Ethical Hacking and Cyber Security Workshop Report

A Two day workshop on Ethical hacking and Cyber Security was handled for II, III and IV year B.E. Computer Science and Engineering students by the resource person Mr. Chandraprakash Sankar, Tiruppur on 13.02.20 to 14.02.20 at P A College of Engineering and Technology, Pollachi -02, Coimbatore, Tamilnadu.

According to the Forbes report cyber security market is expected to grow up to $170 Billion within 2020. With around 20% rise in job opportunities in the field of cyber security. MNCs like TCS, Wipro, and Cognizant have invested huge amount in building up a team of cyber security professionals. This workshop on ethical hacking focuses strictly on how black hat hackers can gain access to critical and sensitive information of individual and organizations. Understanding in depth how to counter the attacks from black hat hackers the workshop demonstrate live hacking to spread awareness among individuals. In this workshop the resource person demonstrate how hackers can hack into smart phone, website hacking and admin panel bypass, undetectable virus which can steal data, ransomware development and safety measures, social media (Face book, Instagram) hacks and many more.

Where 80% of engineering graduates are unemployed (economic times) Ethical Hacking and cyber security provide them a great opportunity to make themselves employable. This two days workshop on ethical hacking provides hands on training with 100% practical live session.

The two days workshop session considered the following Ethical Hacking questions: (i) Do the users Think that their Face book Password's Are Safe? (ii) How Do the users Know If the Transactions that they Do Are Safe or Not? (iii) What If someone is monitoring the users Gmail Accounts? What are the users going to Do Then? Have the users ever thought About It?

Ethical Hackers are essential to secure computer systems from intrusion – as increased internet usage has resulted in increased security threats. The proposed Ethical Hacking Workshop mainly focused on the students eager to be a White Hat Hacker. It featured a brief introduction to the world of hacking starting with the importance of ethical hackers and their need in today's world scenario, including to the basics of networking that will help the students

have a deep understanding of the working of internet. Later, windows hacking using various methods were introduced and in the module of steganography the students learned how to hide files in other files in order to protect sensitive data. After the end of the aforementioned module the students were learned phishing in which the students been taught how to hack Face book Accounts and Gmail Accounts and thus how to avoid it. In the end, the students gained knowledge about the basics of Backtrack and the concept of man in the middle attack (MITM ATTACK).

Fig1: Resource person is addressing the audience   Fig2: Group Photo of the Two day Workshop

Projects Covered were: Phishing (Internet and Domain Required), Steganography, MITM (Internet Required), Denial of Service (Internet required), SQL Injection Using Dvwa, Windows Hacking, Fake Email (Internet required), and Creation of Trojans and Viruses.

The Students were benefited from the workshop in the following ways: (i) Firstly, the workshop gave student an insight of the Ethical Hacking i.e compromise of email hacking DOS attacks SQL Injection etc (ii) Hands-on session along with Theory sessions step by step (iii) The workshop also provided the resource person own Ethical Hacking Toolkit and HackIN Handouts, which consists of all the Tools and Techniques covered in the Workshop (iv) Students got to work with the Working Professionals in Digital Security Field and get to match up their Knowledge and Experience (v) Also the workshop didn't end up then and there. They can contact the concerned faculties throughout their graduation or thereafter also if they need any guidance regarding industrial Projects and Placements.

The duration of this workshop was two consecutive days with eight hours session each day, in a total of sixteen hours properly divided into theory and hand on practical sessions. At the end of this workshop a competition was organized among the participating students where each participating student was given Certificate of Participation and the Winners will get Certificate of Merit.