

Haptic Navigation System

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ABSTRACT

This paper describes software development of a haptic navigation system used to direct users towards a location via multiple waypoints, tracking the user position using GPS. The system created uses a Universal Windows Platform application to be run on a Windows 10 mobile, which controls a belt of 8 vibrating motors via a Bluetooth connection. It is hoped that the software can be extended and/or repurposed for a different application, and therefore emphasis is placed into the software quality. Future work will provide users with the option of a 'hands-free' experience.

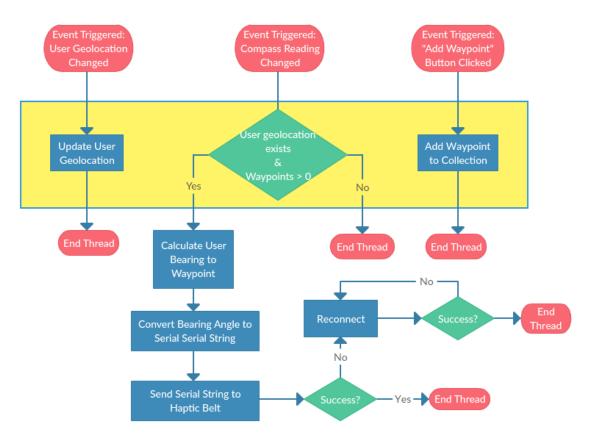


Figure 1. A flow chart showing how threads are used together to find the users bearing to a location

J Time, Haptic Navigation System, Proc. 13th School Conf. for Annual Research Projects, V F Ruiz (Ed), pp. xx-yy, University of Reading, 3rd June 2014.