PROJECT REQUIREMENT

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Team C

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1. Topic

Network security: The mechanics of an amplified and reflected denial of service attack

2. Requirement

Requirement	Description
1	Shall be written using the Java v7 SDK and jNetPcap API
2	Shall run on the Oracle JVM (Java virtual machine), hosted on a currently supported version of the Microsoft Windows operating system
3	Shall provide the user with a graphical user interface
4	Shall run as a standalone application (neither as a client nor as a server)
5	Shall allow a source IP (internet protocol) address to be selected by the user as a target address
6	Shall allow a destination IP address (Open Arena server IP) to be selected by the user
7	Shall allow a destination port (Open Arena server port) to be selected by the user
8	Shall construct UDP (user datagram protocol) packets containing a message eliciting status from an Open Arena server
9	Shall construct IP packet headers, containing user selected addresses and ports
10	Shall combine IP packet headers and UDP packet payloads
11	Shall calculate complete packet-size, prior to transmission
12	Shall transmit packets to a selected Open Arena server, following user initiation
13	Shall receive packets from the selected Open Arena server
14	Shall calculate the size of received packets

15	Shall calculate the ratio of transmitted packet-size to received packet-size
16	Shall display the packet-size ratio (amplification ratio)
17	Shall not be operated remotely via any direct form of network control
18	Shall not be operated by an internal timer
19	Shall not obfuscate its operation via hidden user interface elements or deliberately opaque code