Internet surfacing - google | bing | social media | shopping website

4-5% of total internet - surface web

Google dorking - advanced technique to fetch information from Google - keywords

Dark web - 30% of the internet

Deep web - remaining of the internet

* By normal browser - Tor browser
* Brave browser - enable tor circuit - onion routing
* .onion domain

=> hidden wiki leak

=> GitHub - .onion weblink

DuckDuckGo - search engine

<http://juhanurmihxlp77nkq76byazcldy2hlmovfu2epvl5ankdibsot4csyd>. Onion

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Linux operating system - windows OS | MAC os

Android Mobile - iPhone

The kernel in OS - the heart of OS

Manage the resources - Hardware

CPU | RAM | ROM | GPU | Internet

As per the user's request

Linux kernel - JVM - java

Kali | ubuntu - 600+

=> open source OS - source code of OS is available publically

Linux must skill - oracle virtualbox vmware workstation VMware fusion

AWS | AZURE => 1 yrs free subscription

Free tier Linux - ubuntu| Debian | centOS

Tryhackme

Hackthebox academy

Picoctf

Ctf platform

Proving ground

vulnhub

Target IP => 10.10.104.144

Kali IP => 10.10.234.97

Ethical hacking process

1. Information gathering
2. Scanning and enumeration
3. Gaining access
4. Post-exploitation phase - persistent
   1. Backdoor
   2. Shell
   3. Malware
5. Clear the track

Logs and events.

Target - website, account, hardware device, OS, application/software, car, satellite, drone, biometric, IoT devices

Linux | Computer networking | OS fundamental

Core skills - basic skills

Data flow

ICMP

ARP | RARP => IP to MAC and vice versa

Wireshark monitoring

NAMP - network mapper

Port open

Service

Version

OS

Firewall

PORT

1. Hardware ports -
2. Virtual ports - 65535

Remote

1. Command line interface - terminal access
2. GUI - graphical access
   1. Anydesk, team view, zoom

Apache-tomcat -> web server

Nginx, litespeed, iss web, etc

Enum4linux - user enumeration

=> Jan and Kay users is running on the target

Password attack

Hydra tool - for password cracking

Katana

Burpsuite

* Password list = is a combination of random
* Rockyou - 40 lakh password combination
* Jan = Armando

EMI

CRUNCH - custom password list

Python - cyber security | data science AI/ML

Java

DSA + - hackerrank hackerearth codechef sololearn

Javascript | HTML, CSS, and database

Basic

Linux | computer networking | OS

Intermediate

Cyber security concept - attacks and mitigation

Cryptography - encryption and decryption

Malware - virus, worm, trojan horse, ransomware, etc

Web fundamental - Internet and website working

Advanced

Website hacking

Mobile applciation hacking

API hacking

Network hacking

IoT and Hardware hacking

Cloud Security

Drone | satellite | car

Infra and thick client pentesting

MAC OS pentesting

Red teaming | blue teaming - SOC

Project area

Certification - skills

CEHv12 | Security+ | ejptv2

Ewpt | CPENT \ Pentest+

OSCP | CPPT | CREST CSPA and CPT

40K - 32k exam voucher + 8k trining charger

Usb esp = 300

Laptop and Python script - rubber ducky

Hardware - capture the packet

Tplink 700 rs link

CHFI certification course

Autopsy

Osforensic

KALI - for hacking

DEFT and CAINE - digital forensic OS Linux