package com.masai;

import java.util.List;

import com.masai.Entry;

public class Data {

private int count;

private List<Entry> entries;

public int getCount() {

return count;

}

public void setCount(int count) {

this.count = count;

}

public List<Entry> getEntries() {

return entries;

}

public void setEntries(List<Entry> entries) {

this.entries = entries;

}

}

Entry.java

package com.masai;

import com.fasterxml.jackson.annotation.JsonProperty;

public class Entry {

*@JsonProperty*("API")

private String api;

*@JsonProperty*("Description")

private String description;

*@JsonProperty*("Auth")

private String auth;

*@JsonProperty*("Https")

private boolean hTTPS;

*@JsonProperty*("Cors")

private String cors;

*@JsonProperty*("Category")

private String category;

public String getApi() {

return api;

}

public void setApi(String api) {

this.api = api;

}

public String getDescription() {

return description;

}

public void setDescription(String description) {

this.description = description;

}

public String getAuth() {

return auth;

}

public void setAuth(String auth) {

this.auth = auth;

}

public boolean ishTTPS() {

return hTTPS;

}

public void sethTTPS(boolean hTTPS) {

this.hTTPS = hTTPS;

}

public String getCors() {

return cors;

}

public void setCors(String cors) {

this.cors = cors;

}

public String getCategory() {

return category;

}

public void setCategory(String category) {

this.category = category;

}

}

//@JsonProperty is used to mark non standerd getters/setters method to be used with respect to json property

MyController.java

package com.masai;

import java.util.ArrayList;

import java.util.List;

import javax.management.loading.PrivateClassLoader;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.http.ResponseEntity;

import org.springframework.objenesis.instantiator.basic.NewInstanceInstantiator;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.PathVariable;

import org.springframework.web.bind.annotation.PostMapping;

import org.springframework.web.bind.annotation.RequestBody;

import org.springframework.web.bind.annotation.RestController;

import org.springframework.web.client.RestTemplate;

@RestController

public class MyController {

@Autowired

RestTemplate restTemplate;

@GetMapping("/entries/{category}")

public List<ResultDTO> getEntriesHandler(@PathVariable("category") String category){

Data d= restTemplate.getForObject("https://api.publicapis.org/entries", Data.class);

List<Entry> entries= d.getEntries();

List<ResultDTO> list= entries.stream().filter(e -> e.getCategory().equals(category)).map(e ->new ResultDTO(e.getApi(),e.getDescription())).toList();

return list;

}

}

ResultDTO.java

package com.masai;

public class ResultDTO {

private String title;

private String description;

public ResultDTO() {

// **TODO** Auto-generated constructor stub

}

public ResultDTO(String title, String description) {

super();

this.title = title;

this.description = description;

}

public String getTitle() {

return title;

}

public void setTitle(String title) {

this.title = title;

}

public String getDescription() {

return description;

}

public void setDescription(String description) {

this.description = description;

}

}

RestTemplateConfiguration.java

----------------------------------------

package com.masai;

import org.springframework.context.annotation.Bean;

import org.springframework.context.annotation.Configuration;

import org.springframework.web.client.RestTemplate;

@Configuration

public class RestTemplateConfiguration {

@Bean

public RestTemplate restTemplate() {

return new RestTemplate();

}

}

ProspectaApplication.java

------------------------------------------

package com.masai;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class ProspectaApplication {

public static void main(String[] args) {

SpringApplication.run(ProApplication.class, args);

System.out.println("hello prospecta");

}

}

Challenge 2:

First of all I have to read the CSV file using the below code.

using System;

public class test

{

public static void Main()

{

using ( CsvReader reader = new CsvReader( "data.csv" ) )

{

foreach( string[] values in reader.RowEnumerator )

{

Console.WriteLine( "Row {0} has {1} values.", reader.RowIndex, values.Length );

}

}

Console.ReadLine();

}

}

Or…………….

1] CsvFileReader reads the CSV file in java using BufferedReader class then skipping the header and starting from the second line, we split each line usingString.split() function. A String.split () function splits string around matches of the given regular expression. Finally, we create a new list and print it.

Once we read the data properly we should write code in such a way that when “=” operater comes we should declare that it is a formula and we have to calculate it and store that in that key itself . We have to consider this as key-value pairs .

2] The type of errors we may face are- 1. File size One of the most common CSV import errors is that the file is simply too large. ...

2. Matching: Another key import error that pops up when uploading a CSV file is related to matching. ...

3. Translation of data : A data translation error could occur if the encoding is incorrect or unexpected. ...

4. Values:

5. Missing data

6. some exception also occure while coding.