



DEPARTMENT OF IT :: VRSEC
17IT2605A: CYBER SECURITY
A.Y. 2021-22

Visualization based learning



Standard Operating Procedure (SOP)

Introduction:

Most students have vivid imaginations, and they have no difficulty visualizing make-believe scenes and characters. However, once they enter college, concrete learning methods often leave fantasy and self-generated visuals out of the learning equation. Visualization is the creating or recreating of imaginary or real scenes within one's mind. It enhances learning and improves reading, writing, memory, emotional regulation, and more. Visualization stimulates the same parts of the brain as when we actually perform the same activity.

ACTIVE LEARNING

Name of the Faculty: Dr.N.Neelima	Designation: Assistant Professor	Subject: Cyber security
Year/ Semester: III/II(2021-22)	Section: Open Elective-IV	Topic: Nikto tool for scanning web vulnerabilities
Name of the activity: Visualization based learning	Date: 18-04-2022	No. of students attended: 72

Objective of the activity:

- Understand clearly about Network sniffing
- Outline the process of Nikto tool for packet sniffing and vulnerability identification
- Identify various command formats for sniffing

Execution Plan:

Time management: Class time: **50 mins**

- Students visualized the animation video about the packet sniffing process for the packets traveling in the network
- Analyzed the sniffed data along with protocols and other parameters using various tools
- The link of Animation is as follows:

https://www.youtube.com/watch?v=GH9qn_DBzCk

Expected Outcomes:

The students can be able to

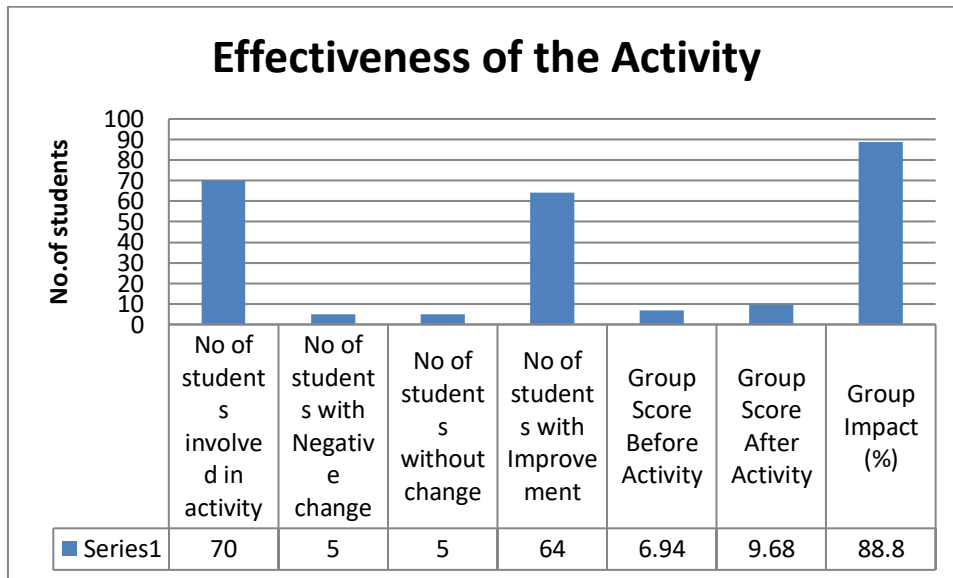
- Understand about the network packet sniffing
- How the find the vulnerabilities present in a network
- Understand the usage of various tools for packet sniffing and analysis

Assessment of the effectiveness of the activity

S.No	Student RollNo	Assessment before activity (Taken Ass2)	Assessment after activity (Taken Sess2)	Group Score Before	Group Score After	Impact (Place a tick and state the % of impact)			
						Negative change	No change	Improvement	%
1	188W1A0418	4.5	6.5	6.94	8.78			✓	88.8
2	198W1A0144	7.5	10.5					✓	
3	198W1A01C4	9	8.5			✓			
4	198W1A01C5	7.5	8.5					✓	
5	198W1A01C8	9	8.5			✓			
6	198W1A01D7	6	8					✓	
7	198W1A01G8	8	7			✓			
8	198W1A0254	8	9					✓	
9	198W1A0258	8.5	10					✓	
10	198W1A0259	8	9					✓	
11	198W1A0268	5.5	8.5					✓	
12	198W1A0273	7	9					✓	
13	198W1A0274	7	10					✓	
14	198W1A0276	5	7					✓	
15	198W1A0279	7	9.5					✓	
16	198W1A0283	7.5	9					✓	
17	198W1A0287	8	6.5			✓			
18	198W1A0292	7	9.5					✓	
19	198W1A0297	5.5	8.5					✓	
20	198W1A0298	6	9.5					✓	
21	198W1A02A0	3.5	5.5					✓	
22	198W1A02B9	7.5	8.5					✓	
23	198W1A0412	3	6					✓	
24	198W1A0434	7	10					✓	
25	198W1A0438	6	10					✓	
26	198W1A0459	7.5	8.5					✓	
27	198W1A0475	6	11					✓	
28	198W1A0478	4.5	10					✓	
29	198W1A0494	3	10					✓	

30	198W1A0495	5.5	8					✓	
31	198W1A04A4	7.5	10					✓	
32	198W1A04B5	5.5	7.5					✓	
33	198W1A1044	2.5	8.5					✓	
34	198W1A1045	3	9.5					✓	
35	198W1A1046	8.5	8.5				✓		
36	198W1A1057	3	6.5					✓	
37	198W1A1071	3	7.5					✓	
38	198W1A1204	8	10.5					✓	
39	198W1A1205	8	0						
40	198W1A1209	8	12					✓	
41	198W1A1212	8.5	0						
42	198W1A1214	5.5	12					✓	
43	198W1A1218	7	12					✓	
44	198W1A1221	7.5	10					✓	
45	198W1A1223	7	10					✓	
46	198W1A1229	8	8				✓		
47	198W1A1230	10	9.5			✓			
48	198W1A1231	7.5	7.5				✓		
49	198W1A1236	10	9					✓	
50	198W1A1237	8.5	10					✓	
51	198W1A1239	7	8.5					✓	
52	198W1A1244	7	8.5					✓	
53	198W1A1249	5	10.5					✓	
54	198W1A1252	7	11					✓	
55	198W1A1260	10	11.5					✓	
56	198W1A1261	9.5	10					✓	
57	198W1A1270	9.5	11					✓	
58	198W1A1273	8	9.5					✓	
59	198W1A1276	7	11					✓	
60	198W1A1281	9.5	10					✓	
61	198W1A1282	8	9					✓	
62	198W1A1284	10	11					✓	
63	198W1A1285	8	9					✓	
64	198W1A1287	7	10.5					✓	
65	198W1A12A5	8.5	8.5					✓	
66	198W1A12C3	9	9.5					✓	
67	208W5A0213	6	9					✓	
68	208W5A1201	4	6.5					✓	
69	208W5A1204	9	0						
70	208W5A1206	5	8.5					✓	
71	208W5A1210	7.5	11					✓	
72	208W5A1212	7	10					✓	

No of students involved in activity	No of students with Negative change	No of students without change	No of students with Improvement	Group Score Before Activity	Group Score After Activity	Group Impact (%)
72	5	3	64	6.94	8.78	88.8



Students Performance	No of Students	Percentage
Improvement	64	89%
No Change	3	04%
Negative Change	5	07%

