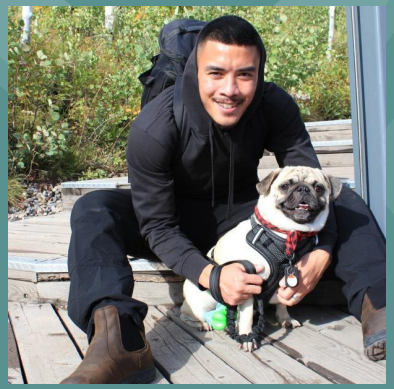
Capstone Project Vlog #5
NG911 System

by Team Bugs

Li Pan

Abdelrahman Rabaa



Renz Rivero

Project Reintroduction

NG911 System

- **A modernized 911**
- **Adding more ways to communicate with a dispatcher on top of what is offered by current technologies (Apple Watch SOS & Android 12)**
- **Will aim to utilize the next generation 911 (NG911) infrastructure to come in Saskatchewan around 2024**

Feb.1 - Mar.8 2022

Li: audio stream, map route, testing

Renz: front-end development — UI/UX, testing, general code clean up and documentation

Rabaa: implement app connection indicator, new locations

Demo

Status Description

Current status: Green

Project issues

- The campus guest wifi connection not stable which affect our video stream

Project changes

- Using NG911 system instead of SOS emergency system

Encryption

- RSA
- End-End
- Start encrypting messages
- Key pairs generated per connection

Optimization

- Code refactoring
- Using stable wire connection with a high speed of network

User Testing

- Previous RCMP officer, John Leitch, had a physical device with the client side application
- Collective in-person meeting with the team, Mr. Leitch, and our mentor Dr. Morgan to test the system

Next up

- Stabilize the quality of video/audio connections
- Stabilize the quality of locations shown on the PSAP
- Continue improving UI/UX

Team Reflection

Does the team feel "on track"? (reiterate the above colour status)

Yes, our system's main functionalities are accomplished.

What progress does the team particularly feel good (great) about?

The project management / testing steps are going as planned.

What barriers (if any) does the team feel are a current impediment to success?

N/A

What help (if any) does the team require to move positively forward?

Another powerful laptop for testing, ethernet cable for the final project day.

What question or concerns does the team have (if any)?

1. The wifi in the university may not be best for presenting.
2. P2P audio video architecture.
3. Weekly deliverable

Thank You!