User Profile Data API

# Requirement:

Design and implement RESTful APIs to retrieve merged user profile data from both Github and Bitbucket.

# Technology Choices:

Programming Language: Python3

Web framework: Flask

# Configuration:

We are using Github external API version 3 and Bitbucket version 2 for solving this problem. And versions and base urls can b configurable through flask configuration.

Example:

config.cfg:

GITHUB\_URL="https://api.github.com"  
GITHUB\_VERSION="v3"  
BITBUCKET\_URL="https://api.bitbucket1.org"  
BITBUCKET\_VERSION="2.0"

# RESTful API

**Base\_URL: http://localhost:5000**

1. **Get User Profile Data:**

This API will be used to get the merged data from Github and Bitbucket for a given organization.

**Endpoint: GET – {Base\_URL}/users/<organization>/profile**

**Request Headers:**

**Content-type:** application/json

**x-github-auth-token**: <token>

**Note:** In case we need to access more than 60 requests per hour then only token should be provided otherwise no need to provide any token in headers.

**Request Content:**

Empty

**Response Content:**

* **If given organization not exists**

**Message:** Not found

**Status:** 404

* **If bad credentials given**

**Message:** Bad credentials

**Status:** 401

* **In case no token is provided and Github API rate limit exceeds (60 requests per hour)**

**Message:** API rate limit exceeded

**Status:** 403

* **For any other errors including network failures/timeouts**

**Message:** Internal server error.

**Status:** 500

* **If everything ok**

**Status:** 200

**Response Body:**

**{**

**"repos":[{**

**"forks\_count" : Integer,**

**"language\_count": Integer,**

**"languages": [String],**

**"repo\_name": String,**

**"repo\_type": String,**

**"topics": [String],**

**"watcher\_count": Integer**

**}],**

**"total\_forked\_count": Integer,**

**"total\_languages": {**

**Key<String>: Value<Integer>**

**},**

**"total\_original\_repos":Integer,**

**"total\_topics: {**

**Key<String>: Value<Integer>**

**},**

**"total\_watchers\_count": Integer**

**}**