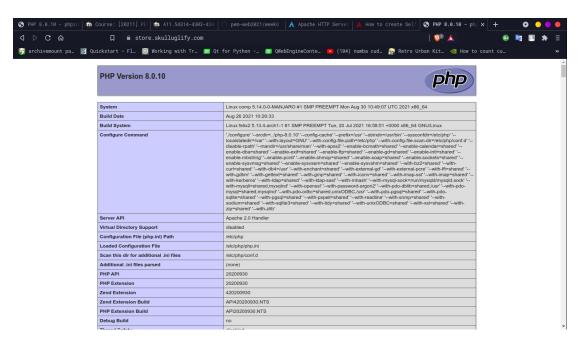NAMA: AHMAD ASY SYAFIQ
NIM: A11.2020.12411

logs menginstall web server apache plus ssl tervalidate tapi cuman beberapa browser local user, hehehe

untuk git repo https://github.com/111202012411/pem-web2021

platform like unix, distro manjaro
web server apache + php

mengunduh depends terlebih dahulu
pacman -Syu apache php-apache

# membuat folder untuk document root nya
sudo mkdir -p /var/local/www
sudo chmod o+x /var/local/www
sudo mkdir -p /var/local/www/admin
sudo hmod o+x /var/local/www/admin

sudo echo "<?php phpinfo(); ?>" >/var/local/www/index.php
sudo echo "<?php phpinfo(); ?>" >/var/local/www/admin/index.php

configure beberapa config didalam /etc/httpd/conf

```
#vhost, /etc/httpd/conf/extra/httpd-vhosts.conf

<VirtualHost *:80>
     ServerAdmin admin@skulluglify.com
     DocumentRoot "/var/local/www/admin"
     ServerName store.skulluglify.com
     ServerAlias www.store.skulluglify.com
     Redirect permanent "/" "https://skulluglify.com/"
     ErrorLog "/var/log/httpd/www.store.skulluglify.com.error.log"
     CustomLog "/var/log/httpd/www.store.skulluglify.com.log" common
</VirtualHost>


<VirtualHost *:443>
     ServerAdmin admin@skulluglify.com
     DocumentRoot "/var/local/www/admin"
     ServerName store.skulluglify.com:443
     ServerAlias www.store.skulluglify.com:443
     SSLEngine on
     SSLCertificateFile "/etc/httpd/conf/server.crt"
     SSLCertificateKeyFile "/etc/httpd/conf/server.key"
     SetEnvIf User-Agent ".*MSIE.*" nokeepalive ssl-unclean-shutdown
     ErrorLog "/var/log/httpd/www.store.skulluglify.com.error.log"
     CustomLog "/var/log/httpd/www.store.skulluglify.com.log" common
</VirtualHost>
```

untuk loaded module php, saya uncomment bagian   pada /etc/httpd/conf/httpd.conf
LoadModule mpm_prefork_module modules/mod_mpm_prefork.so
LoadModule socache_shmcb_module modules/mod_socache_shmcb.so
LoadModule rewrite_module modules/mod_rewrite.so
Include conf/extra/httpd-ssl.conf

dan menambahkan config berikut pada /etc/httpd/conf/httpd.conf
<<<php_modules>>>
LoadModule php_module modules/libphp.so
AddHandler php-script .php
Include conf/extra/php_module.conf
<<<php_modules>>>

menambahkan address pada /etc/hosts

127.0.0.1 store.skulluglify.com

```
# membuat CA Certificate dan Certificate pada Server
# dengan membuat script genkey cert dan pem secara automatis
# shell script beberapa modified

subject="/C=ID/ST=JavaCenter/L=bandarCity/O=skulluglifyOrgz/OU=IT/emailAddr
ess=skulluglify@outlook.com/CN=store.skulluglify.com"

openssl req -x509 -nodes -new -sha256 -days 3650 -newkey rsa:4096 -keyout ca.key
-out ca.pem -subj $subject

openssl x509 -outform pem -in ca.pem -out ca.crt

certutil -d sql:$HOME/.pki/nssdb -A -t "C,," -n "store.skulluglify.com" -i ca.crt

cat <<EOF >default.conf
authorityKeyIdentifier=keyid,issuer
basicConstraints=CA:FALSE
keyUsage=digitalSignature,nonRepudiation,keyEncipherment,dataEncipherment
subjectAltName=@alt_names
extendedKeyUsage=serverAuth

[alt_names]
DNS.1=store.skulluglify.com
IP.1=192.168.1.8
EOF

openssl req -new -nodes -newkey rsa:4096 -keyout store.skulluglify.com.key -out
store.skulluglify.com.csr -subj $subject

openssl req -in store.skulluglify.com.csr -noout -text

openssl x509 -req -sha256 -days 3650 -in store.skulluglify.com.csr -CA ca.pem
-CAkey ca.key -CAcreateserial -extfile default.conf -out store.skulluglify.com.crt

openssl x509 -in store.skulluglify.com.crt -text -noout

cat <<EOF >vhost.conf
SSLEngine on
SSLCertificateFile        /etc/httpd/conf/server.crt
SSLCertificateKeyFile     /etc/httpd/conf/server.key
EOF

sudo cp -r store.skulluglify.com.crt /etc/httpd/conf/server.crt
sudo cp -r store.skulluglify.com.key /etc/httpd/conf/server.key
sudo systemctl enable --now httpd.service
sudo systemctl restart httpd.service

# dengan menjalan kan script ini maka web server apache berhasil terinstall plus ssl
tervalid hanya untuk beberapa browser, untuk test nya tervalid di chrome-google, dan
brave, sedangkan microsoft-edge-dev, dan mozilla masih mendapatkan kendala.
```

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