UNIVERSITY OF TECHNOLOGY AND

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COST EFFECTIVE HUMAN TRACKING SMART WRIST WATCH FRAMEWORK

A HALF YEARLY REPORT

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ABSTRACT

Many times, it is heard in news that elderly or specially enabled people are lost due to no track of their movements in public places in the Sultanate of Oman. This is a word of concern and demands a product that could bring confidence among them and their guardians.

A study was made to find the best components that could be used in order to achieve a cost effective product to fulfill the aim to save elderly or specially enabled people from losing.[Litt. Review]

A survey to see the reactions of the common people on a product was conducted by the student researchers and they realized that they were on the right track with a huge positive response. [Appendix]

This project will be a framework of a Smart Wrist Watch that works with the Bluetooth system connected to a microcontroller that will be fixed on the elderly person or specially enabled people. It will contain a GPS system to track them.

A lot of GPS trackers are available in the market, few of which are discussed further. An attempt is going to be made to develop a cost effective wrist watch which could be affordable for the common man. [1]

The Raspberry Pi P4 microcontroller which is the latest and has the built in GPS module will be used. It will be connected to Bluetooth for Raspberry Pi P4. All these will take the form of a wrist watch which will be fixed on the victim who has the tendency to lose. An app will be installed in the guardian's mobile which will receive the alert message when the victim moves away. After the alert the GPS tracker will get enabled and show the direction and location of the victim.

Our aim is to achieve a good product with maximum facilities and minimum expenses.

Keywords: *Raspberry Pi, microcontroller, GPS, location tracker.*