Push Notification Testing

Masters Project Proposal by
Rodger William Byrd
29 February 2020

Department of Computer Science
at the University of Colorado at Colorado Springs
School of Engineering and Applied Science

Committee Members:
Kristen Walcott Justice, Advisor
Committee Member 1
Committee Member 2

1 Abstract

Contents

2 Introduction

3 Background

4 Proposed Work

The proposed work is to test push notificaitons in Android devices.

4.1 Initial Phase

Emulation This will involve using Android Studio to emulate and test notifications to determine what can cause delays. Use debugging tools to determine what can cause delays in notification in andriod devices and wearable devices.

Simulation Simulates criteria that may lead to delays, such has low storage, high memory usage, high processor usage to attempt to determine factors that can lead to delays. Review Android OS patching history to determine what fixes have been put in place related to notifications and wearable devices.

4.2 Second Phase

Test findings from initial phase on actual hardware.

5 Completed Work

Previous research by Sultana[1] showed that some Android devices had delayed notifications on paired wearable devices. Some of the potential causes noted in that research

6 Tasks and Timeline

7 Conclusion

Bibliography

[1] Taniza Sultana. Wearable Devices: Smartwatch, Fitness Tracker adn Call Notifications Delay.