

No Disturbance Mode

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Abstract—How much do you feel anxious when you silence your smartphone? What if you come up with 100 missed calls or your mom is trying to reach you with some urgent news? Our main goal in this project is to make sure when you silence your phone you won't miss any critical calls

Keywords—Text mining, semantic triplet, parse.

I. INTRODUCTION

We face many times silencing our phones because of lectures, meetings or other kind of schedules. But how much we are focused on those events. In most what we do is always keep looking our phones and checking whether there are some urgent or critical calls. Even though we silenced our phone, what if your mom is trying to reach you with some urgent situation or news, or what if your boss is waiting in the line. On the one hand we want to keep enjoying the silence mode but on the other hand we don't want to come back with hundred missed calls, and facing some critical situations.

Our project aims to achieve a reliable identification of urgent calls using context aware techniques in mobile phones thus minimizing disruption of the user. Basically, user starts first setting the thresholds, for instance for your mom or wife you can give high points. As you can see in the figures 1 and 2 below. Furthermore, our system analyzes all the duration and frequency of previous calls for specific contacts in the list. And eventually, it considers also the number of repeat calls, since if the incoming number is new which is not existing in the contact list then obviously it would be hard to get an incoming call as an urgent. Because, we will count all the points given for each process and if the total is above the 100 the specific ringtone will ring.

A. Related Works

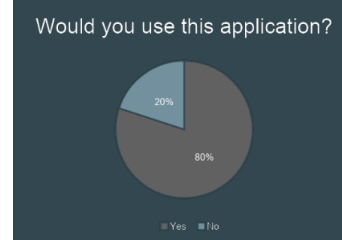
Emergency Service: This app is also based on identification of urgent calls. But it considers only repeating calls.

Priority Mode: Only Allowed Contacts, this application takes consider only selected contacts giving the such priority so that they call even you are in silent mode.

Urgent Calls - Repeat calls, Text message This app has advantage in the text message part. So when the calling person text a message with urgent word it can identify and set call as an urgent. But this app doesn't consider the duration and frequency calls.

Ringtone Identification of Urgent calls. In this project they main activity was to consider extracted incoming phone number and compared with existing list of authorized clients to make an urgent call.

B. Experiments and Results



In this experiment we have conducted a simple survey from 10 random people whose ages were from 20-36. Fully anonymous. The first we asked was if they are willing to use such kind of application. As you can see in the graph, 80 % of the participants answered yes and others no. Furthermore, next was: "Is it useful in your daily life?" where we got in average 7.7/10. It was slightly lower then the expected value, since one of the biggest reasons could be users don't fully rely on this app, estimating of functional failures and etc. Following, we asked: "Is it easy to learn?" 9/10. It high enough, since as you can see below the interface is really simple, just user should enter the thresholds. Next "Is it easy to use?" 8.3/10. It was also little lower value, since app might be not comfortable. Because every-time user should first enable silent mode and enter to the app. Eventually, our last question was "Would you trust your application and put your phone on silent mode?" We got relatively low score, since users said they won't trust it fully because it may have functional failures.

• Is it useful in daily life? (1-10)	Average: 7.7
• Is it easy to learn? (1-10)	Average: 9
• Is it easy to use? (1-10)	Average: 8.3
• Would you trust your application and put your phone on silent mode? (1-10)	Average: 7.9

II. CONCLUSION AND FUTURE WORKS

With this app we can help every user to make sure them keep focusing on their duties or works. And in the future we want to identify the context also, meaning that if the user has set in his schedule a meeting our app would automatically turn into silent mode or when the user is driving his car app will automatically silenced.

Various research shows high distraction rates of people while driving, including phone calls disruption which contribute to fatal, injury and other types of crashes Use of mobile phones for calls and text messaging while driving has detrimental effect of driving behaviour, thus crash risks. We aim to

integrate this kind of feature and automize every process so that user could rely fully without no worry and disturbance. We believe this kind of app would make a huge contribution.

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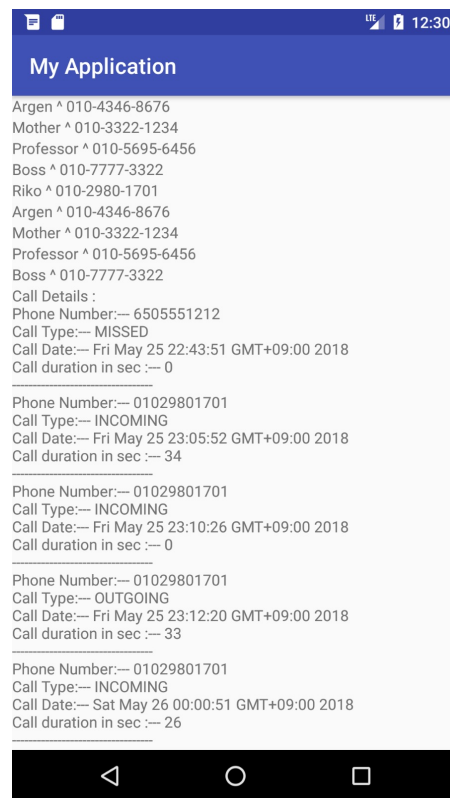


Fig. 1. Contact Detailed information

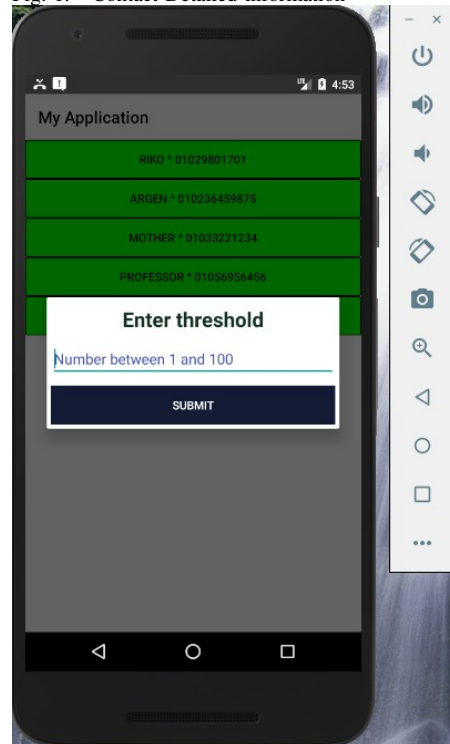


Fig. 2. Main menu with entering a threshold

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Date of Patent: Nov. 18, 2008. Inventor Bryan Eric Aupperle, Merwin Mathewson 2 James Extracted incoming phone number and compared with existing list of authorized clients to make an urgent call
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Date of Patent: Oct. 13, 2016. Michael Marvick Urgent call lite app which based on users sending text message with "urgent" and counting the number of repeat calls
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Date of Patent: June. 13, 2017. MadRabbit will ring the emergency alert sound when you have 3 missed calls from the same person.