SOCKS5

Start Assignment

Due Sunday by 11:59pm **Points** 100 **Submitting** a file upload **File Types** py
Available until Apr 20 at 11:59pm

you will be implementing the SOCKS5 protocol using the serialize package that our class has chosen. the RFC for SOCKS5 is **https://tools.ietf.org/html/rfc1928 (https://tools.ietf.org/html/rfc1928)** .

specifically, you will implement a SOCKS5 server that can handle TCP connect requests. you only need to handle IPv4 addresses and hostnames. you will also need to do username/password authentication. please just hardcode the username "cs158b" and the password "Pa55word" to check for now.

this assignment is an opportunity to familiarize yourself with serializeme. you can find the documentation for serializeme at **https://github.com/jroosenschoon/serialize-me (https://github.com/jroosenschoon/serialize-me)** . you should not build any packets by hand. all packets must be built using the serializeme API.

Some Rubric

Criteria	Ratings		Pts
simple requests work curl -x "socks5h://cs158b:Pa55word@127.0.0.1:1080" "http://google.com (http://google.com) " curl -x "socks5h://cs158b:Pa55word@127.0.0.1:1080" "https://www.google.com (https://www.google.com) "	**20 to >0.0 pts** **Full Marks**	**0 pts** **No Marks**	20 pts
able to handle multiple clients with out stopping and blocking	**20 to >0.0 pts** **Full Marks**	**0 pts** **No Marks**	20 pts
uses the serializeme API correctly all serialization/deserialization done with serializeme	**20 to >0.0 pts** **Full Marks**	**0 pts** **No Marks**	20 pts
userid and password validated properly	**20 to >0.0 pts** **Full Marks**	**0 pts** **No Marks**	20 pts
remote hostname resolution as well as IP addresses work properly	**10 to >0.0 pts** **Full Marks**	**0 pts** **No Marks**	10 pts
code is clear and readable	**10 to >0.0 pts** **Full Marks**	**0 pts** **No Marks**	10 pts
			Total Points: 100