

Postman API Testing

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Postman

Postman is a powerful API testing tool that simplifies the process of developing, testing, and documenting APIs.

Features:

- User-friendly interface for building and testing API requests.
- Supports various HTTP methods (GET, POST, PUT, DELETE, etc.).
- Automation of API tests with Postman Collections and Newman.
- Integration with CI/CD pipelines.
- Collaboration features for team environments.

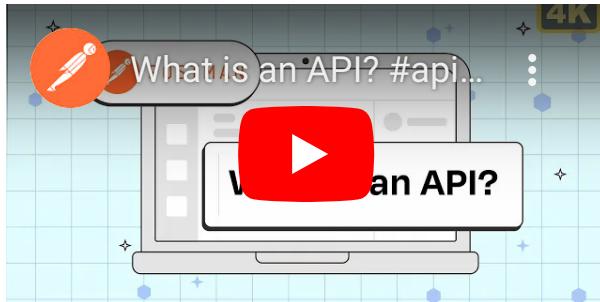
Getting Started

1. Download and install Postman from postman.com.
2. Create a free account
3. Create a workspace
4. Create a collection
5. Create a request

What is an API?

API:

Stands for Application Programming Interface.



Example:

- Weather App: Your weather app uses an API to get weather data from a weather service.
- Payment Processing: Online stores use APIs to connect to payment gateways like PayPal or Stripe.

Key Characteristics of APIs

- **Request:** A client sends a request to the server.
- **Response:** The server processes the request and sends a response back to the client.
- **Endpoint:** The URL where the API is located.
- **Method:** The HTTP method used to interact with the API (GET, POST, PUT, DELETE, etc.).
- **Headers:** Additional information sent with the request or response.
- **Body:** Data sent with the request or response (e.g., JSON, XML).
- **Status Code:** A code that indicates the success or failure of the request (e.g., 200 OK, 404 Not Found).

HTTP Methods

- **GET**: Retrieve data from the server.
- **POST**: Send data to the server.
- **PUT**: Completely updating data (e.g., updating all user details).
- **PATCH**: Partially updating data (e.g., updating only the user's email).
- **DELETE**: Delete data from the server.

HTTP Status Codes

Resource: [HTTP Status Code](#)

Postman Collection

A Postman Collection is a group of API requests that can be organized into folders and subfolders.

Postman Variables

Key Value Pairs that can be used in requests.

- **Key:** variable name
- **Value:** variable value

Example:

- Suppose, you have a variable `base_url` with value `https://api.example.com` .
- You can use this variable in your requests like this: `{{base_url}}/users` .

Postman Variable Priority

1. **Local Variables:** Defined in the request.
2. **Environment Variables:** Defined in the environment.
3. **Collection Variables:** Defined in the collection.
4. **Global Variables:** Defined globally.

Resources: [Postman Variables](#)

Set Variables from scripts

Syntax:

- Local: `pm.variables.set("variable_name", "variable_value");`
- Environment: `pm.environment.set("variable_name", "variable_value");`
- Collection: `pm.collectionVariables.set("variable_name", "variable_value");`
- Global: `pm.globals.set("variable_name", "variable_value");`

Get Variables from scripts

Syntax:

- Local: `pm.variables.get("variable_name");`
- Environment: `pm.environment.get("variable_name");`
- Collection: `pm.collectionVariables.get("variable_name");`
- Global: `pm.globals.get("variable_name");`

Thank you ❤️

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