Create a project to demonstrate microservices with Spring Boot.

1.Create a User Microservice

// User.java (Model class)

public class User {

private Long id;

private String name;

private String email;

// Constructors, getters, and setters

}

// UserController.java

@RestController

@RequestMapping("/users")

public class UserController {

@PostMapping

public User createUser(@RequestBody User user) {

// Save the user to the database

// ...

return user;

}

@GetMapping("/{userId}")

public User getUser(@PathVariable Long userId) {

// Retrieve the user from the database

// ...

return user;

}

// Other methods for updating, deleting, etc.

}

// Application.java (Main class)

@SpringBootApplication

public class Application {

public static void main(String[] args) {

SpringApplication.run(Application.class, args);

}

}

2. Create a Product Microservice

// Product.java (Model class)

public class Product {

private Long id;

private String name;

private String description;

// Constructors, getters, and setters

}

// ProductController.java

@RestController

@RequestMapping("/products")

public class ProductControllers {

@PostMapping

public Product createProduct(@RequestBody Product product) {

// Save the product to the database

// ...

return product;

}

@GetMapping("/{productId}")

public Product getProduct(@PathVariable Long productId) {

// Retrieve the product from the database

// ...

return product;

}

// Other methods for updating, deleting, etc.

}

// Application.java (Main class)

@SpringBootApplication

public class Application {

public static void main(String[] args) {

SpringApplication.run(Application.class, args);

}

}

3. Create an API Gateway

// ApiGatewayApplication.java

@SpringBootApplication

@EnableZuulProxy

public class ApiGatewayApplication {

public static void main(String[] args) {

SpringApplication.run(ApiGatewayApplication.class, args);

}

}

1. Set up Service Discovery (using Eureka):

// EurekaServerApplication.java

@SpringBootApplication

@EnableEurekaServer

public class EurekaServerApplication {

public static void main(String[] args) {

SpringApplication.run(EurekaServerApplication.class, args);

}

}