

Process_Monitoring_System

after pulling the repo make sure to put your server ip in process service file in frontend server(frontend-server/src/app/services/process.service.ts) (this will be improved later using nginx for production mode)

after that,run `sudo /bin/bash install.sh`

install.sh will generate automatically the process_monitoring_service file and copy it to /etc/systemd/system (enable & restart)

to test it move to the test folder: `cd test`

1-run the command `sudo /bin/bash test.sh` this will create a process that will throw an exception after almost 150 seconds

2-run `ps -aux | grep "test"`

3-read the pid

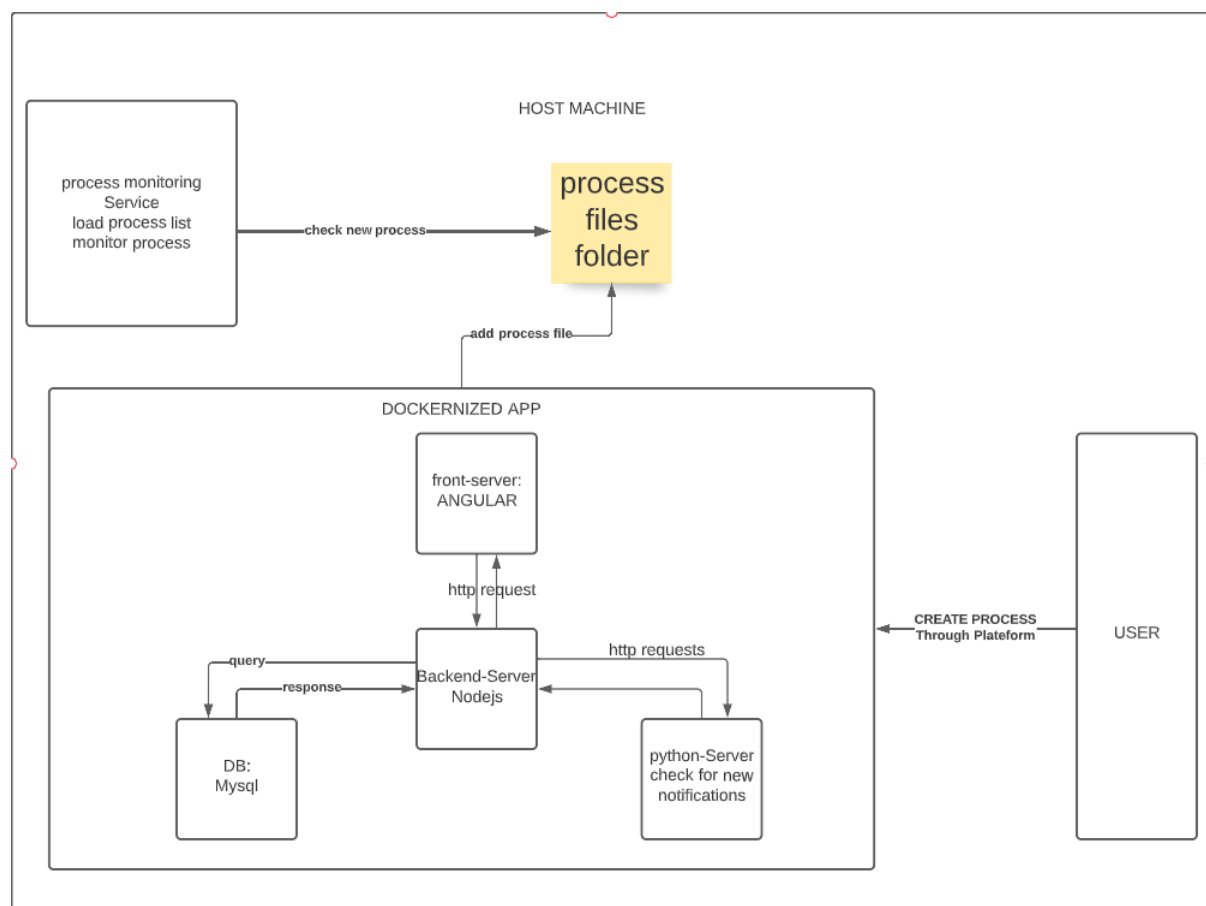
4-open the front server ip:4202

5-fill the form to create the process (try to make it before the 150 seconds)

6-wait for the email notification

7-concerning the telegram notification you should create your own bot to obtain token and chat id

#DIAGARAM



The application is composed of dockernized app and process_monitoring service:

The process monitoring service is implemented in python with shell scripting for good interaction with the host machine .

It checks the process files folder if there is a new file it removes it and reloads the list of monitored processes from the backend-container.

If any process is down it sends a http request to the backend-server to create a new notification containing the pid,error message retrieved from the log file as well as running time in seconds for the dead process.

the Dockerized application is composed of 4 containers:

1-front-container using angular framework which enables the user to create a monitored process:this step will add a monitored process into the database as well as generate a process file in the shared process_files folder .

2-backend-container using node js framework which seems to be a good stack with angular and includes easy-to-use telegram and email messaging api.

3-python-server:implemented with python that periodically sends requests to the backend server to check for unseen notifications:if there is any it sends a request to launch email,telegram messaging.

4-DB:mysql Database since our notifications structured