**SKG\_WEB\_LAB\_NEWSAPI**

**Article:**

package com.examly.springapp.model;

import java.util.Date;

public class Article

{

private String author;

private String title;

private String description;

private String url;

private String urlToImage;

private Date publishedAt;

private String content;

private Source source;

public Article() {

}

public Article(String author, String title, String description, String url, String urlToImage, Date publishedAt,

String content, Source source) {

this.author = author;

this.title = title;

this.description = description;

this.url = url;

this.urlToImage = urlToImage;

this.publishedAt = publishedAt;

this.content = content;

this.source = source;

}

public String getAuthor() {

return author;

}

public void setAuthor(String author) {

this.author = author;

}

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;

}

public String getUrl() {

return url;

}

public void setUrl(String url) {

this.url = url;

}

public String getUrlToImage() {

return urlToImage;

}

public void setUrlToImage(String urlToImage) {

this.urlToImage = urlToImage;

}

public Date getPublishedAt() {

return publishedAt;

}

public void setPublishedAt(Date publishedAt) {

this.publishedAt = publishedAt;

}

public String getContent() {

return content;

}

public void setContent(String content) {

this.content = content;

}

public Source getSource() {

return source;

}

public void setSource(Source source) {

this.source = source;

}

}

**ApiReponse:**

package com.examly.springapp.model;

public class ApiResponse

{

private Article[] articles;

public ApiResponse() {}

public ApiResponse(Article[] articles) {

this.articles = articles;

}

public Article[] getArticles() {

return articles;

}

public void setArticles(Article[] articles) {

this.articles = articles;

}

}

**NewsService:**

package com.examly.springapp.service;

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

import org.springframework.http.ResponseEntity;

import org.springframework.stereotype.Service;

import org.springframework.web.client.RestTemplate;

import com.examly.springapp.model.ApiResponse;

@Service

public class NewsService

{

@Value("${newsapi.apikey}")

private String apiKey;

private final RestTemplate restTemplate;

public NewsService(RestTemplate restTemplate) {

this.restTemplate = restTemplate;

}

public ApiResponse getNewsBySource(String source) {

String url = String.format("https://newsapi.org/v2/top-headlines?sources=%s&apiKey=%s", source, apiKey);

ResponseEntity<ApiResponse> response = restTemplate.getForEntity(url, ApiResponse.class);

return response.getBody();

}

public ApiResponse getNewsByCountryAndCategory(String country, String category) {

String url = String.format("https://newsapi.org/v2/top-headlines?country=%s&category=%s&apiKey=%s", country, category, apiKey);

ResponseEntity<ApiResponse> response = restTemplate.getForEntity(url, ApiResponse.class);

return response.getBody();

}

public ApiResponse getNewsByCountryCategoryWithPaginationAndSort(String country, String category, int pageNumber, int pageSize, String sortField) {

String url = String.format("https://newsapi.org/v2/top-headlines?country=%s&category=%s&apiKey=%s", country, category, apiKey);

ResponseEntity<ApiResponse> response = restTemplate.getForEntity(url, ApiResponse.class);

return response.getBody();

}

}

**NewsController:**

package com.examly.springapp.controller;

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

import org.springframework.http.ResponseEntity;

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

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

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

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

import com.examly.springapp.model.ApiResponse;

import com.examly.springapp.service.NewsService;

@RestController

@RequestMapping("/news")

public class NewsController

{

@Autowired

private NewsService newsService;

@GetMapping("/source/{source}")

public ResponseEntity<ApiResponse> getNewsBySource(@PathVariable String source) {

ApiResponse apiResponse = newsService.getNewsBySource(source);

if (apiResponse == null || apiResponse.getArticles() == null || apiResponse.getArticles().length == 0) {

return ResponseEntity.notFound().build();

}

return ResponseEntity.ok(apiResponse);

}

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

public ResponseEntity<ApiResponse> getNewsByCountryAndCategory(@PathVariable String country, @PathVariable String category) {

ApiResponse apiResponse = newsService.getNewsByCountryAndCategory(country, category);

if (apiResponse == null || apiResponse.getArticles() == null || apiResponse.getArticles().length == 0) {

return ResponseEntity.notFound().build();

}

return ResponseEntity.ok(apiResponse);

}

@GetMapping("/country/{country}/category/{category}/{pageNumber}/{pageSize}/{sortField}")

public ResponseEntity<ApiResponse> getNewsByCountryCategoryWithPaginationAndSort(@PathVariable String country, @PathVariable String category, @PathVariable int pageNumber, @PathVariable int pageSize, @PathVariable String sortField) {

ApiResponse apiResponse = newsService.getNewsByCountryCategoryWithPaginationAndSort(country, category, pageNumber, pageSize, sortField);

if (apiResponse == null || apiResponse.getArticles() == null || apiResponse.getArticles().length == 0) {

return ResponseEntity.notFound().build();

}

return ResponseEntity.ok(apiResponse);

}

}

**AppConfig:**

package com.examly.springapp.configuration;

import org.springframework.context.annotation.Bean;

import org.springframework.context.annotation.Configuration;

import org.springframework.web.client.RestTemplate;

@Configuration

public class AppConfig

{

@Bean

public RestTemplate restTemplate() {

return new RestTemplate();

}

}

Source:

package com.examly.springapp.model;

public class Source

{

private String id;

private String name;

public Source() {

}

public Source(String id, String name) {

this.id = id;

this.name = name;

}

public String getId() {

return id;

}

public void setId(String id) {

this.id = id;

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

}

**OUTPUT:**

