**Creating an API**

**What is an API?**

An [API](https://www.twilio.com/docs/glossary/what-is-an-api) is an application programming interface - in short, it’s a set of rules that lets programs talk to each other, exposing data and functionality across the internet in a consistent format.

REST stands for [Representational State Transfer](http://www.ics.uci.edu/~fielding/pubs/dissertation/rest_arch_style.htm). This is an architectural pattern that describes how distributed systems can expose a consistent interface. When people use the term ‘REST API,’ they are generally referring to an API accessed via HTTP protocol at a predefined set of URLs.

These URLs represent various resources - any information or content accessed at that location, which can be returned as JSON, HTML, audio files, or images. Often, resources have one or more methods that can be performed on them over HTTP, like GET, POST, PUT and DELETE.[[1]](#endnote-1)

GLAPS API provides users access to the predictions created from our machine learning model. Our machine learning model returns predictions of median home values for counties within the United States with and without baseball stadiums. Our program then calculates the percent change that adding or removing a stadium will cause in the area and apply this calculation to the provided home value. The user can then display this data or use it for any further calculations they might need.

**Using the API**

The GLAPS API is accessed on gmastorg.pythonanywhere.com/GLAPS?. The GLAPS API enforces HTTPS, therefore attempts to access an endpoint with HTTP will result in an error message.

The GLAPS API outputs JSON. All identifiers are strings and all strings are UTF-8. [[2]](#endnote-2)

**Resources**

## Resource URL

[http://gmastorg.pythonanywhere.com/GLAPS](http://gmastorg.pythonanywhere.com/GLAPS?)

## Resource Information

|  |  |
| --- | --- |
| Response formats | JSON |
| Requires authentication? | No |
| Rate limited? | No |

## Parameters

| **Name** | **Required** | **Description** | **Default Value** | **Example** |
| --- | --- | --- | --- | --- |
| HomeVal | required | Value of specific user’s house to be used in calculations | N/A | HomeVal=150000 |
| County | required | County and State must be entered in specific format | N/A | County=Cumberland County, North Carolina |

## Example Request

<http://gmastorg.pythonanywhere.com/GLAPS?HomeVal=150000&County=Cumberland%20County,%20North%20Carolina>

## Example Response

After you submit your request successfully you should get back something that looks like this:

[

{

"HomeVal": 150000,

"HomeValStad": 176838,

"MedHomeVal": 119875,

"MedHomeValStad": 141323

}

]

1. <https://www.twilio.com/docs/usage/api> [↑](#endnote-ref-1)
2. <https://developer.twitter.com/en/docs/ads/general/guides/getting-started> [↑](#endnote-ref-2)