Shape

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**FATİH TALHA TÜMER - 191180081**

**SCRIPTING LANGUAGES**

**TERM PROEJCT**

Ana ekran

Chart

Description automatically generated

Hesap makinesi mikroservisiGraphical user interface, application, Word

Description automatically generated

Hava durumu mikroservisiGraphical user interface, application, Word

Description automatically generated

Ana servisin kodları:

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.html")));  
 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){  
 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:

<!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">  
  
 </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:

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")){  
 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:

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();  
 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;  
  
 }  
  
}