

ENSE 471

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The JRS

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Problem Definition

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The Regina Fire and Protective Services have been giving a demonstration to kindergarten to grade three students in Regina elementary schools every three years. The firefighters have been using standard landline phones to give demonstrations, and kids no longer know how to use them, making the presentations less effective. Firefighters also teach kids how to form an escape plan and send this info home to their parents. However, sending papers home with kids does not do a very good job of educating parents about fire safety.

Project Vision:

Create an application that will allow kids to practice having a conversation with a 911 operator in school demonstrations. Create a separate application that will help kids and parents remember information learned through school, and create a fire escape plan.

Rationale:

Fire safety is very important for kids to learn, as the information that they learn can and will save lives when fires happen in the kid's homes. Kids are capable of doing all the steps necessary to escape a fire safely if they know what to do. Giving kids a meaningful demonstration and then allowing them to take the information home to their parents will help them make the right choices if they are ever in a fire emergency.

Stakeholders:

Stakeholders in the project would include anyone that does/will have any vested interest in the project or outcome at any point in the development of the project. These people would include The JRS, Tim, Candace, Regina Fire and Protective Services (including all firefighters and workers), the U of R Software Engineering program.

North Star Customer:

Considering the app that Firefighters will use in school demonstrations, the north star customer would be the firefighters giving school presentations needing an interface for students to simulate calling 911 through.

Considering the app that would help bring safety information home for the students and allow them to make an escape plan, the north star customer is the students in kindergarten to grade three.

Assumptions:

- Two separate apps will need to be created: one for the firefighters to talk to the students with in demonstrations, and one for the students/parents to learn and practice exercises with at home.
- Both applications should run on both Android and IOS.
- Kids/parents will have modern cell phones (like Android or Apple)
- Firefighters will have several equipped smartphones to use in demonstrations with the kids.

Constraints:

Constraints for us working on this project would be: time, we only have a couple of months to come up with something useful, and we are all in other classes and labs with similar time commitments; technology, none of us have worked on any mobile development before, so any software development time would need to include time spent learning relevant frameworks/toolkits. The quality of our final solution is a constraint. Good quality comes at the cost of time. We also need to produce a product that satisfies our north star customer.

High-level customer needs/requirements:

- A system to have children connect to firemen in demonstrations that will accurately simulate a 911 call for the kids. This app should resemble a phone app from the children's side, and have a very usable interface on the firefighter's side.
- An app or other means of communicating lessons learned in the demonstrations to parents at home.
- An intuitive method for creating fire escape plans and encouraging children to practice them at home.

Customer ecosystem maps:

