Goals

- Creating an encrypted and protected chat application that resides within a portable USB thumbdrive
- Client-Server messaging system that has easy setup, is scalable, and accessible on the go
- Providing a cheap, easy setup, and scalable alternative for the government and private sectors

Motivations and Objectives

Motivations
- Breaches and other cyber-crimes cost around $540 billion globally and is predicted to reach $2 trillion by 2019 [1]
- Current messaging alternatives are more focused on functionality than security

Objectives
- 3-Factor authentication system that does not ruin user experience
- Create a tool that allows any organization to easily set up its own private key encryption messaging system

Challenges

- Reducing the overall cost of the design. Currently our solution relies heavily on expensive fingerprint sensors.
- Adding extra functionality such as an option for secure file transfers as well as creating "messaging groups"
- Prevent arduino code from being extracted and deciphered
- Increased coordination from the server to handle multiple clients in an organized way

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References