## **FIXIT**

## **Mohomed Umar Iqbal**

A dissertation submitted in partial fulfillment for the requirement for Bachelor of Science (Honours) degree in Business Information Systems

## **School of Business**

Informatics Institute of Technology, Sri Lanka in Collaboration with University of Westminster, UK **Abstract** 

A vehicle breakdown occurs when a vehicle's mechanical or electrical system

fails, preventing it from being driven and forcing it to stop. This can be caused

by a faulty battery, damaged tyres, fuel issues, overheating, and other factors.

People often overlook the importance of regularly taking their vehicles to a

repair shop. Also, most vehicle breakdowns occur unexpectedly, so most

drivers are unsure how to react. This can result in unsafe behavior, hence

secondary incidents. Therefore, if a vehicle breaks down, it is best to seek

professional assistance because they have a thorough understanding of the

problem and how to fix it.

The aim of the project is to analyse and identify the problems faced by vehicle

drivers during a breakdown and to design, develop and evaluate an IT solution

that addresses the issues identified and allows the individuals to find mechanics

efficiently and provide self-repair instructions. A comprehensive review of the

existing literature was conducted to identify and analyse the main challenges.

Interviews and surveys were carried out to further evaluate the identified

challenges. Through these facts and finding, the need for a solution to this

problem was identified. Hence, a mobile application called "FixIt" has been

designed and developed. Both experts and users tested and evaluated the

application to ensure that it met the required quality and standard. Based on the

evaluations, this application was considered successful in overcoming the

challenges identified.

**Keywords:** Vehicle breakdown, mechanics, vehicle self-repair, challenges

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