

ABSTRACT

BUS COMING A NEAR REAL TIME BUS TRACKING SYSTEM TO PROVIDE BUS LOCATION INFORMATION TO PASSENGERS, IN AN ATTEMPT TO IMPROVE THEIR TRAVEL EXPERIENCE

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Reliable public transport is one of the aspirations of any country, however many countries in the West Indies fall short of this aspiration especially when it comes to servicing citizens that live in rural areas. This thesis attempts to provide a way of attaining the goal of a reliable public bus system by providing both the transport authority and the passenger with near real time bus tracking services.

The massive influx of programmable smart phones with built in Global Positioning System (GPS) receivers, provides an opportunity to make the current bus system more reliable by providing passengers and bus operators with information that would allow them to make better transport decisions.

A four part system was developed that captures and stores near real time bus location data and provides near real time bus location information visually via a web application and textually via a mobile application.

The bus location information provided to the mobile application takes into consideration the location of the passenger, this is especially useful for passengers in rural areas where buses stop not at predefined bus stops but where necessary to pick up and drop off passengers.

Keywords: Arthur Thompson Jr.; transport; bus; tracking; GPS; web services; mobile application