School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:1   **DATE: 16 April 2020**

Tasks to be done:

Introduction to Cyber Security and types of Hackers

Tasks Completed:

Learnt the meaning of cyber security and importance of cyber security in the present era where everything is connected to internet.

Major hacks happened in 2017 like Equifax, Yahoo bombshell, voter records exposed etc.

Learnt about the different types of hackers and their roles.

There are white hat, black hat, grey hat, script kiddies, Hacktivist hackers and what we learn is white hat hacking which is legal and we help to check the systems and company data is secured and how can we secure the datas.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:2   **DATE: 17 April 2020**

Tasks to be done:

Phases of Hacking and Carrier Opportunities

Tasks Completed:

There are mainly 5 phases in hacking

- Information Gathering
- Scanning
- Gaining Access
- Maintaining access
- Covering Tracks

We will be learning first 3 steps as a white hat or ethical hacker.

There are many carrier opportunities like Security sales account manager, security project manager, cyber staffing director and technical jobs like pen tester, firewall administrator etc.

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:3   **DATE: 18 April 2020**

Tasks to be done:

Installing Kali Linux and Metasploitable

Tasks Completed:

Learnt the installation of Kali and Metasploit in Virtual Machine.

I used VM ware as virtual machine to install Kali from the official site. Same way I installed the Metasploitable 2 in VM ware.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:4   **DATE: 19 April 2020**

Tasks to be done:

Linux Basics

Tasks Completed:

Learnt the basic commands of Linux as the Operating system we will be using is Kali linux.

Basic commands like ls, pwd, cp, ifconfig, sudo, mkdir, data, top, kill, ping, wget, cat and their work in Linux terminal.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:5   **DATE: 20 April 2020**

Tasks to be done:

Linux File Permissions

Tasks Completed:

Learnt the file permission in Linux.

The first line "d" describes if it's a directory.

For each file we have Read(4) Write(2) and Execute(1) permissions.

For example –rw-r—r—1 root root 59347 Feb 16 14:46 script.jpeg describes about a jpeg image file has memory of 59347 KB which is created on Feb 16 at 14:46 stored in root directory and the owner has read and write permissions and group and anyothers have only read permission.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:6   **DATE: 21 April 2020**

Tasks to be done:

IPv4

Tasks Completed:

Learnt about the networking and IP address.

Internet Protocol Version 4 (IPv4) is a widely deployed.

It is of 32bits and have 5 classes namely A, B, C, D, E.

6   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:7   **DATE: 22 April 2020**

Tasks to be done:

IPv6

Tasks Completed:

Learnt about the networking and IP address.

Internet Protocol Version 6 (IPv6) is most recent version of internet protocol that provides identification and location of system for computer in network.

IPv6 have 128 bits.

.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:8   **DATE: 23 April 2020**

Tasks to be done:

NAT (Network Address Translation)

Tasks Completed:

Learnt about the NAT process which is usually a firewall assigns a public address to a computer inside a private network.

8   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:9   **DATE: 24 April 2020**

Tasks to be done:

OSI Layers

Tasks Completed:

Learnt about the OSI layers and their importance in communication between systems.

Layers like Application, Presentation, Session, Transport, Network, Datalink, Physical layer are in OSI layers.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:10   **DATE: 25 April 2020**

Tasks to be done:

Other networking terms and devices

Tasks Completed:

Learnt about other networks like DHCP and ports.

Learnt about many protocols like FTP, SSH, SMTP, DNS, POP3 etc.

Also learnt about the Proxy server, Routers and Switches.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:11   **DATE: 26 April 2020**

Tasks to be done:

Information Gathering Part1 and Part2

Tasks Completed:

Being a pen tester and ethical hacker information gathering is one of the important things.

The more information we have, the more vulnerable is your system.

Archive.org and netcraft.com gives details about the website, details about the server,

expire date etc.

Other information Gathering are wayBackMachine, whois.com, DNS stuff, link extractor,

virus Total.

DAY:12   **DATE: 27 April 2020**

Tasks to be done:

Information Gathering Part3 and Part4

Tasks Completed:

Learnt about the information gathering using the terminal.

Nslookup command in Linux helps to get details about a website.

Tracert is another command which gives details about the hops of website so that we can see the vulnerable router for getting into a website.

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:13   **DATE: 28 April 2020**

Tasks to be done:

Scanning

Tasks Completed:

Learnt about the network scanning and it scans all the ports, open ports.

The nmap tool can be used to get the ports and open ports of an IP address.

Ping and netcat is also used to scan the network for getting the open ports of the system.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:14   **DATE: 29 April 2020**

Tasks to be done:

Understanding Google Hacking

Tasks Completed:

Learnt about the advanced search in Google and how to get the desired results.

Learnt about the bots in the internet search and how it works.

                                   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:15   **DATE: 30 April 2020**

Tasks to be done:

Google Dorks

Tasks Completed:

Learnt about the google dorks and how to search in google.

Learnt about the top 10 google dorks used by the security expert. Cache, link, site, intitle, info, define, stocks etc.

15   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:16   **DATE: 1 May 2020**

Tasks to be done:

Introduction to Metasploit Framework

Tasks Completed:

Learnt about the Metasploit framework.

With the help of it we can hack any system connected to internet which is vulnerable.

16   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:17   **DATE: 2 May 2020**

Tasks to be done:

System Hacking

Tasks Completed:

Learnt about the system vulnerable to particular attack using msf.

Set payload and execute the payload in the host system and access the data.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:18   **DATE: 3 May 2020**

Tasks to be done:

Introduction to Armitage and Shodan

Tasks Completed:

Learnt about the Armitage which is similar to msf but it is graphical interface of
Metasploit.

All the things are preloaded in it. We click and use them.

Shodan is extra search engine used to search technical devices in the internet.

We can see the open cameras and other vulnerable devices connected to internet
throughout the wrorld.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:19   **DATE: 4 May 2020**

Tasks to be done:

Malwares

Tasks Completed:

Learnt the abbreviation and definition about the malware.

Types of malware and lifecycle of virus.

19   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:20   **DATE: 5 May 2020**

Tasks to be done:

Malwares (part 2)

Tasks Completed:

Learnt about the other malwares like worms, adware, spyware, rootkit.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:21   **DATE: 6 May 2020**

Tasks to be done:

Countermeasures of Malwares

Tasks Completed:

Learnt about the counter measures of malwares.

The use of updates software and updating to latest versions mainly clears the virus.

21   Signature of Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:22   **DATE: 7 May 2020**

Tasks to be done:

Wi-Fi Terms

Tasks Completed:

Learnt about Wi-Fi and how it's important to connect devices through internet.

Terms like Access point, bandwidth, channel, DNS are learnt.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:23   **DATE: 8 May 2020**

Tasks to be done:

Understanding 802.11x

Tasks Completed:

Learnt about ESSID, Firmware, WEP, WAP.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:24   **DATE: 9 May 2020**

Tasks to be done:

WAP2 Cracking

Tasks Completed:

Learnt about WAP2.

The command like airmon –ng where we get packets, channel numbers, ESSID etc.

We use available file containing passwords and apply brute force approach to crack the password of WAP2.

To secure use complicated password like phrases without spaces.

24   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:25   **DATE: 10 May 2020**

Tasks to be done:

Introduction to Web Applications

Tasks Completed:

Learnt about websites and webapps and terms like static, dynamic websites and webapp.

Learnt about Http response codes.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:26   **DATE: 11 May 2020**

Tasks to be done:

Brute Force Attack

Tasks Completed:

Learnt about Brupsuite, which act as interceptor between client and server.

26   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:27   **DATE: 12 May 2020**

Tasks to be done:

Arbitrary Code Execution

Tasks Completed:

Learnt about about DVWA and how to execute the arbitrary code in DVWA.

27   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:28   **DATE: 13 May 2020**

Tasks to be done:

CSRF

Tasks Completed:

Learnt about Cross side Request Forgery where we will be using the code copied from inspect element and working on it.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:29   **DATE: 14 May 2020**

Tasks to be done:

SQL injection

Tasks Completed:

Learnt about SQL injection which is used on forms and weak websites with less security where we can get the data stored in database.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:30   **DATE: 15 May 2020**

Tasks to be done:

XSS and Shell Exploits

Tasks Completed:

Learnt about cross site scripting and upload malicious file in upload to retrieve the location of database stored.

30   Signature of   Student   :……………………

DAY:31   **DATE: 16 May 2020**

Tasks to be done:

Introduction to Dos

Tasks Completed:

Learnt about Denial of service which is attack to a system.

DAY:32   **DATE: 17 May 2020**

Tasks to be done:

Types of Dos attacks

Tasks Completed:

Learnt about flood service and crashing software attacks.

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:33   **DATE: 18 May 2020**

Tasks to be done:

Introduction to DDos and prevention of DDos attack

Tasks Completed:

Learnt about Distributed Denial of Service which is attack from more system to a particular server and how to prevent the DDos attack.

33   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:34   **DATE: 19 May 2020**

Tasks to be done:

Introduction to Cryptography

Tasks Completed:

Learnt about Cryptography and cryptanalysis.

Definition of plain text and cipher text.

34   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:35   **DATE: 20 May 2020**

Tasks to be done:

Basic Cryptography Techniques

Tasks Completed:

Learnt about traditional cryptographic techniques like transpositions, pig-latin, grille, ceaser substitution, atbash.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:36   **DATE: 21 May 2020**

Tasks to be done:

CryptoSystem

Tasks Completed:

Learnt about keys, key management system and algorithm to cipher.

Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:37   **DATE: 22 May 2020**

Tasks to be done:

Various Type of Encryption

Tasks Completed:

Learnt about Symmetrical encryption, Asymmetric encryption, Hashes.

Signature of   Student   :……………………

DAY:38   **DATE: 23 May 2020**

Tasks to be done:

Enigma and other Cryptography Service

Tasks Completed:

Learnt about Enigma machine and how it works.

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:39   **DATE: 24 May 2020**

Tasks to be done:

Firewall and various types of Firewall

Tasks Completed:

Learnt about importance of firewall and security in network.

Learnt about bastion host, multi-homed firewall, screened subnet, packet filtering, application gateway.

39   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:40   **DATE: 25 May 2020**

Tasks to be done:

IDS

Tasks Completed:

Learnt about Intrusion Detection System and their types.

40   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:41   **DATE: 26 May 2020**

Tasks to be done:

IPS

Tasks Completed:

Learnt about Intrusion Prevention System.

41   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:42   **DATE: 27 May 2020**

Tasks to be done:

Capstone Project

Tasks Completed:

Gave the 3 assignment combined project and must be submitted as mail.

42   Signature of   Student   :……………………

DAY:43   **DATE: 28 May 2020**

Tasks to be done:

Capstone Project

Tasks Completed:

Scanning the network for the target network for active and passive attack on the system.

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:44   **DATE: 29 May 2020**

Tasks to be done:

Capstone Project

Tasks Completed:

Completed the project report and submitted to the team.

44   Signature of   Student   :……………………

School of Information Technology & Engineering

Department of Software and Systems Engineering

M.Tech Software Engineering

SWE3099-Industrial Internship

DAY:45   **DATE: 30 May 2020**

Tasks to be done:

Certification, Internship letters and Project letter from company

Tasks Completed:

Received the certificate through mail and other letters regarding the internship.

45   Signature of   Student   :……………………