

Natural Disaster Help App: Part II & Part IV Summary DRAFT

Group 19

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INTRO:

The major focus of this project is the smart device application component with the desired additions of various support systems. That application will help users survive natural disasters via navigation and tracking support systems. This is reflected in the requirements with the majority of them related to the app and its needs.

PART II: Requirements

The product must have access to private information in order to perform its function, and therefore calls for security requirements which can be difficult to deal with because of the different laws surrounding privacy in different countries. There are access requirements which determine who will have access to the information stored within the application. It was determined that only authorized emergency response personnel would have access to direct privacy information such as the user's personal information and exact location while the company of the application will have access to information the user provides to the application to aid with testing purposes. There are also immunity requirements that must be in place to protect the user's personal information from unauthorized and / or malicious access. The way the application is built must not allow for security vulnerabilities to allow for injections as well as it must encrypt the user's data to protect the information in the case of unauthorized access into the application.

Performance requirements are also somewhat problematic as the product has to function quickly and correctly as people's lives may depend on this app's performance. However this app is meant to perform during adverse weather conditions where system performance can be an issue. The speed of the performance is the most crucial of the performance requirements and is thus emphasized over the capacity and precision sections of performance. This product does however seek to improve on the precision and accuracy of the current related software.

Though no less important dependability requirements are easier to follow as the system is unlikely to be under much cyber stress. The dependability requirements provide a great deal of support to the performance requirements there are several dependability requirements that fill in for the performance related requirements when the performance fails under the physical, natural stress.

Look and feel of the application will require more consideration because we want our product to be used by people of all ages. Since children, teenagers and adults are all part of this group, the look of the application must be designed such that people from each group is not alienated by it.

Ease of use of the application requires not only documentation requires but also usability requirements. The application must allow for users with vision impairments to be able to listen to the contents on the screen as well as allow for voice entry. There must also be documentation about how to use the application itself as well as more in depth instructions in an online Wikia. Also, emergency response personnel must be trained on how to use their side of the application to understand the data sent to their servers.

PART IV: Test Plans

We will be testing all components that are part of this product with the exception of functionality of external products that run alongside this product. It is assumed that these external products were evaluated properly before chosen.

All tests have a pass/fail criteria which vary for features of the system and external products. If the component is a feature of the system, it must meet the use case requirements for that specific feature. For external products, the interfaces, constraints and signatures must must meet the requirements for that adjacent system.

Certain tests created for this product will have to be, at least initially, run under simulated circumstances as natural disasters are not controllable. After the natural disasters have occurred the data collected by the system can be used to cement these simulated tests.