**Problem Definition (Group E)**

**Updated:** 03/09/2020

**1. Problem definition**

The fire-safety public education program given by Regina Fire and Protective Services

to kindergarten to grade three students has become obsolete and cannot cope up with the current technology and communication tools. The firefighters using landline phones to give demonstration of how to call 911 is no longer effective as today’s kids have no idea of how to use it and place a phone call. Even after the demonstration, the kids have no idea of how to describe an emergency or how to effectively communicate with the 911 operator through it.

**2. Project vision**

Designing an interactive application for kids, which teaches them of having an efficient conversation with the 911 operator in the case of fire. The kids should be able to catch up the information from that conversation and implement it as quickly as possible.

**3. Rationale**

Whenever a fire happens, it is disastrous to the community and to the people. The most important part of it is survival especially for the children who are capable to learn surviving techniques. Teaching them to learn essential survival skills in case of fire will enable them to respond appropriately in a fire emergency.

**4. Stakeholders**  
 + Stakeholders: City council, Mayor, and city manager

+ Customer: Elementary school teachers and staff, kids, firefighters, and RFPS itself

**5. North Star Customer**

Since we are designing a fire survival app by focusing on children from kindergarten to grade three, our north star customer is the children.

**6. Assumptions**

* Kids have the access to modern android or ios cellphones.
* The application is running on both the platforms, android and ios.
* Kids are familiar with the modern smartphones and they know it’s basic functioning like making / picking up the call, sending / reading a message etc.

**7. Constraints**

Since this application is mainly focused on kids aged (5-11),

Therefore, we have to dive deeper to know the psychology of kids and their behaviour in order to develop a good conceptual model of the application which is both understandable and communicable by kids. A good communication is the key to good conceptual model.

**8. Customer eco-system map(s)**

Communities

Children(5-11)

Teachers &  
Staff

Parents

City Council, Mayor and City Managers

RFPS

Mentors

Developers

**9. High-level customer needs/requirements**

An application that will simulate the 911 phone call for kids to teach them how to effectively communicate with the 911 operator in the case of fire. This app could be downloaded on modern phones. It should be interactive and kids should be able to use and understand its functions easily even when they are in case of an emergency. Also, it should have a visually appealing signifier for them to guide on how to use it (usability). Usability is a key to a good design (which is very important in a case of emergency).