List of commands for creating the HomeControl application

Edit /boot/cmdline.txt:

sudo nano /boot/cmdline.txt

Enable `cgroups` by adding "cgroup_memory=1 cgroup_enable=memory" at the end of that file(without the double quotes and in the same line). Here is an example of file content with the change ==highlighted==:

```
console=serial0,115200 console=tty1 root=PARTUUID=2aaaa7b2-02 rootfstype=ext4 fsck.repair=yes
rootwait quiet splash plymouth.ignore-serial-consoles cgroup_memory=1 cgroup_enable=memory
```

Save the file, then reboot:

sudo reboot

Install K3s(a lightweight Kubernetes for IoT) using the following command. The '--write-kubeconfig-mode=644' option lets you use K3s without *sudo*:

curl -sfL https://get.k3s.io | INSTALL_K3S_EXEC='--write-kubeconfig-mode=644' sh –

Wait for the installation to complete(~30 seconds) then check for Ready node:

kubectl get node

Install Portainer:

kubectl apply -f
https://raw.githubusercontent.com/portainer/k8s/master/deploy/manifests/portainer/portainer.yaml

Launch Portainer in the browser:

http://<raspberrypi_host>:30777

Clone the Git repository:

git clone https://github.com/oshokry/HomeControl.git

Make .sh scripts of the HomeControl application executable:

sudo find ~/HomeControl -type f -name ".sh" -exec chmod +x {} \;*

Create the secrets:

cd ~/HomeControl/secrets

./create.sh

Create the HomeControl application:

cd ~/HomeControl

./create-all.sh

Wait for 5 minutes for application resources to be created. Then confirm that 4 Pods for *web-app, control, phpmyadmin, and mysql* are created:

kubectl get pod

Access the application. Default user/password to login are admin/admin:

http:// <raspberrypi_host>:30080/