

# SEMESTER PROJECT

## ATTACK CRAWLER FOR MODERN NETWORKED SYSTEMS

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# AGENDA

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- Introduction
- Stuxnet Model
- Client-Server Protocol
- External Search Module on TTool
- Demo
- Conclusion

# INTRODUCTION

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## ■ Goal

- Extract relevant information of threads from Internet sources.
- Develop a crawler for collecting data of vulnerabilities
- Integrate the data into Ttool.

## ■ Time

- 1<sup>st</sup> Semester : Modeled operation of Stuxnet.
- 2<sup>nd</sup> Semester : Designed and implemented a protocol for TTool and the Crawler.

# STUXNET MODEL

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Model con Stuxnet 6 slides 7 phut

Cach lam sao ?

+ mo ta tong quan ve mo hinh: mo hinh gom nhung gi, root attack .....

+

Lay cai hinh ra noi ket qua

Noi 4 cai hinh

# STUXNET MODEL

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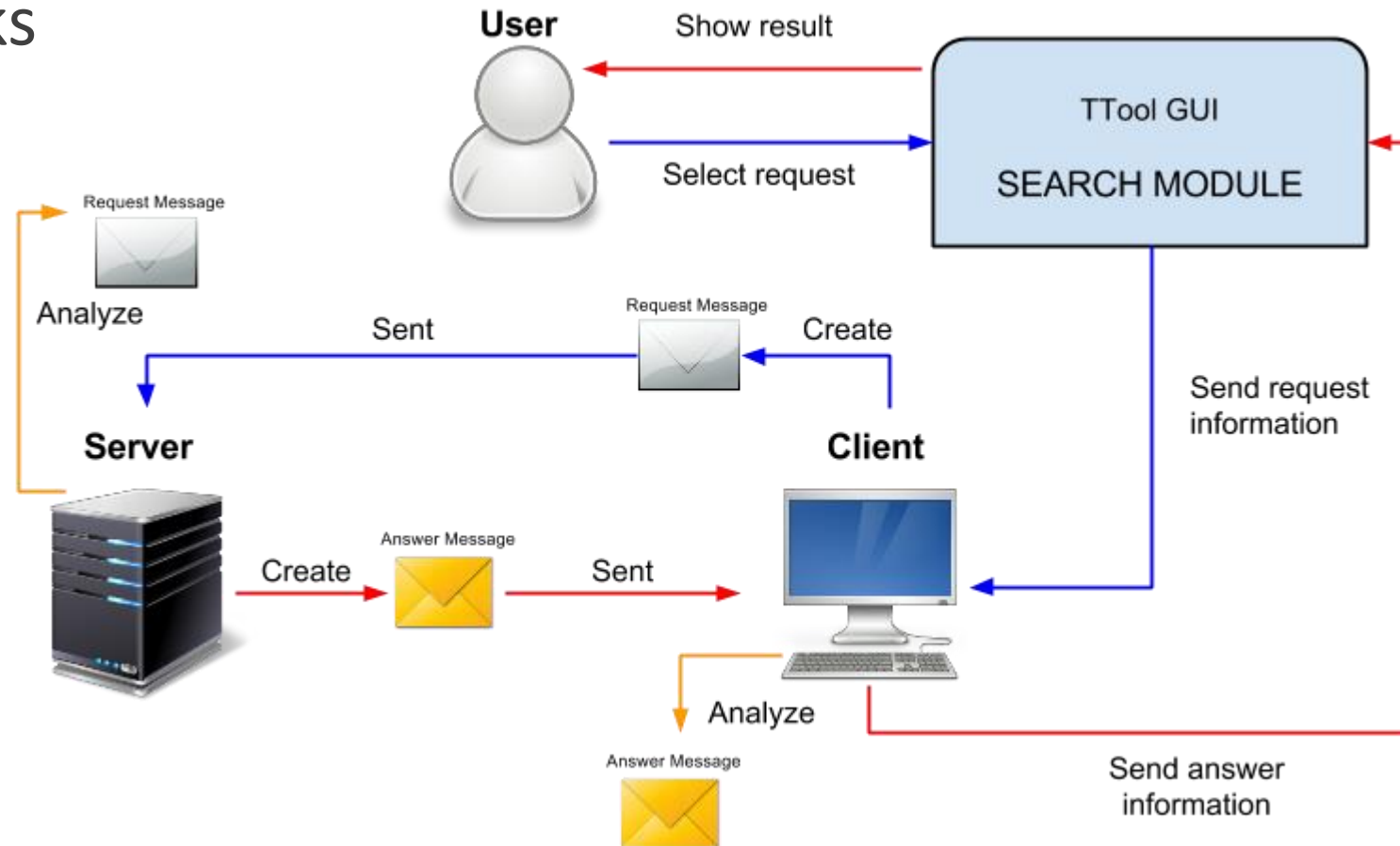
# CLIENT-SERVER PROTOCOL

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- Objective
  - Connect TTool and Web Crawler database.
  - Exchange information.
  - Secure the information.
- Design
  - Clients – Server
    - Client code is integrated in Ttool.
    - Multithread server.
    - SSL Socket.
  - Message

# CLIENT-SERVER PROTOCOL

- How it works



# CLIENT-SERVER PROTOCOL

## Structure of a message



Request Message



CLIENT					
cmd	Search				
content					
options	Keyword	Year	System	Score	NoR
values	Stuxnet	This year	Linux	7-8	10

	SERVER
cmd	SearchResult
content	Result from the server in XML format



Answer Message

# EXTERNAL SEARCH MODULE

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## Objective

- Provide an interface allowing users interact with database server and search engine.
- Integrated in TTool source code.
- Design
  - A JDialog named External Search.
  - Support interaction with components in a diagram.
  - Interact with Google Search engines.
  - Take advantage of Ttool existing functions.

# EXTERNAL SEARCH MODULE

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## Google Search features

- Use Jsoup library

## Database Search features

# EXTERNAL SEARCH MODULE

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Database Search features

# DEMO

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Show interface

Chay client server

Chay chuc nang search hien hinh anh

SSL



# CONCLUSION

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Conclusion 1 slide 1p

Finish

knowledge

Future