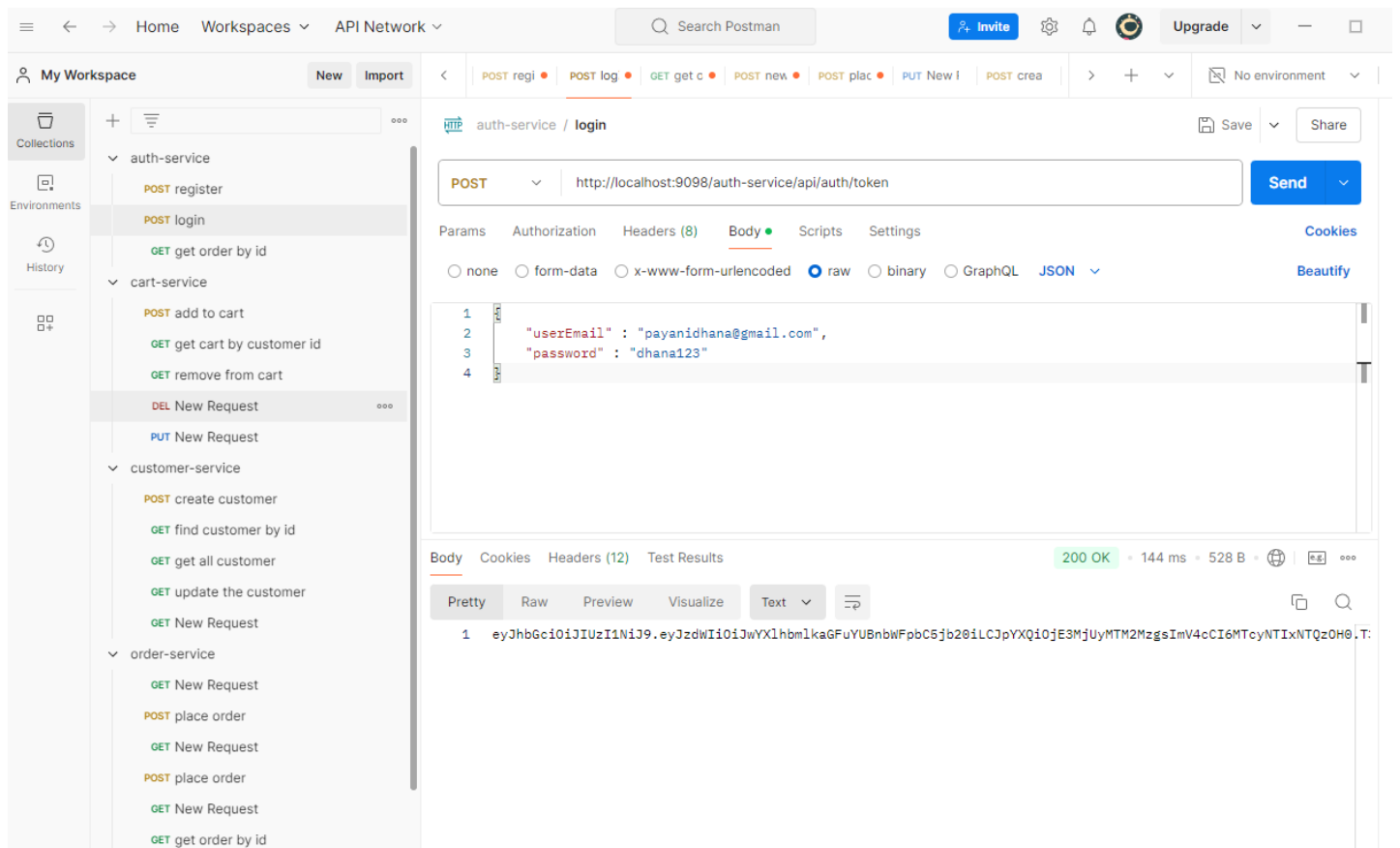
Servers

Tomcat v9.0 Server at localhost [Stopped]

Registrar User



Token generation



Database Design

- users: id, shipping_address ,user_name, password, user_email, role

MySQL Workbench

Local instance MySQL80 (ecomm... x Local instance MySQL80 (eco... x

File Edit View Query Database Server Tools Scripting Help

Navigator: SCHEMAS Filter objects

- auth_service_db
 - Tables
 - user
 - user_seq
 - Views
 - Stored Procedures
 - Functions
- bookstore
- cart_db
- customer_db
- department_db
- ecommerce_db
 - Tables
 - Views
 - Stored Procedures
 - Functions
- employee_db
- new_schema
- order_db
- sys

Query 1 user x

1 • SELECT * FROM auth_service_db.user;

Limit to 1000 rows

Result Grid

	id	password	role	shipping_address	user_email	user_name
5	\$2a\$10\$3ebU2U.CQ6xQvjouR0W4ceOIP4mlC/n...	ROLE_USER	chittoor	dhanaSekhar@gmail.com	Dhana sekhar	
6	\$2a\$10\$04EJWmGbhcvwhRikNjzx2OeNN56z6Y...	ROLE_USER	chittoor	sekhar@gmail.com	sekhar	
7	\$2a\$10\$3yG73pE29bF6FgQ2uEshXeJhPINrgTc...	ROLE_USER	chittoor	sekhar@gmail.com	sekhar	
52	\$2a\$10\$Y/8XdlbLN7Wyr9LbvgGWg.keEh5WVJ...	ROLE_USER	chittoor	hari@gmail.com	hari	
53	\$2a\$10\$3zsgH605/xiZJKudgX3EteWyZHFkEcIxy...	ROLE_USER	chittoor, andhra pradesh	dhana@gmail.com	NULL	
102	\$2a\$10\$WslLqZmCLUjzOvwAqRs07eW/1I3qW...	dhanaSekhar@gmail.com	andhra pradesh	dhana@gmail.com	NULL	
103	\$2a\$10\$7CxxQqarEt6T094QkzENBuxvCS6PLr...	ROLE_USER	chittoor, andhra pradesh	dhana@gmail.com	NULL	
104	\$2a\$10\$dfG6cCKBD8UAT6AINJNO.RUXW3uod...	ROLE_USER	chittoor, andhra pradesh	pavanidhana@gmail.com	NULL	

Administration Schemas

Information

Table: user

Output

- customers: customer_id, customer_name, customer_email, shipping_address

MySQL Workbench

Local instance MySQL80 (ecomm... x Local instance MySQL80 (eco... x

File Edit View Query Database Server Tools Scripting Help

Navigator: SCHEMAS Filter objects

- auth_service_db
 - Tables
 - user
 - user_seq
 - Views
 - Stored Procedures
 - Functions
- bookstore
- cart_db
- customer_db
 - Tables
 - customer
 - customer_seq
 - Views
 - Stored Procedures
 - Functions
- department_db
- ecommerce_db
 - Tables
 - Views
 - Stored Procedures
 - Functions
- employee_db
- new_schema
- order_db
- sys

Query 1 user customer x

1 • SELECT * FROM customer_db.customer;

Limit to 1000 rows

Result Grid

	customer_id	customer_email	customer_name	shipping_address
7	7	sekhar@gmail.com	sekhar	chittoor
52	52	hari@gmail.com	hari	chittoor
53	53	dhana@gmail.com	dhana	chittoor, andhra pradesh
102	102	dhanaSekhar@gmail.com	dhana sekhar	chittoor, andhra pradesh
152	152	dhana@gmail.com	NULL	chittoor, andhra pradesh
153	153	dhana@gmail.com	NULL	chittoor, andhra pradesh
154	154	pavanidhana@gmail.com	NULL	chittoor, andhra pradesh

Administration Schemas

Information

Table: customer

Columns:

customer_id	customer_email	customer_name	shipping_address
int PK	varchar(25)	varchar(25)	varchar(25)

Action Output

#	Time	Action	Message
1	23:46:19	SELECT * FROM auth_service_db.user LIMIT 0, 1000	12 row(s) returned
2	23:48:10	SELECT * FROM customer_db.customer LIMIT 0, 1000	13 row(s) returned

- products: id, name, description, price, category, stock, available

MySQL Workbench

Local instance MySQL80 (ecom... x) Local instance MySQL80 (eco... x)

File Edit View Query Database Server Tools Scripting Help

Navigator: Filter objects

SCHEMAS

- auth_service_db
 - Tables
 - user
 - user_seq
 - Views
 - Stored Procedures
 - Functions
- bookstore
- cart_db
- customer_db
 - Tables
 - customer
 - customer_seq
 - Views
 - Stored Procedures
 - Functions
- department_db
- ecommerce_db
 - Tables
 - product
 - product_seq
 - Views
 - Stored Procedures
 - Functions
- employee_db
- new_schema
- order_db
- sys

Query 1: SELECT * FROM ecommerce_db.product;

Result Grid

id	available	category	description	name	price	stock
57	1	mobies	Apple A15 Bionic chipset, 32400 mAh battery	iPhone-12 pro	540000	30
58	1	mobies	Apple A15 Bionic chipset, 32400 mAh battery	iPhone-12 pro	540000	30
59	1	mobies	Apple A15 Bionic chipset, 32400 mAh battery	iPhone-18 pro	840000	3000
60	1	mobies	Apple A15 Bionic chipset, 32400 mAh battery	iPhone-18 pro	840000	3000
61	1	mobies	nothing A15 Bionic chipset, 32400 mAh battery	nothing2	840000	3000
62	1	mobies	nothing A15 Bionic chipset, 32400 mAh battery	nothing	840000	3000
NULL	NULL	NULL	NULL	NULL	NULL	NULL

product 1 x

Output

Action Output

#	Time	Action	Message
1	23:46:19	SELECT * FROM auth_service_db.user LIMIT 0, 1000	12 row(s) returned
2	23:48:10	SELECT * FROM customer_db.customer LIMIT 0, 1000	13 row(s) returned
3	23:49:15	SELECT * FROM ecommerce_db.product LIMIT 0, 1000	15 row(s) returned

Table: product

Columns:

- id: bigint PK
- available: bit(1)
- category: varchar(255)
- description: varchar(255)
- name: varchar(255)
- price: double
- stock: int

- carts: cart_id, customer_id, cart_price

MySQL Workbench

Local instance MySQL80 (ecom... x) Local instance MySQL80 (eco... x)

File Edit View Query Database Server Tools Scripting Help

Navigator: Filter objects

SCHEMAS

- auth_service_db
 - Tables
 - user
 - user_seq
 - Views
 - Stored Procedures
 - Functions
- bookstore
- cart_db
 - Tables
 - cart
 - cart_seq
 - item_entry
 - item_entry_seq
 - Views
 - Stored Procedures
 - Functions
- customer_db
 - Tables
 - customer
 - customer_seq
 - Views
 - Stored Procedures
 - Functions

Query 1: SELECT * FROM cart_db.cart;

Result Grid

cart_id	cart_price	customer_id
1	1520000.00	53
NULL	NULL	NULL

cart 1 x

Apply Revert

- item_entry:item_entry_id, cart_id, product_id, quantity, product_price, product_name

The screenshot shows the MySQL Workbench interface. On the left, the 'SCHEMAS' pane displays a tree view of databases, including 'e-commerce_db'. The main query editor shows a query: `SELECT * FROM cart_db.item_entry;`. The 'Result Grid' at the bottom displays the following data:

item_entry_id	product_id	product_name	product_price	quantity	cart_id
1	3	iPhone-14 pro	980000	1	1
2	4	iPhone-12 pro	540000	1	1
NULL	NULL	NULL	NULL	NULL	NULL

Product :-microservice

The screenshot shows a REST client interface for a 'product-controller'. It lists several API endpoints with their corresponding HTTP methods:

- GET** `/api/product/{id}`
- PUT** `/api/product/{id}`
- DELETE** `/api/product/{id}`
- POST** `/api/product`
- GET** `/api/getproductsbycategory/query`
- GET** `/api/getproductsbyavailability/query`
- GET** `/api/getallproducts`

Below the endpoints, there is a 'Schemas' section showing a 'ProductDto' schema.

Customer microservice:-

Servers

http://localhost:9096 - Generated server url

customer-controller

GET

/api/customer/{customerId}

PUT

/api/customer/{customerId}

GET

/api/customer

POST

/api/customer

Schemas

CustomerDto >

Cart microservice:-

cart-controller

GET

/api/cart/{customerId}

PUT

/api/cart/{customerId}

POST

/api/cart/{customerId}

GET

/api/getcartid/{cartId}

DELETE


/api/cart/{cartId}

Schemas

CartDto >

ItemEntryDto >

Order microservice:-

order-controller			^
PUT	/api/updateorderpayment/{orderId}		✓
PUT	/api/updateorderdelivery/{orderId}		✓
POST	/api/placeorder/{cartId}		✓
GET	/api/order/{orderId}		✓
GET	/api/getorderbypayment/query		✓
GET	/api/getorderbydelivery/query		✓
GET	/api/getorderbycustomer/{customerId}		✓
GET	/api/getallOrders		✓
DELETE	/api/cancelorder/{orderId}		✓