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Mobile Application for Locate and Contact Nearest Taxies via GPS

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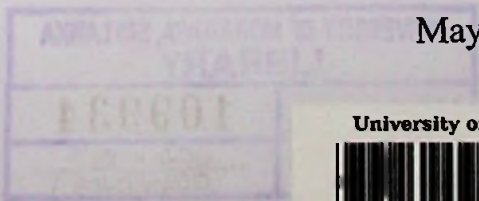
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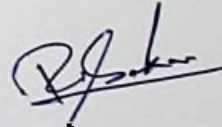
DECLARATION

I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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ABSTRACT

It is extremely difficult to find a taxi in Colombo when a person needs a taxi. When a person needs a taxi, there are multiple of ways to find a taxi; (i) passenger can reserve cab on the web (ii) passenger can phone for a taxi. Of the above most of the time the easiest and convenient way is phone for a taxi. When the passenger phone for a cab on peak times, the cab services would not be responded or they don't have free taxis around, while more other individual taxi drivers are available around the passenger.

Therefore, the objective of this mobile taxi tracking system is to target those individual taxi drivers through their embedded taxi meter. Solution will be based on GPS navigational data and GPRS communication technology. This GPS taxi meter will be connected to a central web server with a unique taxi id and location. Web server will have a separate account for a taxi associated with contact numbers and rates. When a passenger searches for a taxi, the web server will filter available taxis around the passenger and fetch to the Google map interface on the user mobile. The driver rating system enables user to rate the taxi and the hire which highlight the high rates taxis when others search on map. Application will be based on Android mobile operating system, so it will be simpler and user friendly.

Furthermore, target is to reach all individual taxies as well as taxi companies which handling more than one. While using definitely the application will with their new requirements and also they will get better opportunity to serve their customers. In other hand customers also will gain the benefit of the user friendliness and the new features of the solution while using it for their day today taxi needs.

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ACRONYMS AND DEFINITIONS

GPS	Global positioning system
OS	Operating System
GPRS	General Packet radio service
SMS	Short Message Service
API	Application Processing Interface
REST	Representational state transfer
ER	Entity Relation
SDK	Standard Development Kit
IDE	Integrated Development Environment
RDBMS	Relational Database Management System