

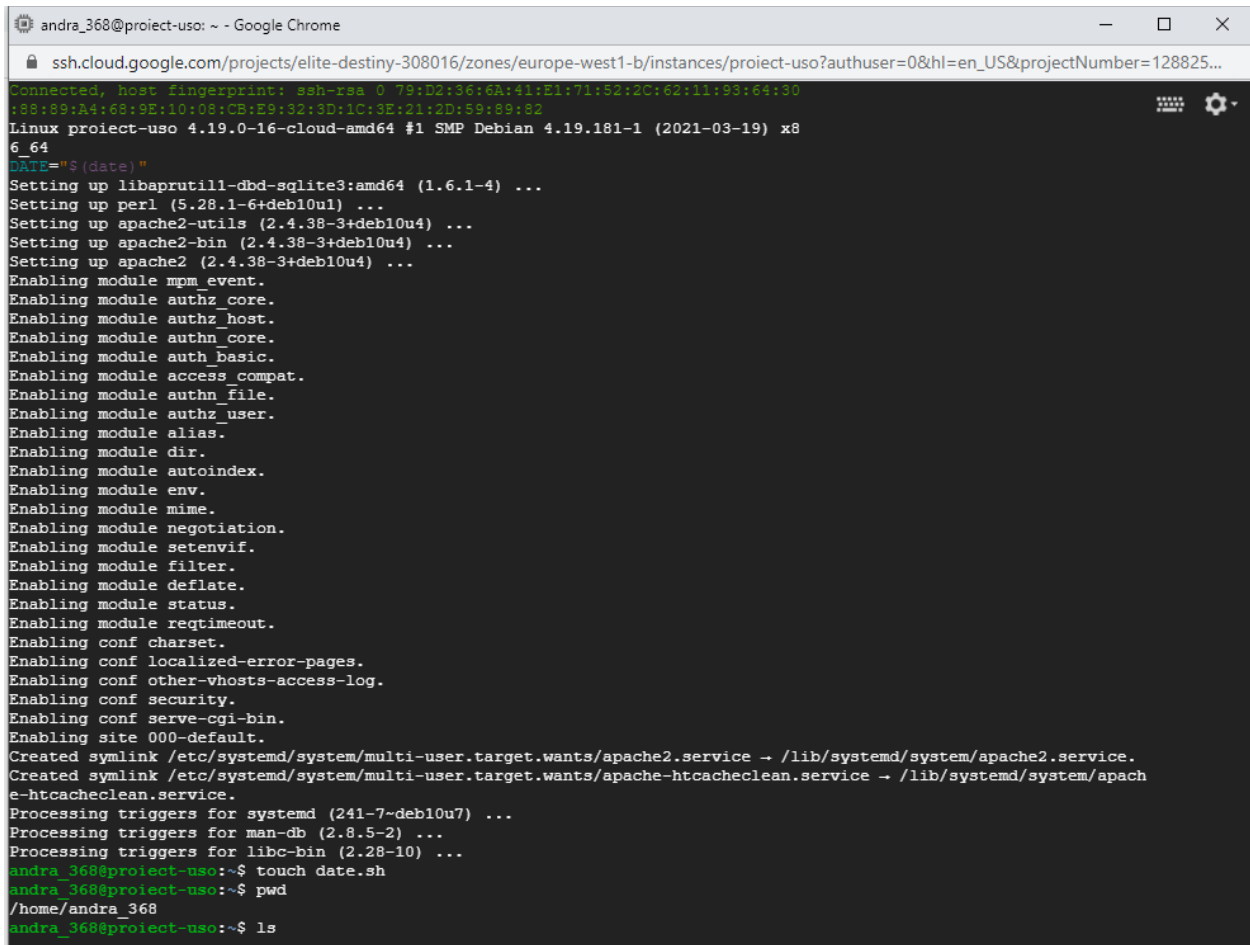
# Proiect Utilizarea Sistemelor de Operare

## Cerința

1. **Crawl** (2-3 studenți) – Creați o mașină virtuală în care este instalat și configurat un server web. Folosiți un utilitar ca **curl(1)** sau **wget(1)** cu care să descărcați tot conținutul pe care îl puteți accesa pe un site existent (ex. <http://fmi.unibuc.ro>). Configurați server-ul web să servească aceste pagini și să imite pe cât se poate de bine originalul. Permiteți acces din exterior doar pe porturile necesare accesării site-ului.

## Pașii realizării proiectului

- Instalare Apache;
- Creare fisier date.sh (inițial pentru verificarea funcționalității);



```
andra_368@project-uso: ~ - Google Chrome
ssh.cloud.google.com/projects/elite-destiny-308016/zones/europe-west-1-b/instances/project-uso?authuser=0&hl=en_US&projectNumber=128825...
Connected, host fingerprint: ssh-rsa 0 79:D2:36:6A:41:E1:71:52:2C:62:11:93:64:30
:88:89:A4:68:9E:10:08:CB:E9:32:3D:1C:3E:21:2D:59:89:82
Linux project-uso 4.19.0-16-cloud-amd64 #1 SMP Debian 4.19.181-1 (2021-03-19) x8
6_64
DATE=$(date)
Setting up libaprutil1-dbd-sqlite3:amd64 (1.6.1-4) ...
Setting up perl (5.28.1-6+deb10u1) ...
Setting up apache2-utils (2.4.38-3+deb10u4) ...
Setting up apache2-bin (2.4.38-3+deb10u4) ...
Setting up apache2 (2.4.38-3+deb10u4) ...
Enabling module mpm_event.
Enabling module authz_core.
Enabling module authz_host.
Enabling module authn_core.
Enabling module auth_basic.
Enabling module access_compat.
Enabling module authn_file.
Enabling module authz_user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /lib/systemd/system/apach
e-htcacheclean.service.
Processing triggers for systemd (241-7~deb10u7) ...
Processing triggers for man-db (2.8.5-2) ...
Processing triggers for libc-bin (2.28-10) ...
andra_368@project-uso:~$ touch date.sh
andra_368@project-uso:~$ pwd
/home/andra_368
andra_368@project-uso:~$ ls
```

```

Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /lib/systemd/system/apach
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Processing triggers for systemd (241-7-deb10u7) ...
Processing triggers for man-db (2.8.5-2) ...
Processing triggers for libc-bin (2.28-10) ...
andra_368@project-uso:~$ touch date.sh
andra_368@project-uso:~$ pwd
/home/andra_368
andra_368@project-uso:~$ ls
date.sh
andra_368@project-uso:~$ vi date.sh
andra_368@project-uso:~$ cat date.sh
DATE=$(date)
echo "Content-type: text/html"
echo "<html><head><title>Test</title></head><body>"
echo "Today is $DATE <br>"
andra_368@project-uso:~$ sudo chmod 755 date.sh
andra_368@project-uso:~$
andra_368@project-uso:~$ mv

```

```

andra_368@project-uso:~$ vi date.sh
andra_368@project-uso:~$ cat date.sh
DATE=$(date)
echo "Content-type: text/html"
echo "<html><head><title>Test</title></head><body>"
echo "Today is $DATE <br>"
andra_368@project-uso:~$ sudo chmod 755 date.sh
andra_368@project-uso:~$
andra_368@project-uso:~$ mv date.sh /var/www/html
mv: cannot move 'date.sh' to '/var/www/html/date.sh': Permission denied
andra_368@project-uso:~$ sudo !!
sudo mv date.sh /var/www/html
andra_368@project-uso:~$ cd /var/www/html
andra_368@project-uso:/var/www/html$ ls
date.sh index.html
andra_368@project-uso:/var/www/html$ sudo chmod 755 date.sh
andra_368@project-uso:/var/www/html$
andra_368@project-uso:/var/www/html$ ls -l date.h
ls: cannot access 'date.h': No such file or directory
andra_368@project-uso:/var/www/html$
andra_368@project-uso:/var/www/html$ sudo !!
sudo ls -l date.h
ls: cannot access 'date.h': No such file or directory
andra_368@project-uso:/var/www/html$ ls -l date.sh
-rwxr-xr-x 1 andra_368 andra_368 125 May  4 07:15 date.sh
andra_368@project-uso:/var/www/html$

```

VM instances – Compute Engine X How to run simple shell scr

← → ↻ ⚠ Not secure | 34.77.246.61/date.sh

Today is Wed May 5 17:47:12 UTC 2021  
 Current directory is /var/www/html  
 Shell Script name is /var/www/html/date.sh

- Modificarea fişierului date.sh;

```

#!/bin/bash
echo "Content-type: text/html"
echo ""
echo "<html><head><title>Gaseste site-ul :)</title></head><body>"
echo "<center><font color=\"#ff0066\" face=\"Times New Roman\" size=\"7\">Introduceti link-ul site-ului <3</center>"
echo "<body bgcolor=\"#ffcccc\"></body>"
echo "<form ACTION=\"processInput.sh\" METHOD=\"post\">"
echo "<center><INPUT TYPE=\"text\" NAME=\"site\"></a></center>"
echo "<center><INPUT TYPE=\"submit\" VALUE=\"Submit\"></a></center>"
echo "</body></html>"

```

- Crearea fișierului processInput.sh.

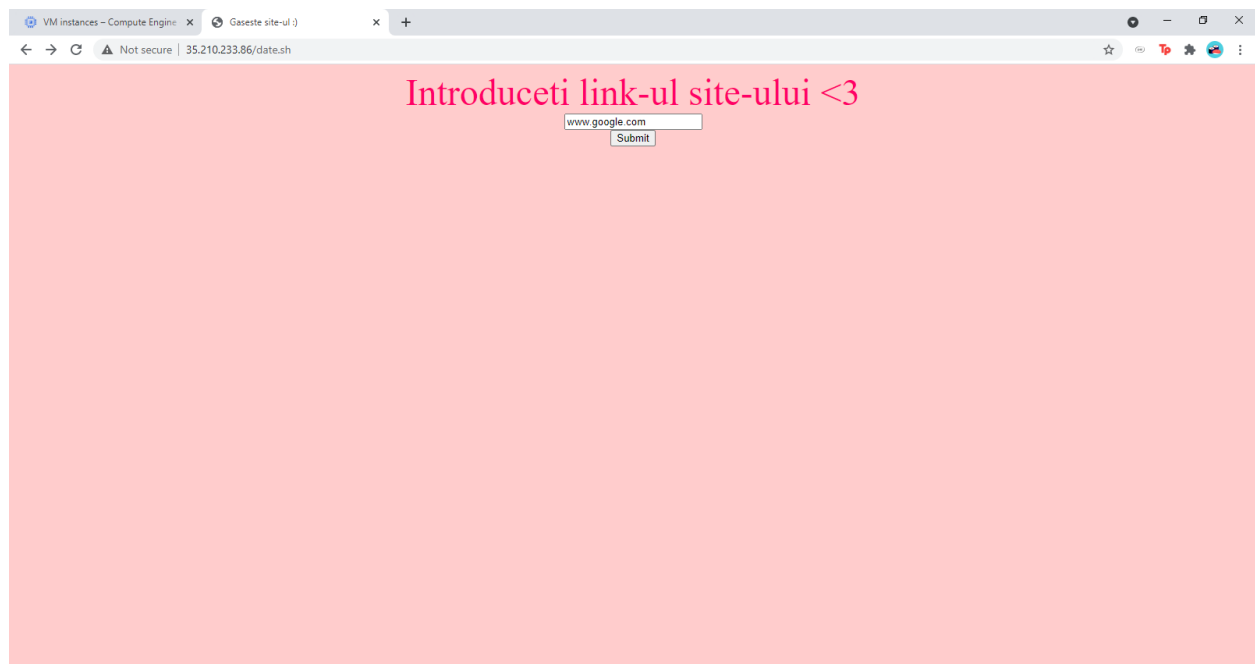
```
#!/bin/bash
read POST_STRING
SITE_FINAL=$(cut -d "=" -f2 <<< $POST_STRING)
echo "Content-type: text/html"
echo ""
echo "<html><head><title>Am gasit pagina! (sau nu : 'c)</title></head>"
echo "Vom cauta site-ul $SITE_FINAL<br>"
wget -O altindex.html $SITE_FINAL
if [[ $? -eq 0 ]]
then
    echo "Site-ul poate fi accesat <a href=\"http://35.210.233.86/altindex.html\" > aici."
else
    echo "Nu am putut gasi site-ul :c</center>"
fi
```

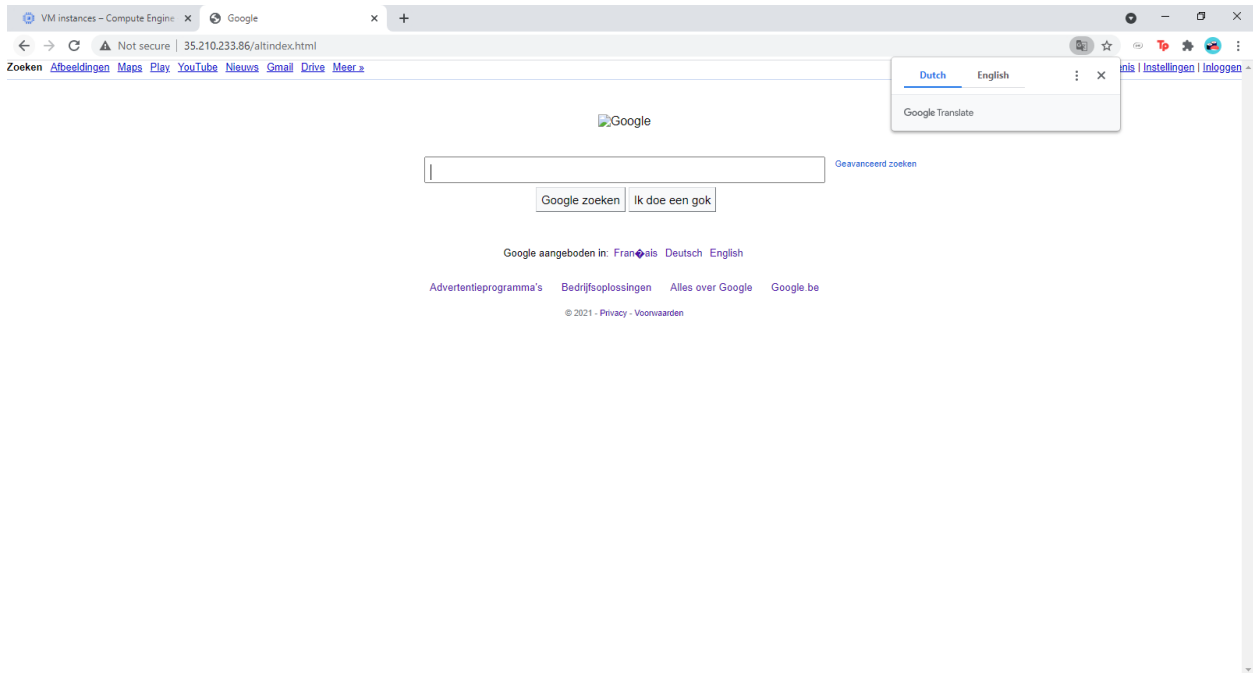
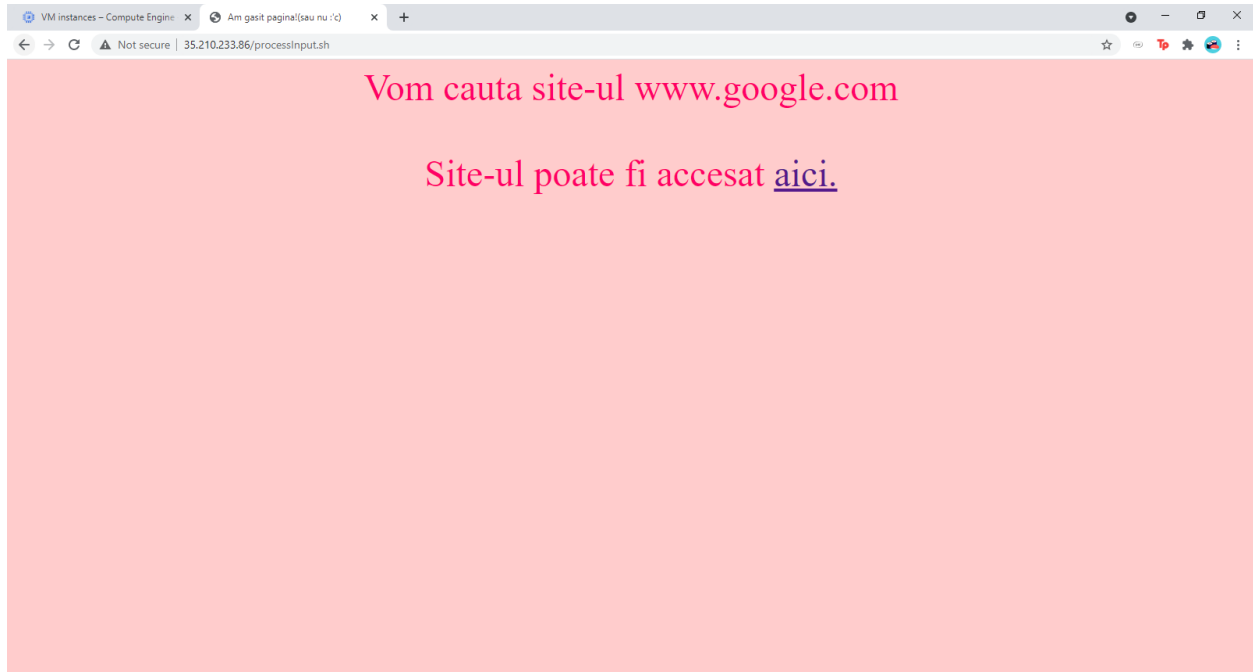
## Interfața site-ului

- IP-ul mașinii virtuale: [35.210.233.86](http://35.210.233.86);
- Adresa la care se face căutarea site-ului: <http://35.210.233.86/date.sh>;
- Adresa la care se poate accesa site-ul căutat: <http://35.210.233.86/processInput.sh>;
- Adresa la care se poate găsi site-ul căutat: <http://35.210.233.86/altindex.html>;

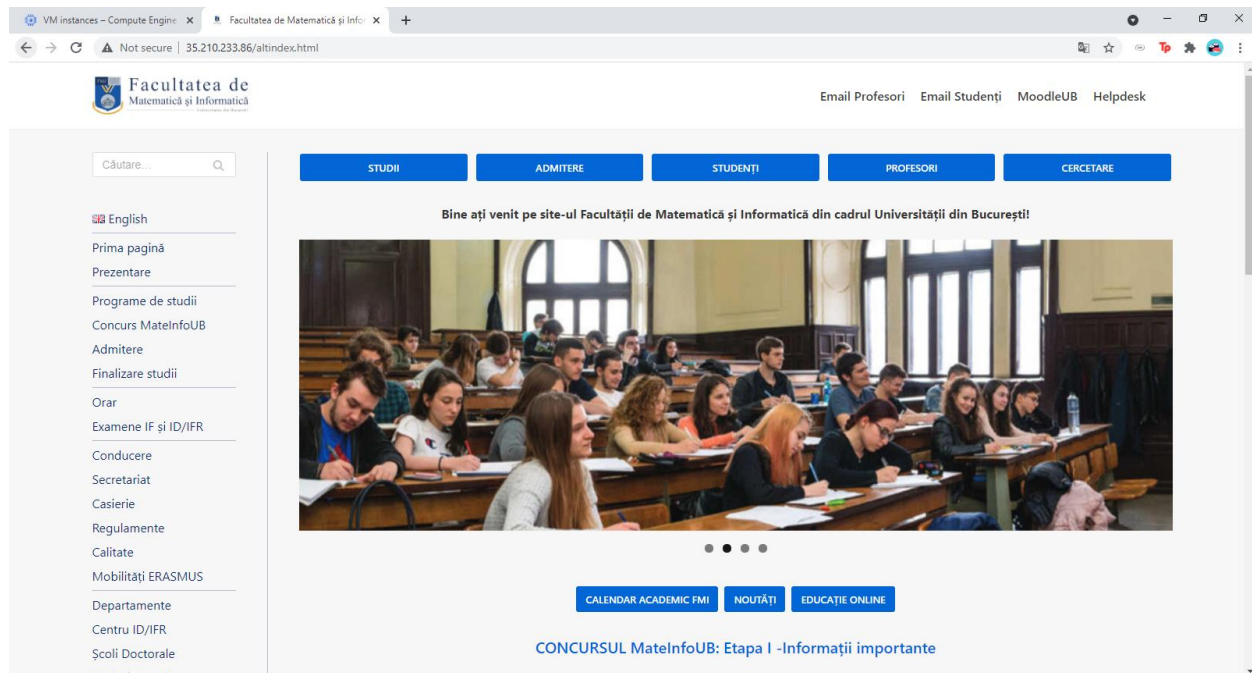
## Exemple

- Căutarea site-ului Google:

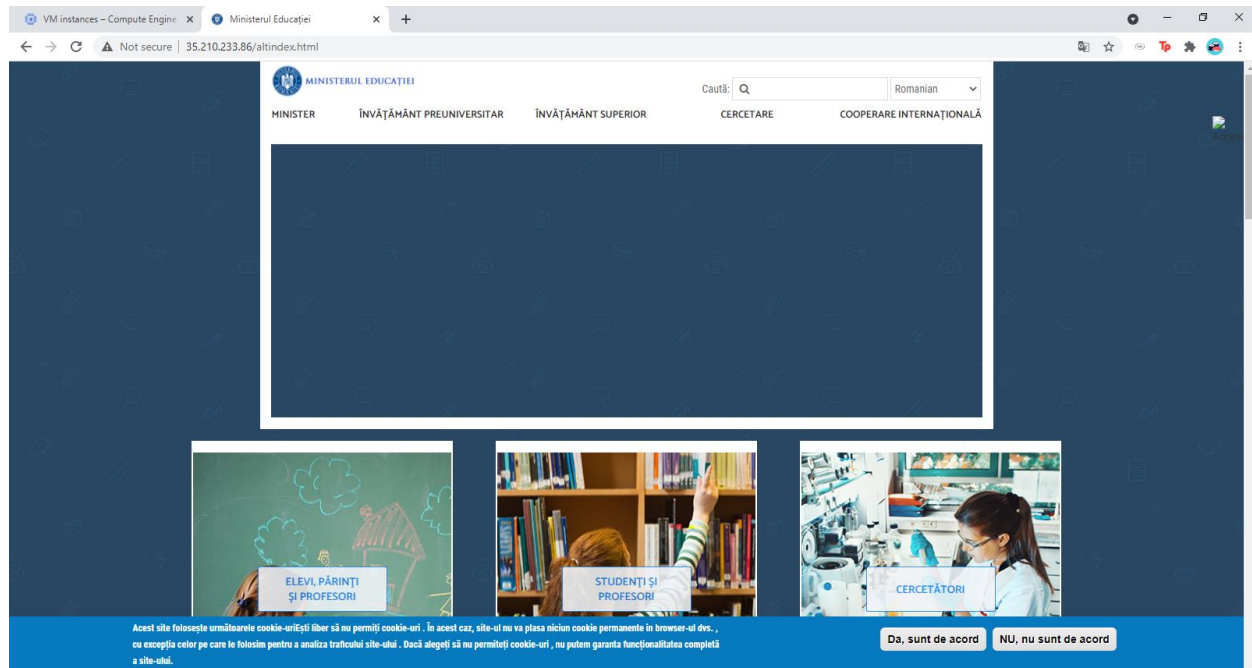




- Căutarea site-ului Facultății de Matematică și Informatică, Universitatea București:



- Căutarea site-ului Ministerului Educației:



- Căutarea unui site inexistent:

