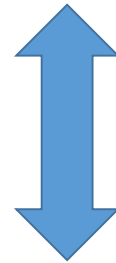
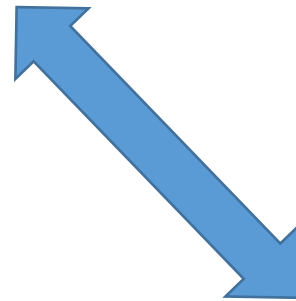


Server module to be installed
in each server side

Server 1

Server 2

Server 3

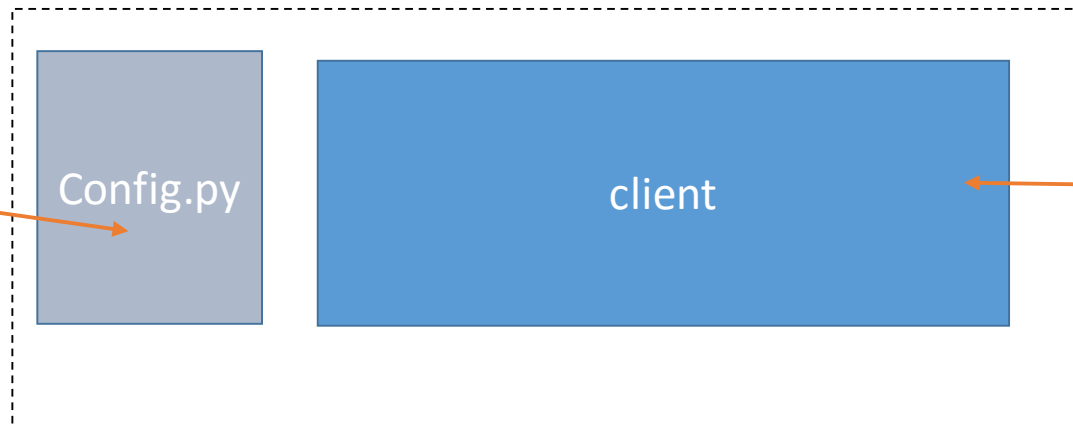


In config of client all
the server and user
information

Config.py

client

Driver module to be
installed in client side



Design principles

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

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.

- Server 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 install :

System requirements: python 3.5, works on linux system only

Server side:

1. download from github <https://github.com/geeksambit/marax-ai.git>.
- 2.unzip the folder
3. install all the constraints inside requirements.txt inside 'server' folder .
- 4.run server.py in server side(in terminal/comand : python server.py)

Client Side:

1. Open the Driver folder.
- 2.run driver.py in server side(in terminal/comand : python driver.py)

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 "Server" 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.eyJleHAiOiJlMTMyNzc5NzAsInVzZXliOiJzYW1iaXQifQ.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.