

## GITHUB API INTEGRATION MODULE USING SHELL SCRIPTING:

### Basic overview:

This script will help users to communicate and retrieve information from GitHub.

We need to provide our GitHub token and rest api to the script as input.

### Script :

```
#!/bin/bash
#####
# Author: Hemant
# Version: v1
#
#
# This script will help users to communicate and retrieve information from GitHub
# Usage:
#   Please provide your github token and rest api to the script as input
#
#####

# input validation purpose
if [ $# -lt 2 ]; then
    echo "usage: $0 [your github token] [REST expression]"
    exit 1;
fi

GITHUB_TOKEN=$1
GITHUB_API_REST=$2

#we will get this from github rest api documentation
GITHUB_API_HEADER_ACCEPT="Accept: application/vnd.github.v3+json"

#creation of temporary file for storing the output and printing it whenever its needed
temp=$(basename $0)
TMPFILE=$(mktemp /tmp/${temp}.XXXXXX) || exit 1

#Making the rest call to github api by sending the github token and storing it in temporary file
function rest_call {
    curl -s $1 -H "${GITHUB_API_HEADER_ACCEPT}" -H "Authorization: token $GITHUB_TOKEN" >> $TMPFILE
}

# single page result-s (no pagination), have no Link: section, the grep result is empty
last_page=$(curl -s -I "https://api.github.com/${GITHUB_API_REST}" -H "${GITHUB_API_HEADER_ACCEPT}" -H "Authorization: token $GITHUB_TOKEN" | grep '^Link:' | sed -e 's/Link:.*page=//g' -e 's/.*$//g')

# does this result use pagination?
if [ -z "$last_page" ]; then
    # no - this result has only one page
    rest_call "https://api.github.com/${GITHUB_API_REST}"
else
    # yes - this result is on multiple pages
    for p in $(seq 1 $last_page); do
        rest_call "https://api.github.com/${GITHUB_API_REST}?page=$p"
    done
fi

cat $TMPFILE
"github-api-integration-module" 511, 15758
```

Execute the script using the following commands:

`./github-api-integration-module.sh $password /user`

Output: It will show the all the users of the GitHub repository

Use of this project : This script is basically used to retrieve the information from the github api without manually going to the github UI for searching for the required information. This is automation module which can be integrated with multiple api to increase the efficiency of the organization .