

# The Star Wars API

(SWAPI)

# API Overview

The Star Wars API (SWAPI) is an open-source RESTful web service that provides structured and consistent data from the Star Wars universe. It contains resources such as people, planets, starships, vehicles, species, and films.

SWAPI helps developers easily access and integrate Star Wars data into their own applications, websites, games, and learning projects.

## Getting Started

Developers can use the SWAPI directly from a web browser, through Postman, curl, or programmatically using any programming language like Python, Java, or JavaScript.

To start,

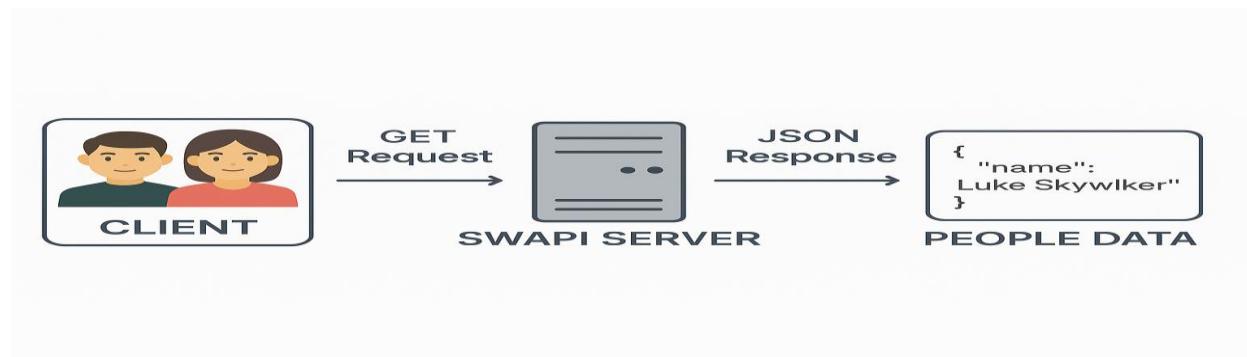
1. Use the Base URL:

<https://swapi.py4e.com/api/>

2. Select a **Resource** and send a **Request**

## Workflow

The below image illustrates how requests and responses flow between client and server.



## Prerequisites

- A REST client (Postman or curl).

## Authorization / Authentication

- SWAPI does **not require authentication**.

- All endpoints are publicly available and can be used directly.

## Headers

The SWAPI uses standard HTTP headers for requests and responses.

Header Type	Description	Values
Request Content-Type	Specifies format of data sent	Accept: application/json Content-Type: application/json
Response Content-Type	Specifies format of data returned	Content-Type: application/json

## Return Status Codes

The API uses standard HTTP status codes to indicate the result of a request:

HTTP Code	Meaning	Description
200 OK	Success	Request processed successfully.
400 Bad Request	Client error	Incorrect query or invalid ID.
404 Not Found	Missing data	Requested person ID does not exist.
429 Too Many Requests	Rate limit exceeded	Too many calls in short time.
500 Internal Server Error	Server failure	Problem on SWAPI's side.

## Throttling / Rate Limits

SWAPI controls how many requests you can make in a day to keep the system stable and prevent overuse.

You can make up to **10,000 requests per day**. The number of requests allowed per minute is **not defined**.

# API REFERENCE

## Resource: People

### Introduction

Fetches a list of all characters from the Star Wars universe. This API provides key details such as name, height, gender, birth year, and links to related resources like films, species, and starships.

### Method

GET

### Base URL

<https://swapi.py4e.com/api>

### Endpoint

/people

### Example URL

<https://swapi.py4e.com/api/people>

### Sample Response

```
{  
    "count": 87,  
    "next": "https://swapi.py4e.com/api/people/?page=2",  
    "previous": null,  
    "results": [  
        {  
            "name": "Luke Skywalker",  
            "height": "172",  
            "mass": "77",  
            "hair_color": "blond",  
            "skin_color": "fair",  
            "eye_color": "blue",  
            "birth_year": "19BBY",  
            "gender": "male",  
            "homeworld": "https://swapi.py4e.com/api/planets/1/",  
            "created": "2014-12-09T13:50:51.651Z",  
            "edited": "2014-12-09T13:50:51.651Z",  
            "url": "https://swapi.py4e.com/api/people/1/"  
        }  
    ]  
}
```

```

"films": [
    "https://swapi.py4e.com/api/films/1/",
    "https://swapi.py4e.com/api/films/2/",
    "https://swapi.py4e.com/api/films/3/",
    "https://swapi.py4e.com/api/films/6/",
    "https://swapi.py4e.com/api/films/7/"
],
"species": [
    "https://swapi.py4e.com/api/species/1/"
],
"vehicles": [
    "https://swapi.py4e.com/api/vehicles/14/",
    "https://swapi.py4e.com/api/vehicles/30/"
],
"starships": [
    "https://swapi.py4e.com/api/starships/12/",
    "https://swapi.py4e.com/api/starships/22/"
],
"created": "2014-12-09T13:50:51.644000Z",
"edited": "2014-12-20T21:17:56.891000Z",
"url": "https://swapi.py4e.com/api/people/1/"
}

```

## Response Parameter Table

<b>Parameter</b>	<b>Child Parameters</b>	<b>Data Types</b>	<b>Values</b>	<b>Description of parameter</b>
count		Int64		Total number of people records available in swapi.
next		String		URL to fetch the next page of results.
previous		String		URL to fetch the previous page of results.
results	name	String		Full name of the person.
	height	String		Height of the person in centimeters.

	mass	String		Weight of the person in kilograms.
	hair_color	String		Hair color of the person.
	skin_color	String		Skin color of the person.
	eye_color	String		Eye color of the person.
	birth_year	String		Birth year of the person (BBY = Before Battle of Yavin, ABY = After Battle of Yavin).
	gender	String		Gender of the person.
	homeworld	String		URL to the person's home planet resource.
	films	String		List of film URLs in which the person appeared.
	species	String		List of species URLs for the person.
	vehicles	String		List of vehicle URLs associated with the person.
	starships	String		List of starship URLs associated with the person.
	created	String		Date and time when the record was created.
	edited	String		Date and time when the record was last updated.
	url	String		The API endpoint URL for this specific person.

## Sample Screenshot

The screenshot shows a REST API client interface. At the top, the URL <https://swapi.py4e.com/api/people/> is entered in the address bar, along with a dropdown menu showing "GET". To the right are "Save", "Share", and "Send" buttons. Below the address bar are tabs for "Params", "Authorization", "Headers (6)", "Body", "Scripts", and "Settings". A "Cookie" tab is also visible on the right. Under "Query Params", there is a table with one row containing "Key" and "Value" columns. The main content area displays the JSON response from the API. The response is a paginated list of people, starting with Luke Skywalker. The JSON structure includes fields like count, next, previous, and results. The results array contains multiple objects, each representing a person with properties such as name, height, mass, hair\_color, skin\_color, eye\_color, birth\_year, gender, homeworld, and films.

Key	Value	Description
Key	Value	Description

```
1  {
2    "count": 87,
3    "next": "https://swapi.py4e.com/api/people/?page=2",
4    "previous": null,
5    "results": [
6      {
7        "name": "Luke Skywalker",
8        "height": "172",
9        "mass": "77",
10       "hair_color": "blond",
11       "skin_color": "fair",
12       "eye_color": "blue",
13       "birth_year": "19BBY",
14       "gender": "male",
15       "homeworld": "https://swapi.py4e.com/api/planets/1/",
16       "films": [
17         "https://swapi.py4e.com/api/films/1/",
```

# API REFERENCE

## Resource: People

### Introduction

Fetches detailed information about a specific Star Wars character using their unique ID. The response includes personal attributes and related resource links such as homeworld, films, species, vehicles, and starships.

### Method

GET

### Base URL

<https://swapi.py4e.com/api>

### Endpoint

/people/{id}

### Example URL

<https://swapi.py4e.com/api/people/1>

### Path Parameter Table

Parameters	Child Parameters	Data Types	Required / Optional	Description of Parameter
id		integer	Required	The unique ID of the person used to fetch details of a specific Star Wars character.

### Sample Response

```
{  
  "name": "Luke Skywalker",  
  "height": "172",  
  "mass": "77",  
  "hair_color": "blond",  
  "skin_color": "fair",  
  "eye_color": "blue",  
  "birth_year": "19BBY",
```

```

"gender": "male",
"homeworld": "https://swapi.py4e.com/api/planets/1/",
"films": [
    "https://swapi.py4e.com/api/films/1/",
    "https://swapi.py4e.com/api/films/2/",
    "https://swapi.py4e.com/api/films/3/",
    "https://swapi.py4e.com/api/films/6/",
    "https://swapi.py4e.com/api/films/7/"
],
"species": [
    "https://swapi.py4e.com/api/species/1/"
],
"vehicles": [
    "https://swapi.py4e.com/api/vehicles/14/",
    "https://swapi.py4e.com/api/vehicles/30/"
],
"starships": [
    "https://swapi.py4e.com/api/starships/12/",
    "https://swapi.py4e.com/api/starships/22/"
],
"created": "2014-12-09T13:50:51.644000Z",
"edited": "2014-12-20T21:17:56.891000Z",
"url": "https://swapi.py4e.com/api/people/1/"
}

```

## Response Parameter Table

Parameters	Data Types	Description
name	String	Full name of the person.
height	String	Height of the person in centimeters.
mass	String	Mass of the person in kilograms.
hair_color	String	Hair color of the person.
skin_color	String	Skin color of the person.
eye_color	String	Eye color of the person.
birth_year	String	Birth year of the person (BBY = Before Battle of Yavin, ABY = After Battle of Yavin).

gender		Gender identity of the person.
homeworld	String	URL link to the planet resource where the person was born or resides.
films	String	List of film URLs in which the person has appeared.
species	String	List of species URLs. May be empty if the person is human.
vehicles	String	List of vehicle URLs associated with the person.
starships	String	List of starship URLs associated with the person.
created	String	Timestamp when the record was first created.
edited	String	Timestamp when the record was last updated.
url	String	The API endpoint URL for this specific person record.

## Sample Screenshot

The screenshot shows a REST API client interface with the following details:

- URL:** <https://swapi.py4e.com/api/people/1/>
- Method:** GET
- Headers:** (6)
- Body:** (18)
- Test Results:** 200 OK (391 ms, 1.07 KB)
- Params:** Key Value Description
- Query Params:** Key Value Description
- Body Content (JSON):**

```
1 {
2     "name": "Luke Skywalker",
3     "height": "172",
4     "mass": "77",
5     "hair_color": "blond",
6     "skin_color": "fair",
7     "eye_color": "blue",
8     "birth_year": "19BBY",
9     "gender": "male",
10    "homeworld": "https://swapi.py4e.com/api/planets/1",
11    "films": [
12        "https://swapi.py4e.com/api/films/1/",
13        "https://swapi.py4e.com/api/films/2/",
14        "https://swapi.py4e.com/api/films/3/",
15        "https://swapi.py4e.com/api/films/6/",
16        "https://swapi.py4e.com/api/films/7/"
17    ]
```