CU
CHANDIGARH UNIVERSITY

Project Based on Python
WEBSITE BLOCKER

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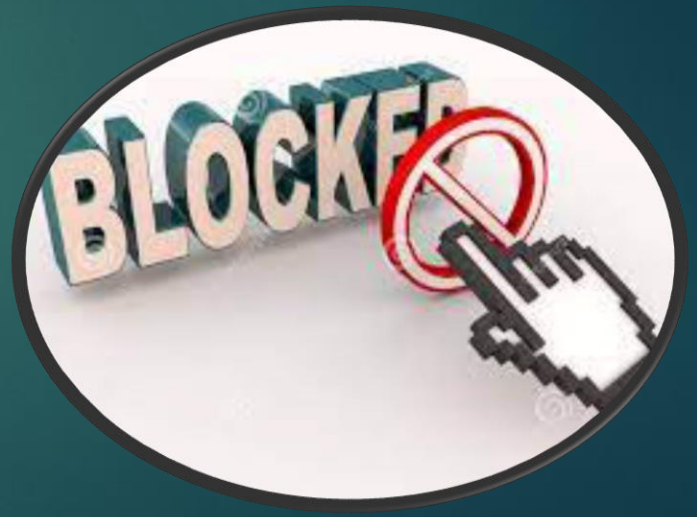


Website Blocker :

This project is to create website blocker for windows , mac as well as linux , which will also have an option to unblock those websites so that user can not open them during the specific period .

Why do we need to block website ?

The internet puts the world at your fingertips. From laughing at your favorite shows to shuddering at the news, anything you want to access is just a click away. But that may be worrisome if you're a parent or teacher for your child.

Parental controls help reduce the risk of your child viewing inappropriate content on the web.

Some websites contain viruses and if the site is not blocked and normal user can access it directly and some normal user is not aware of the file they are downloading which contains malware. If someone downloads that file then his computer can be accessed by other unauthorized people so to increase our privacy and more data protection blocking option website is needed.

Let's discuss how can we build such an application by using python.

HOW DO WE BLOCK SITES?

Every operating system has a host file and it's on this file where we are going to add a list of websites we want to block by redirecting them to 127.0.0.1 (localhost).

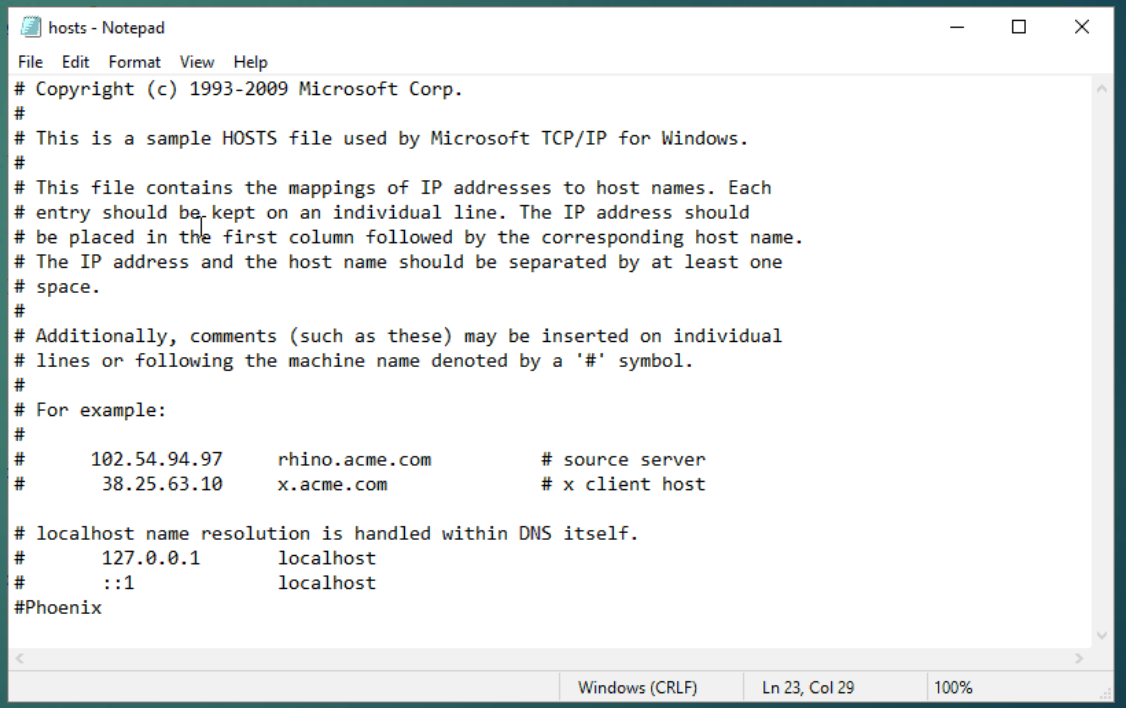
We will add website URLs to the host file and mapping them to the localhost thus preventing you from accessing the real site during working hours.

Location of hosts file

For Windows:
C:\Windows\System32\drivers\etc

For mac : /etc/hosts

For Linux : /etc/hosts



Building our Website Blocker

Libraries used in this application are time and datetime for getting the current time of the day and also to give a delay in responding. The coding part is very simple.

We first decide a duration in which we want to block the websites. We also decide which websites have to be blocked. Then we check if our current time is in the duration. If it is then we write to the hosts file local machine ip address and the website(domain) name. If it is outside the duration then we erase the file contents.

Scheduling our windows blocker in Windows Startup :

First of all change the extension of your script from ".py" to ".pyw".Now open task scheduler.

You may see website blocker already scheduled because I have already scheduled in my computer for my testing purpose. Follow further instruction of scheduling carefully in order to schedule website blocker in your computer.

Click on "create task". Fill the name of your choice and flag "Run with highest privilege"

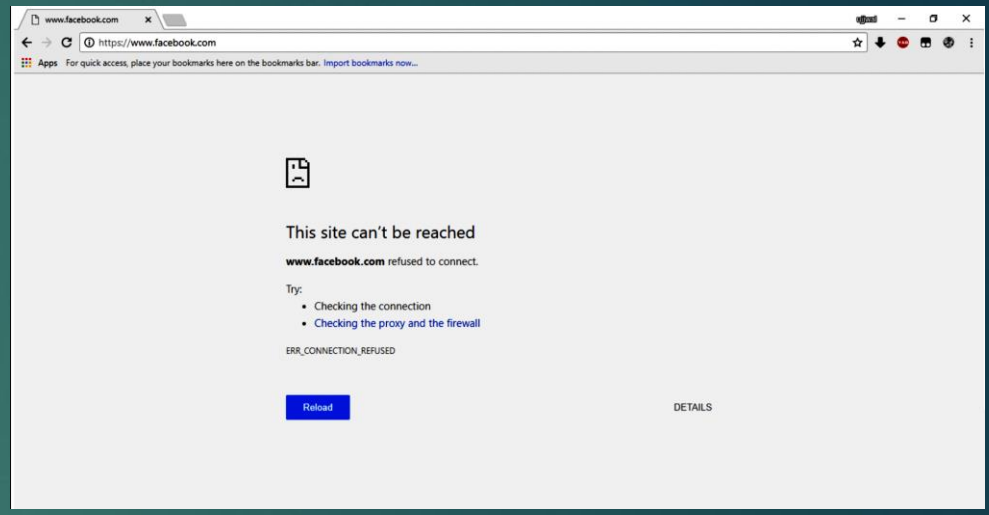
Now go to triggers, select "At startup" for begin the task.

Go to Action bar and create a new action and give path of your script.

Go to conditions bar and unflag the power section.

Press ok and you can see the script scheduled

Finally we will restart our PC and our project will be executed .




THANK YOU