Microservices with API gateway:

// pom.xml

<project xmlns="http://maven.apache.org/POM/4.0.0"

         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">

    <modelVersion>4.0.0</modelVersion>

    <groupId>com.example</groupId>

    <artifactId>bank-microservices</artifactId>

    <version>1.0.0</version>

    <properties>

        <java.version>17</java.version>

    </properties>

    <dependencies>

        <!-- Web -->

        <dependency>

            <groupId>org.springframework.boot</groupId>

            <artifactId>spring-boot-starter-web</artifactId>

        </dependency>

        <!-- XML support -->

        <dependency>

            <groupId>com.fasterxml.jackson.dataformat</groupId>

            <artifactId>jackson-dataformat-xml</artifactId>

        </dependency>

    </dependencies>

    <build>

        <plugins>

            <plugin>

                <groupId>org.springframework.boot</groupId>

                <artifactId>spring-boot-maven-plugin</artifactId>

            </plugin>

        </plugins>

    </build>

</project>

// ========== Application.java ==========

package com.example;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class Application {

    public static void main(String[] args) {

        SpringApplication.run(Application.class, args);

    }

}

// model/Loan.java

package com.example.model;

import com.fasterxml.jackson.dataformat.xml.annotation.JacksonXmlRootElement;

@JacksonXmlRootElement(localName = "Loan")

public class Loan {

    private long loanId;

    private double amount;

    private float interestRate;

    public Loan() {}

    public Loan(long loanId, double amount, float interestRate) {

        this.loanId = loanId;

        this.amount = amount;

        this.interestRate = interestRate;

    }

    public long getLoanId() { return loanId; }

    public void setLoanId(long loanId) { this.loanId = loanId; }

    public double getAmount() { return amount; }

    public void setAmount(double amount) { this.amount = amount; }

    public float getInterestRate() { return interestRate; }

    public void setInterestRate(float interestRate) { this.interestRate = interestRate; }

}

// model/Account.java

package com.example.model;

import com.fasterxml.jackson.dataformat.xml.annotation.JacksonXmlRootElement;

@JacksonXmlRootElement(localName = "Account")

public class Account {

    private long accountNumber;

    private String accountType;

    private double balance;

    public Account() {}

    public Account(long accountNumber, String accountType, double balance) {

        this.accountNumber = accountNumber;

        this.accountType = accountType;

        this.balance = balance;

    }

    public long getAccountNumber() { return accountNumber; }

    public void setAccountNumber(long accountNumber) { this.accountNumber = accountNumber; }

    public String getAccountType() { return accountType; }

    public void setAccountType(String accountType) { this.accountType = accountType; }

    public double getBalance() { return balance; }

    public void setBalance(double balance) { this.balance = balance; }

}

// BankController.java

package com.example.controller;

import com.example.model.Account;

import com.example.model.Loan;

import org.springframework.http.MediaType;

import org.springframework.web.bind.annotation.\*;

@RestController

@RequestMapping("/api")

public class BankController {

    @GetMapping(value = "/loan", produces = { MediaType.APPLICATION\_JSON\_VALUE, MediaType.APPLICATION\_XML\_VALUE })

    public Loan getLoanDetails() {

        return new Loan(5001, 250000.00, 7.2f);

    }

    @GetMapping(value = "/account", produces = { MediaType.APPLICATION\_JSON\_VALUE, MediaType.APPLICATION\_XML\_VALUE })

    public Account getAccountDetails() {

        return new Account(1011223344L, "Savings", 45230.75);

    }

}

//WebConfig.java

package com.example.config;

import org.springframework.context.annotation.Configuration;

import org.springframework.http.MediaType;

import org.springframework.web.servlet.config.annotation.ContentNegotiationConfigurer;

import org.springframework.web.servlet.config.annotation.WebMvcConfigurer;

@Configuration

public class WebConfig implements WebMvcConfigurer {

    @Override

    public void configureContentNegotiation(ContentNegotiationConfigurer configurer) {

        configurer

            .favorParameter(true)

            .parameterName("mediaType")

            .ignoreAcceptHeader(false)

            .defaultContentType(MediaType.APPLICATION\_JSON)

            .mediaType("json", MediaType.APPLICATION\_JSON)

            .mediaType("xml", MediaType.APPLICATION\_XML);

    }

}

// application.properties

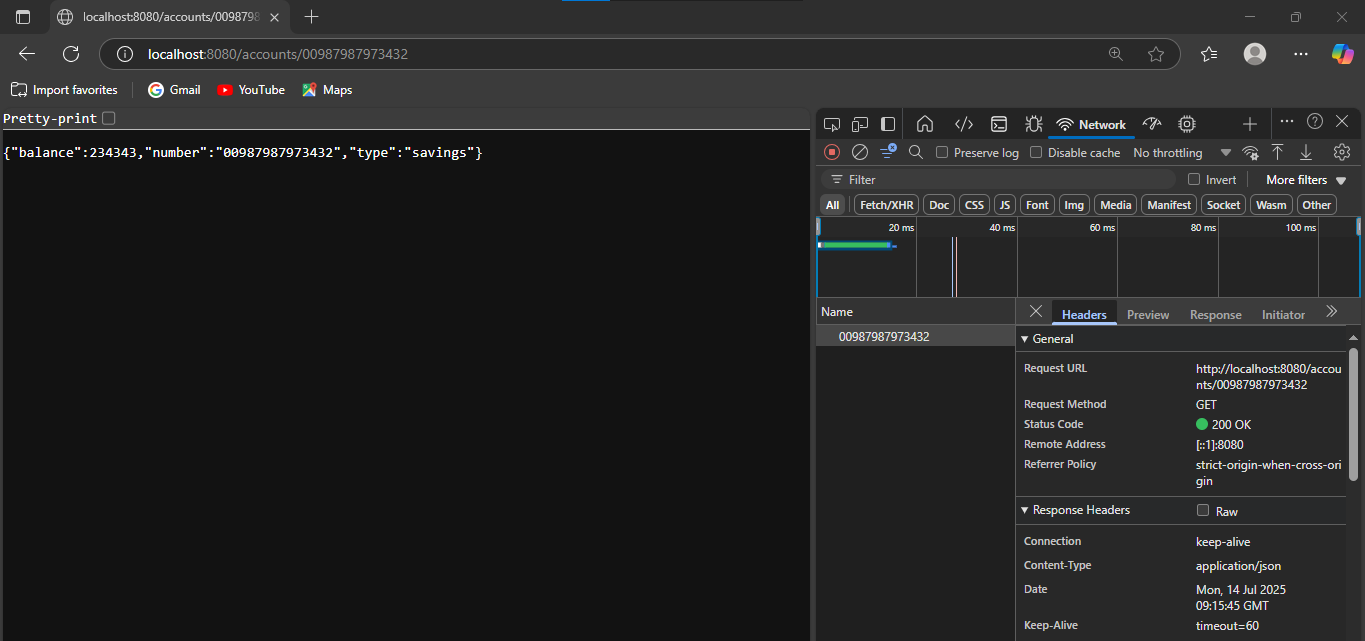
server.port=8080

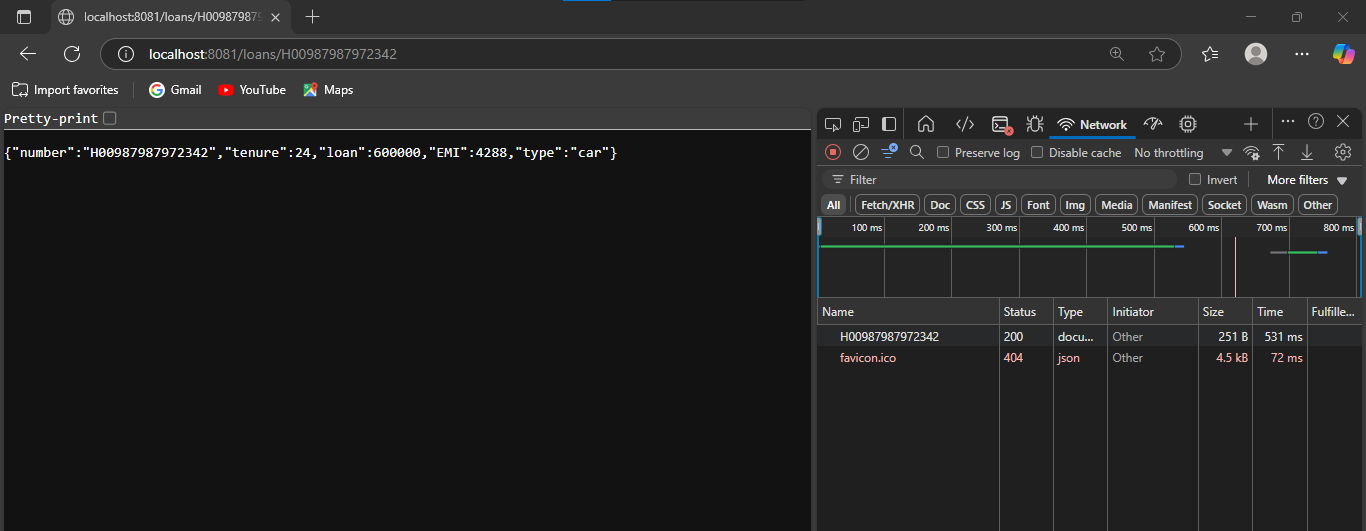
spring.mvc.contentnegotiation.favor-parameter=true

spring.mvc.contentnegotiation.parameter-name=mediaType

spring.mvc.contentnegotiation.favor-path-extension=false

**OUTPUT:**

****

****