

Table 1: Revision History

<b>Date</b>	<b>Developer(s)</b>	<b>Change</b>
September 24, 2017	Matthew Po	Initial draft of Problem Statement
September 25, 2017	Evan Ansell	Added to initial draft
September 25, 2017	Livia Kelle	Added Project Context
December 04, 2017	Matthew Po	Updated Problem Summary
December 06, 2017	Livia Kelle	Modified Project Importance
December 06, 2017	Matthew Po	Problem Statement grammar

# SE 3XA3: Problem Statement

## TouchTime

Team 13, Team Name  
Matthew Po - pom  
Livia Kelle - kellel  
Evan Ansell - ansellea

### **1 High Level Problem Summary**

The hardware should detect when the watch has been touched and respond with appropriate number of vibrations. The software should indicate the current hour and minute of time. The hardware should then vibrate a pattern that reflects that of the time provided by the Software. The vibrations should be distinguishable and easy to understand. The pattern should be simple enough to translate into time. The application is designed to be useful for the vision-impaired and for people who want to tell the time surreptitiously.

### **2 Project Importance**

Time is a very important and useful thing to know. Whether it's knowing the time of a meeting, the start of a class, or a bus schedule, people need to be aware of the time. Generally most people will have easy access to looking at the time since they carry a phone, a watch, or both. Unfortunately this isn't the case for all people, and those with a visual impairment may have difficulties with telling the time from a traditional watch or phone. While solutions currently exist for such people, they are often imprecise or tell the time by sound. Our solution of telling time by vibration will allow people to be able to tell the time in a more precise manner in situations which traditional solutions would fail such as a loud environment or in a situation in which it would be considered rude to be looking at your watch.

### 3 Project Context

The problem we are trying to solve involves three main stakeholders: the development team, the clients, and the users. The development team consists of the members of group 13, the clients are the TA's and professor of Software Engineering 3XA3, and the users are the people that will be using the smart-watch application. The users will have access to either an Android Smartwatch and are either people who are visually impaired or people who want to be able to tell the time without looking. With this special set of users in mind, the application interface should be simple to navigate. The application should require very little maintenance and should run on any Android Wear 2.0.0 or later and Android OS 7.1.1 or later. The application itself will be developed through the use of Android Studio and will be written using Java.