DAILY ONLINE ACTIVITIES SUMMARY

Date:	23-05-2020		Name:	PRASANNA		
Sem & Sec	8 th ,B		USN:	4AL16CS068		
Online Test Summary						
Subject						
Max. Marks			Score			
Certification Course Summary						
Course	Course Introduction to ethical hacking					
Certificate Provider		Great learner academy	Duration		6 Hrs	
Coding Challenges						
Problem Statement: prob1- To calculate number of uppercase and lowercase letter in given string						
Status: Solved						
Uploaded the report in Github			Yes			
If yes Repos	itory nam	ne	prasanna_p			
Uploaded the report in slack			Yes			

Online Test Details: (Attach the snapshot and briefly write the report for the same)

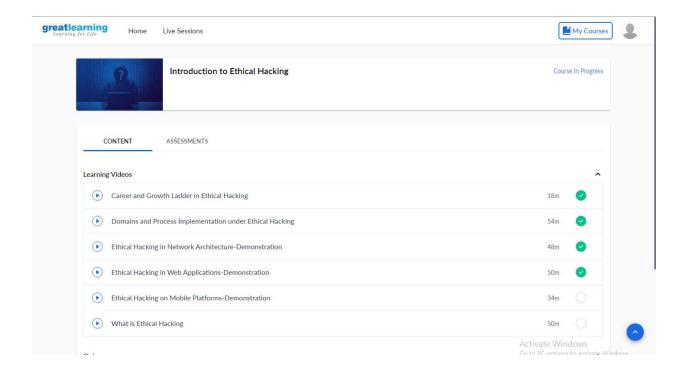
Certification Course Details: (Attach the snapshot and briefly write the report for the same)

Coding Challenges Details: (Attach the snapshot and briefly write the report for the same

1. Certification Course Details:

Mobile App pen-testing:

The Mobile Application Penetration Testing Methodology (MAPTM), as described by author Vijay Kumar Velu in his <u>ebook</u>, is the procedure that should be followed while conducting mobile application penetration testing. It is based on application security methodology and shifts the focus of traditional application security, which considers the primary threat as originating from the Internet.



The mobile application penetration testing methodology focuses on client-side security, file system, hardware, and network security. It is has been long considered that the end user is in control of the device.

Stages of the Mobile Application Penetration Testing Methodology:

Discovery requires the pentester to collect information that is essential in understanding events that lead to the successful exploitation of mobile applications.

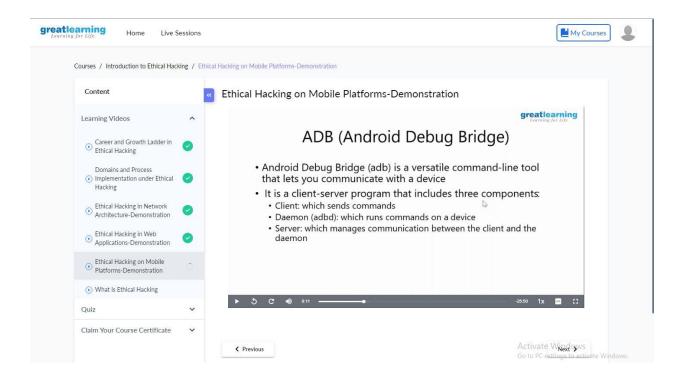
Assessment or analysis involves the penetration tester going through the mobile application source code and identifying potential entry points and weaknesses that can be exploited.

Exploitation involves the penetration tester leveraging the discovered vulnerabilities to take advantage of the mobile application in a manner not intended by the programmer initially did not intend.

Reporting is the final stage of the methodology and it involves recording and presenting the discovered issues in a manner that makes sense to management. This is also the stage that differentiates a penetration test from an attack.

- Open Source Intelligence (OSINT)—The pentester searches the Internet for information about the application. This might be found on search engines and social networking sites, leaked source code through source code repositories, developer forums, or even on the dark web.
- Understanding the Platform—It is important for the penetration tester to understand the mobile application platform, even from an external point of view, to aid in developing a threat model for the application. The pentester takes into account the company behind the app, their business case, and related stakeholders. The internal structures and processes are also taken to account.
- Client-Side vs Server-Side Scenarios—The penetration tester needs to be able to
 understand the type of application (native, hybrid, or web) and to work on the test
 cases. The application's network interfaces, user data, communication with other

- resources, session management, jailbreaking/rooting behavior are all taken into account here.
- Dynamic Analysis—The pentester reviews the mobile application as it runs on the device. Reviews done include forensic analysis of the file system, assessment of the network traffic between the application and server and an assessment of the application's inter-process communication (IPC).
- Reverse Engineering—This involves converting the compiled applications into human-readable source code. The penetration tester reviews the readable code in order to understand the internal application functionality and search for vulnerabilities. Android application source code may be modified once reversed and recompiled. The following tools can be used while conducting reverse engineering:



Android Debug Bridge:

- ADB is a versatile command line tool that lets you communicate with a device.
- It is a client-server program that includes three components:

- Client which sends commands
- Daemon which runs commands on a device
- Server which manages communication between client and daemon

2. Coding challenge:

1. Write a program that accepts a sentence and calculate the number of upper case letters and lower case letters.

Suppose the following input is supplied to the program:

Hello world!

Then, the output should be:

UPPER CASE 1

LOWER CASE 9

Program:

```
s = input()
d={"UPPER CASE":0, "LOWER CASE":0}
for c in s:
    if c.isupper():
        d["UPPER CASE"]+=1
    elif c.islower():
        d["LOWER CASE"]+=1
    else:
        pass
```

print "UPPER CASE", d["UPPER CASE"]
print "LOWER CASE", d["LOWER CASE"]