Chance Eckert Andrew Labastida Alexis Salisbury

# Responsibility Tracker: Proposal

## Why Should We Care?

Over the years, society has evolved and changed along with an individual's responsibility. As roles change, some people fail to adjust to the new needs of the present time. One obvious responsibility that has dramatically changed over time is the care for those unable to care for themselves, especially children. As time has passed, the demand and attention to detail required for childcare has increased exponentially due to stray animals, conspicuous strangers, speeding cars, other children who are considered bullies. All of these dangers can be overwhelming and sadly, some people need assistance to keep track of multiple children who tend to get lost while attempting to enjoy their innocent youth. Without proper assistance, parent have a higher chance to fail at their responsibilities as guardians which has the disastrous results of having harm possibly affected upon a child. Many negativities stem from physical and emotional injury upon a child. Physical injuries can lead to numerous medical bills left upon their parents, unwanted financial stress, permanent disabilities, and possibly death. Emotional injuries could cause the child to developed with a warped mind leading to an individual who struggles to fit into society well and may cause future infractions of the law. Both of these affect society in negative ways with no visible or comparable positive outcome or side effect. The children must be protected to ensure every child has the chance to grow up without having to deal with the trauma of extreme physical injury, and also to ensure that the child doesn't have emotional trauma affect their emotional/mental development in order to become a functioning member of society. Society can only be positively affected with the ensured protection of our children.

#### What is the Problem?

There have been several accidents where individuals have been harmed due to their guardians not knowing where they were. In today's world, parents and guardians have become complacent in the supervision of their wards. 20 years ago, children and the like were watched very closely. If the parent or guardian could not see them, the immediate response was that they were getting into something or were in trouble. Now, children are treated as if they know better than to get into trouble. Trouble like, falling into an animal habitat, following strangers at the prospect of candy, walking into a highway because they are distracted by something. Children in these or similar instances were likely not being watched and if they were, were not given the attention they deserved.

### What is the Proposed Solution?

The proposed solution is a mobile application by the name of The Harambe Incident Preventer. This application is designed to be a child tracker that can be used on any current Android device, and it will be so user friendly that it will be fully utilized by technologically inept adults

who struggle or even fear interacting with today's technology. This will be implemented by using the bluetooth capabilities which has become standard in today's mobile device market. This solution allows any parent with a smartphone or a mobile device to be aided in the protection and tracking of their child or anyone who is unable to properly care for themselves. This proposed solution makes it easy for people to access the product since it will only require a download from the Google Play Store.

## Design

The product will be designed to have 2 components. The first component involves an android application used to manage the device involved in the radar tracking action. Ideally, this uses a bluetooth functionality when the phone is paired with the bluetooth device it will display within a set distance where the device is located. The second component involves a wearable device or a bluetooth LE device that is paired with the user's phone. This device would be worn by a child, or anyone that is being watched by another person for any number of reasons.

#### **Evaluation**

The evaluation of this application and it's accompanying product would involve the creation of the application and testing it to determine if it will work with bluetooth paired devices. These can include but are not limited to cell phones, a computer and a phone, a pair of head phones, smart watches, etcetera. More in depth testing of the application would involve settings of the range between the devices. Also, whether or not the signal can be obstructed and if it can be obstructed, by what. Additionally, how the application would affected by crowded environments.

#### **Tentative Workflow**

Our plan is to first develop a prototype application that can track location and distance using a device such as a smartwatch. Once complete the app will be tested in multiple environments such as inside and outside with a goal of the app being able to distinguish when the wearer is 50 feet away and notify the guardian of their location. Future improvements include being able to adjust the distance that the guardian would be alerted.

App Design: 4 weeks

Android development: Alexis
Bluetooth capabilities: Andrew
Smartwatch integration: Chance

Testing: 1-2 weeks

Evaluations: All Improvements: All

Results: 1 week

Report Completion: All

Sources:

Http://www.howstuffworks.com/john-fuller-author.htm. "How Bluetooth Surveillance Works." *HowStuffWorks*. N.p., 2008. Web. 03 Oct. 2016.

"Cincinnati Gorilla Incident: Police Investigating Boy's Family." *CNN*. Cable News Network, n.d. Web. 03 Oct. 2016.