

CPRE 491 STATUS REPORT #3

October 20, 2019 - October 27, 2019

Group: SDMAY20-52

Project Title: KEY EXCHANGE OUTSIDE OF TCP/IP

Client & Advisor: Julie Rursch

Team Members:

- Logan Woolery Lead Integrations Engineer
 - Jacob Moody Server Developer Lead
 - Joel Wacker Android Developer
 - Andre C Server Development Tester
 - Jack Potter Client Architecture Tester
 - Jordan Svoboda IOS Developer
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Past Week Accomplishments

- ❖ Andre- Performed unit testing in Golang
 - Started creating test cases for REST API
 - Researching Golang syntax

- ❖ Jacob-Worked on beginning the backend code
 - Started prototyping some Golang code for the server
 - Did research into hosting options for our messaging servers

- ❖ Jack-
 - performed research into other encrypted messaging applications/protocols
 - Signal protocol (might be useful)
 - Matrix
 - Worked on setting up android studio environment for development

- ❖ Joel-
 - Setup of Android Studio Development Program
 - Began setup of virtual Android emulator for application testing
 - Research on the best ways to transmit key data
 - Image based
 - Fldigi with Audio transmission

- ❖ Jordan-Continued development of prototype app
 - Developed a few screen sketches to visualize app appearance
 - Began development of sample app
 - Set up virtual Android to begin initial development
 - Made the Android as close to an iPhone as I could
 - Created a simple welcome screen to help visualize the functionality

- ❖ Logan
 - initial setup of testing, development, and CI/CD toolsets

Pending Issues

- ❖ Still trying to find the best way to build the iOS application
 - Going to try just renting a Mac from the library for building and testing
 - Might also see if building a VM with MacOS on it is a possibility
- ❖ Need to discuss potential app designs/ make changes to initial screen sketches

Individual Contributions

Team Member	Contribution	Weekly Hours	Total
Jacob Moody	Team Meetings Research	5	21
Joel Wacker	Team Meetings Research	5	19
Andre C	Team Meetings Research	5	21
Jordan Svoboda	Team Meetings iOS development	6	22
Logan Woolery	Team Meetings Research	5	21
Jack Potter	Team Meetings Research	5	21

Plans for Coming Week

- ❖ Andre-
 - Continue creating test cases
 - Continue GO syntax
 - Pushing VPS search for future date

- ❖ Jacob-Continue backend development
 - Finalize options for hosting our messaging app
 - Continue to develop some of the Golang for the server
 - Look into options for storing encrypted messages

- ❖ Jack
 - continue android studio setup
 - research possibility of iOS development on linux computer

- ❖ Joel-
 - Further setup of Android Studio
 - Testing of data transmission methods

- ❖ Jordan- Continue iOS app prototyping
 - Check out a MacBook from the library
 - Want to try using it to hot reload app and test for iOS
 - Add some of the designed screens/menus to the app
 - If good progress is made, attempt to get app on my phone to test
 - Want to see how it runs on an actual device
 - Need to see how well the virtual phone compares to a real one

- ❖ Logan
 - Begin prototype development