

API Specification Doc

Travel Assistant Web-App

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Introduction

This documentation provides all the details about the Travell Assistant API.

The Assistant API uses C# language with .NET CORE 3.1 framework.

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It works as middleware to consume the above external apis:

1. openweathermap.org -> To get the weather forecast
2. exchangeratesapi.io -> To get the exchange rate
3. worldbank.org -> To get the population and GDP

Additionally `Microsoft.AspNetCore.Authorization` was used to handle API call's authentication.

The API can run using Docker or Internet Information Services (IIS).

Methods

1. Destinations/getDestination

Fetch destinations list available in database.

Request

Method	URL
GET	api/Destinations/getDestinations

Type	Params	Values
HEAD	ApiKey	string

ApiKey

ApiKey must be sent with all client requests. The api_key helps the server to validate the request source.

Note: the API Key will be sent to the customer that will consume the API.

Response

Status	Response
200	<pre>[{ "iso2Code": "AW", "name": "Aruba" }, { "iso2Code": "ZH", "name": "Africa Eastern and Southern" },]</pre>
401	Unauthorized
404	No countries found!

500	Unexpected Error occurred while trying to GetCountries. Please try again later.
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2. Destinations/information

Get the destination information, like weather forecast, GDP data, Population data and exchange rate.

Request

Method	URL
GET	api/Destinations/information?countryCode={iso2Code}

Type	Params	Values
HEAD QUERY PARAMS	ApiKey countryCode	string string

- The `API_KEY` that was given to access the API.
- The countryCode is iso2Code of the country returned on /getDestination API.

Response

Status	Response
200	<p>Response will be an object containing the country details, with array list for weather, gdpHistoricalData and populationHistoricalData</p> <p>An example response is:</p> <pre>{ { "countryName": "Mozambique", "populationTotal": "32969518",</pre>

```
"gdpvalue": "18406835954.6695",
"exchangeRate": 69.00000,
"weather": [
  {
    "date": "2024-06-18 21:00:00",
    "min": 25.34,
    "max": 25.34,
    "description": "clear sky",
    "img": "http://openweathermap.org/img/wn/01n.png"
  },
  {
    "date": "2024-06-19 00:00:00",
    "min": 24.989999999999998,
    "max": 25.219999999999999,
    "description": "clear sky",
    "img": "http://openweathermap.org/img/wn/01n.png"
  },
  {
    "date": "2024-06-19 03:00:00",
    "min": 24.75,
    "max": 24.949999999999999,
    "description": "clear sky",
    "img": "http://openweathermap.org/img/wn/01d.png"
  },
  {
    "date": "2024-06-19 06:00:00",
    "min": 24.809999999999999,
    "max": 24.809999999999999,
    "description": "clear sky",
    "img": "http://openweathermap.org/img/wn/01d.png"
  },
  {
    "date": "2024-06-19 09:00:00",
    "min": 25.510000000000002,
    "max": 25.510000000000002,
    "description": "clear sky",
    "img": "http://openweathermap.org/img/wn/01d.png"
  },
  {
    "date": "2024-06-19 12:00:00",
    "min": 26.370000000000001,
    "max": 26.370000000000001,
    "description": "clear sky",
    "img": "http://openweathermap.org/img/wn/01d.png"
  }
],
"gdpHistoricalData": [
```

```
{
  "year": "2022",
  "value": "18406835954.6695"
},
{
  "year": "2021",
  "value": "16168056388.9101"
},
{
  "year": "2020",
  "value": "14235420505.2904"
},
{
  "year": "2019",
  "value": "15512759174.573"
},
{
  "year": "2018",
  "value": "15017358750.6113"
}
],
"populationHistoricalData": [
  {
    "year": "2022",
    "value": "32969518"
  },
  {
    "year": "2021",
    "value": "32077072"
  },
  {
    "year": "2020",
    "value": "31178239"
  },
  {
    "year": "2019",
    "value": "30285595"
  },
  {
    "year": "2018",
    "value": "29423878"
  }
],
"errorCode": "200",
"errorMessage": "Exchange Rate Error: 429 - "
}
```

401	Unauthorized
404	No countries found!
500	Unexpected Error occurred while trying to Country Information. Please try again later

Glossary

Conventions

- **Client** - Client application.
- **Status** - HTTP status code of response.
- All the possible responses are listed under 'Responses' for each method. Only one of them is issued per request server.
- All response are in JSON format.
- All request parameters are mandatory.

Status Codes

All status codes are standard HTTP status codes. The below ones are used in this API.

2XX - Success of some kind

4XX - Error occurred in client's part

5XX - Error occurred in server's part

Status Code	Description
200	OK
400	Bad request
401	Authentication failure
403	Forbidden
500	Internal Server Error
503	Service Unavailable