Software Platforms

LM in Computer Engineering

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REST Web Service Test

- Activate a VM using the Command Line Interface
- Develop a REST service using the Command Line Interface
  - The Service is invoked through a POST Method with a JSON Payload (Last Name, First Name)
  - The Service extracts a 8 bit Checksum (XOR) from the data obtained in the POST payload:
  - The Service sends an answer to the REST Client through a JSON file: (Last Name, First Name, Code). The Code is printed as a decimal string.
  - The answer is to be sent after n milliseconds, where n = (Checksum mod 16) x 100;
  - Deploy the service in the guest machine.
- Develop a REST client on the host system using the Command Line Interface. The client:
  - is given a First Name , Last Name pair in the Command Line
  - sends a POST Payload organized as a JSON file with (First Name, Last Name).
  - receives a response in JSON format including (First Name, Last Name, Code) and prints it on the console
- Deploy the Service, Execute the Client and Capture the traffic on the server through tcpdump.
- Save the captured data, share the file with the host and analyze the file using Wireshark