Lab 3: Secure MQTT

This lab has been updated to reflect challenges some students have faced due to UF's network infrastructure setup. Each group will be responsible for creating a CA, self-signing that CA, and creating certificates signed by that CA as well as private keys for a broker, subscriber, and publisher, they will have to create a mosquitto configuration file that allows for these components to connect and communicate with each other using MQTTS over port 8883.

What we expect in submissions:

1. A short 5-30 second video showing a subscriber and publisher connecting to an MQTTS broker and exchanging messages. Be sure to show the commands used to launch the subscriber and publisher. Please keep the resolution on this below 1080p!
2. A configuration file for mosquitto with only port 8883 open that expects certificates from all parties that connect and provides a certificate for the broker.
3. A set of certificates and private keys, in PEM format. These should follow the X.key and X.cert naming scheme, where X = {'broker', 'pub', 'sub', 'CA'}
4. 2-3 should be placed into a zip file with no inner folders before uploading, while 1 is uploaded directly to canvas.