Problem Statement

Android Based Situational Awareness: Moving Map

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Changes

Date	Description
September 13, 2012	Document started
September 20, 2012	Created outline
September 20, 2012	Wrote Users/Stakeholders section
September 23, 2012	Wrote Key Needs, Alternatives
October 4, 2012	Separate document created
October 15, 2012	Added Introduction
January 26, 2013	Project Document Audit
February 5, 2013	Current Solution update

1 Introduction

This document will identify the users, stakeholder, and key needs for the project. It will also identify key features and quality attributes.

2 Problem Statement

2.1 User/Stakeholder Descriptions

2.1.1 Users

Soldier, Police Officers, and other Ground Personnel
The users of our program are seeking to maintain their situational awareness in locations which may not have connectivity to the Internet. Many of them use voice guided situational awareness technology, but in light of advances in mobile devices, they could receive this information in a visual manner.

2.1.2 Stakeholders

Raytheon
Raytheon's customers are mainly military organizations, many of which are using Raytheon's current situational awareness technologies. Raytheon is looking to update these technologies to keep their position as a leading provider of military systems.

JD Hill
JD is the client who proposed this solution. He is a major proponent of using mobile devices in a military application.

Doug Duesseau
Doug is the acting Technical Lead for this project.

Development Team
The development team on this project are graduating seniors who wish to learn more about the software development process and interaction with a client. They are very interested in learning more about developing on the Android platform.

2.2 Key Needs

ID	Need
N0	View map of surrounding area
N1	View points of interest on the map
N2	View current location on the map
N3	Map must not require internet access
N4	Map must be Android based
N5	Application must work on any size android device

2.3 Current Solution

The chosen mapping engine was OSMDroid. This engine came pre-built with offline map support, which handled the key functional requirement. The engine is also part of the Open source community which allows the code to be used free of charge, as long as licensing requests from the owner are met. There is also built in support for overlays.

2.4 Alternatives

All considered solutions to the proposed system require Internet access. Most other mapping engines explored were very domain specific (ie hiking or biking) and lacked significant amounts of documentation.