FATİH TALHA TÜMER - 191180081

SCRIPTING LANGUAGES

TERM PROEJCT
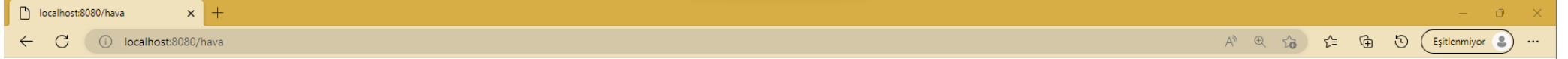
Ana ekran

localhost:8080

Hesap Makinesi

First Number

10

Second Number

42

İşlem:

- ⦿ Toplama
- ○ Çıkarma
- ○ Çarpma
- ○ Bölme

Submit

Hava durumu

Şehir

Ankara

Submit

Hesap makinesi mikroservisi

localhost:8080/calculate

10 * 42 = 420

Hava durumu mikroservisi

ANKARA HAVA DURUMU

Sıcaklık: 3°C
Hava: Açık
Hissedilen sıcaklık: 0°C

Ana servisin kodları:

```java
package com.example.demo;

import org.json.JSONObject;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.context.annotation.Bean;
import org.springframework.http.HttpMethod;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.*;
import org.springframework.web.client.RestTemplate;

import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Paths;

@SpringBootApplication
@RestController
public class DemoApplication {

    @Bean
    public RestTemplate getRestTemplate(){
        return new RestTemplate();
    }

    @Autowired
    private RestTemplate restTemplate;


    public static void main(String[] args) {
        SpringApplication.run(DemoApplication.class, args);
    }

    @RequestMapping("/")
    public ResponseEntity<String> index() throws IOException {
        String html = new
String(Files.readAllBytes(Paths.get("src/main/resources/templates/index.htm
l")));
        return new ResponseEntity<>(html, HttpStatus.OK);
    }

    @RequestMapping("/calculate")
    public String submitForm(@RequestParam("number1") String value1,
@RequestParam("number2") String value2, @RequestParam("islem") String
islem) {
        JSONObject jsonObject = new JSONObject();
        jsonObject.put("message",
restTemplate.exchange(("http://localhost:8081/hesap?num1=" + value1 +
"&num2=" + value2 + "&islem=" + islem).toString() , HttpMethod.GET, null,
String.class).getBody());
            return jsonObject.get("message").toString();
    }

    @RequestMapping("/hava")
    public String hava(@RequestParam(value= "sehir", defaultValue =
"ankara") String sehir){
```

```java
        JSONObject jsonObject = new JSONObject();
        jsonObject.put("message",
restTemplate.exchange(("http://localhost:8082/hava?sehir=" +
sehir).toString() , HttpMethod.GET, null, String.class).getBody());
        return jsonObject.get("message").toString();
    }


}
```

Index.html:

```html
<!DOCTYPE html>
<html>

<head>

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha1/dist/css/bootstrap.min.css" rel="stylesheet"
          integrity="sha384-
GLhlTQ8iRABdZLl6O3oVMWSktQOp6b7In1Zl3/Jr59b6EGGoI1aFkw7cmDA6j6gD"
crossorigin="anonymous">
</head>

<body>
<div class="container h-100">
    <div class="row d-flex h-100 justify-content-between align-items-
center">
        <div class="col-5 border p-5 m-2 h-100 text-center
            ">
            <h2>Hesap Makinesi</h2>

            <form action="/calculate" method="post" id="form">
                <label for="number1">First Number</label><br>
                <input type="number" id="number1" name="number1"
value="10"><br>
                <label for="number2">Second Number</label><br>
                <input type="number" id="number2" name="number2"
value="42"><br>
                <label>İşlem:</label><br>
                <input type="radio" id="toplama" name="islem"
value="toplama" checked="True">
                <label for="toplama">Toplama</label><br>
                <input type="radio" id="cikarma" name="islem"
value="cikarma">
                <label for="cikarma">Çıkarma</label><br>
                <input type="radio" id="carpma" name="islem"
value="carpma">
                <label for="carpma">Çarpma</label><br>
                <input type="radio" id="bolme" name="islem" value="bolme">
                <label for="bolme">Bölme</label><br>
                <br>
                <input type="submit" value="Submit">
```

```html
            </form>
        </div>

        <div class="col-5 border p-5 m-2 h-100 text-center">
            <h2>Hava durumu</h2>
            <form action="/hava" method="post" id="form2">
                <label for="sehir">Şehir</label><br>
                <input type="text" id="sehir" name="sehir"
value="Ankara"><br>

                <br>
                <input type="submit" value="Submit">

            </form>
        </div>
    </div>
</div>




</body>

</html>
```

Hesap makinesi kodları:

```java
package com.toplama.toplama;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.ResponseBody;
import org.springframework.web.bind.annotation.RestController;

@SpringBootApplication
@RestController
public class ToplamaApplication {

    public static void main(String[] args) {
        SpringApplication.run(ToplamaApplication.class, args);
    }

    @GetMapping("/hesap")
    public String topla(@RequestParam(value = "num1", defaultValue = "13")
int num1, @RequestParam(value="num2", defaultValue = "57") int num2,
@RequestParam(value = "carpma", defaultValue = "carpma") String islem) {

        if(islem.equals("toplama")){
            return String.format("%d %s %d = %d", num1,"+", num2, num1+num2);
        }
        else if(islem.equals("cikarma")){
            return String.format("%d %s %d = %d", num1,"-", num2, num1-num2);
        }
        else if(islem.equals("carpma")){
```

```java
            return String.format("%d %s %d = %d", num1,"*", num2, num1*num2);
        }
        else{
            return String.format("%d %s %d = %.2f", num1,"/", num2,
(float)num1/(float)num2);
        }


    }


}
```

Hava durumu kodları:

```java
package com.hava.hava_durumu;

import ch.qos.logback.core.net.SyslogOutputStream;
import org.jsoup.Jsoup;
import org.jsoup.nodes.Document;
import org.jsoup.select.Elements;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.RestController;

import java.io.IOException;
import java.util.Locale;

@SpringBootApplication
@RestController
public class HavaDurumuApplication {

    public static void main(String[] args) {
        SpringApplication.run(HavaDurumuApplication.class, args);

        try {
            Document doc =
Jsoup.connect("https://yandex.com.tr/hava/ankara").get();

            Elements sicaklik = doc.select("body > div.b-page__container >
div.content.content_compressed.i-bem > div.content__top >
div.fact.card.card_size_big > div.fact__temp-wrap > a > div >
div.temp.fact__temp.fact__temp_size_s > span");
            Elements hava = doc.select("body > div.b-page__container >
div.content.content_compressed.i-bem > div.content__top >
div.fact.card.card_size_big > div.fact__temp-wrap > a > div >
div.link__feelings.fact__feelings > div.link__condition.day-anchor.i-bem");
            Elements hissedilen = doc.select("body > div.b-page__container >
div.content.content_compressed.i-bem > div.content__top >
div.fact.card.card_size_big > div.fact__temp-wrap > a > div >
div.link__feelings.fact__feelings > div.term.term_orient_h.fact__feels-like
> div.term__value > div > span");
            //Elements sicaklik = doc.select("");

            String sicaklik_s = sicaklik.text();
```

```java
            sicaklik_s = sicaklik_s.replaceAll("<[^>]*>", "");
            String hava_s = hava.text();
            hava_s = hava_s.replaceAll("<[^>]*>", "");
            String hissedilen_s = hissedilen.text();
            hissedilen_s = hissedilen_s.replaceAll("<[^>]*>", "");

            System.out.println("ANKARA HAVA DURUMU\n");
            System.out.println("Sıcaklık: " + sicaklik_s + "°C");
            System.out.println("Hava: " + hava_s);
            System.out.println("Hissedilen sıcaklık: " + hissedilen_s + "°C");


        } catch (IOException e) {
            throw new RuntimeException(e);
        }


    }

    @GetMapping("/hava")
    public String hava(@RequestParam(value= "sehir", defaultValue =
"ankara") String sehir){

        sehir = sehir.toLowerCase();

        Document doc = null;
        try {
            doc = Jsoup.connect("https://yandex.com.tr/hava/" + sehir).get();
        } catch (IOException e) {
            throw new RuntimeException(e);
        }

        Elements sicaklik = doc.select("body > div.b-page__container >
div.content.content_compressed.i-bem > div.content__top >
div.fact.card.card_size_big > div.fact__temp-wrap > a > div >
div.temp.fact__temp.fact__temp_size_s > span");
        Elements hava = doc.select("body > div.b-page__container >
div.content.content_compressed.i-bem > div.content__top >
div.fact.card.card_size_big > div.fact__temp-wrap > a > div >
div.link__feelings.fact__feelings > div.link__condition.day-anchor.i-bem");
        Elements hissedilen = doc.select("body > div.b-page__container >
div.content.content_compressed.i-bem > div.content__top >
div.fact.card.card_size_big > div.fact__temp-wrap > a > div >
div.link__feelings.fact__feelings > div.term.term_orient_h.fact__feels-like
> div.term__value > div > span");
        //Elements sicaklik = doc.select("");

        String sicaklik_s = sicaklik.text();
        sicaklik_s = sicaklik_s.replaceAll("<[^>]*>", "");
        String hava_s = hava.text();
        hava_s = hava_s.replaceAll("<[^>]*>", "");
        String hissedilen_s = hissedilen.text();
        hissedilen_s = hissedilen_s.replaceAll("<[^>]*>", "");

        String hava_durumu = sehir.toUpperCase() + " HAVA DURUMU<br><br>" +
"Sıcaklık: " + sicaklik_s + "°C<br>" + "Hava: " + hava_s + "<br>Hissedilen
sıcaklık: " + hissedilen_s + "°C";
        //System.out.println("ANKARA HAVA DURUMU\n");
        //System.out.println("Sıcaklık: " + sicaklik_s + "°C");
        //System.out.println("Hava: " + hava_s);
        //System.out.println("Hissedilen sıcaklık: " + hissedilen_s + "°C");
```

```
        return hava_durumu;

    }

}
```