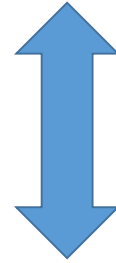
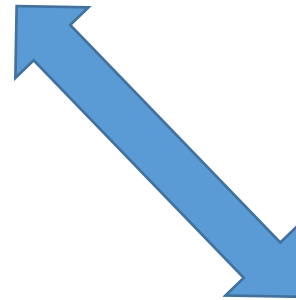


Client module to be installed
in each server side

Server 1

Server 2

Server 3



In config of client all
the server and user
information

Config.
py

clinet

Driver module to be
installed in client side

Design principles

- In this application we have two modules . Client module and driver module.
- Client module is to be installed in server sides and Driver module is in client side.
- Drivermodule:--

Here in "config.py" all the server and user address are saved so that getting this we can sent certain server information to a certain user.

In "driver.py" `send_simple_message()` send email to user .

`get_status_of_servers()`: is used if server do not respond for 5 sec automatically it will sent email to the user.

- Client Module :

Here in "stats.py" all the function are written which will return system information.

get_system_status() - will give system status like RAM and CPU used

get_process_list() - will give all the process running in server and we can filter it by number of process by CPU % used .

run_command() - can be used to run command in server

In "server.py" we authenticate the user and give the user a token to get desired server information .

How to run:

In order to get server information user has to log in first. The server will give a authentication token ; using this token user can get desired server information.

1. first we have to execute the file "server.py" in "client" folder .Then the application will run in a port(ex: <http://127.0.0.1:5000/>)
2. to get the status user have to log in first .So go to "<http://127.0.0.1:5000/login>" in browser. Here we have to provide username and password ="HelloDude".
3. It will return a token_id
(ex: "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJleHAiOiE1MTMyNzc5NzAsInVzZXliOiJzYW1iaXQifQ.ARnOIT1Ja4jaKtXaN5ziOdCaqlLtG7wNnrJcSLiNjuo")
4. To get status : "http://127.0.0.1:5000/stats/?token=token_id
5. similarly we can get processlist : "http://127.0.0.1:5000//processlist/?token=token_id"

- Flaw in Design

1. In the Unit test as the function returns instant system information data which varies every time . It is difficult pass through unit test.

2. I have tried to send information by email and text message .As text message API service (like twilio) are not giving free service now-a-days I could not use it. That's why I used "mailgun " Services for emailing the user.