Annotation 1

Title: E2EE Group Chat Proposed Technologies

Description: This artifact was authored by all 4 members of Electron Chat group (James Marshall, Philip Marshall, Timothy Trusive, and Zakhaddin Khalidov), it is a proposal of tools and technologies that could be used for the Encrypted Messaging Board group project in a Senior Capstone course. The document has a color code to define items: not needed in development environment, needed in development environment, and discussed but passed ideas. There are four discussion categories: Server, Additional Technologies, Backend, and Frontend. There is also a section for helpful links, this is the location where any research found useful for the group is shared.

Reflection: I was surprised at the effectiveness of group brain storming that was conducted during the creation of this artifact. I realized that talking though the technologies with others gave me a better understanding of how the technology would be implemented in the project. By talking about the technologies in a group I also gained a good understanding of everyones experiences and preferences on which aspect of the project they would like to work on. Using this knowledge will make organization in the team more effective.

Purposed Technologies:

Legend:

Not needed in development environment Needed in development environment Discussed but passed ideas

Server:

Apache server with node.js running

A2Hosting - hosting

- This is paid (cheap)

Sql database - database

- Are we storing any logs of some sort?
- Sql is fun.

mongoDb - database

Additional Technologies (API / Libraries):

SocketIO - is library for socket communication (node.js)

- Will this work with a sql database?
- How anonymous can we make this?

Crypto-is - is based encryption library

Backends:

node.js - js backend

- SocketIO uses this so maybe also use this?
- Download | Node.is (nodeis.org)
- Getting Started with Node.js Backend Development DEV Community



Springboot - java backend

James used this before so there is some experience with it

Django - python backend

Frontends:

Angular - is based frontend

- Some experience with this as well.
- How to Encrypt and Decrypt Data in Angular 8 (monkelite.com)

React - is based frontend

Helpful links:

Very similar to what we are doing for website creation: <u>Angular - Node - MongoDB & Express</u> (MEAN) <u>Tutorial for Beginners - Getting Started - YouTube</u>