

## Team/Instructor Bazaar # 2

(Jan.25, 2022 - Mar.1, 2022)

### **Team member**

Team(Bugs): Abdelrahman Rabaa, Li Pan, Renz Rivero

### **Project Reintroduction (Renz)**

- A modernized 911. Instead of just being able to communicate through audio, an emergency caller has other options such as SMS and video. Other features such as automating of sending other relevant information (location, name, medical history, etc) under the users consent can be set up in the profile page
- The project's main objective is to utilize and or inspire the next generation 911 (NG911) that is estimated to come in Saskatchewan around 2024

### **Individual Contributions (Everyone)**

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

Li: map routing, bugs fixing, profile functions updating

Rabaa: running app server in the background, appending data management, data hashing, data encrypting

### **User Route Demo (Rabaa & Li)**

*Video prepared to be played*

### **Status description (Renz)**

Current status: Green

Our current status is green because we currently have a functionable modernized 911 system. We have both a client side application as well as a dispatcher side application with the functionality to communicate with each other via the main objectives of our project.

### **User Testing (Renz)**

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

### **Project issues/changes (Renz)**

- Same holds as last scrum. No real issues, just things to optimize and look out for.
- Feature creeps
  - Good feedback from Mr. Leitch — implement a navigation system while in the call on the client side application
- Focusing on a stable build
  - Encryption
  - System performance (optimization)

### **Encryption (Rabaa)**

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

The AES keys are encrypted using the RSA which is then used to transfer data to and from the app.

### **Optimization (Li)**

- Code refactoring: no duplicate functions or widgets
- Apply effects/loading) only when/where it is necessary
- Process the encryption - compromised video resolution for tolerable speed

### **Next Up (Li)**

- Continue improving UI/UX
- Stabilize states
- Intensive user/automation testing

### **Team reflection (Li)**

**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 steps followed as we planned.

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

Limited time to implement the proposal from the RCMP officer and our mentor.

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

Stabilize all features we implemented.

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

N/A