**Title:** Car-Rental System with Location Tracking and Geo-Fencing Application for

CCM Rent-A-Car

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## **ABSTRACT**

In this urban life transportation is very common. A lot of mis happenings occur on the road every day. Therefore, the need for security and monitoring is developed. The GPS tracking system is an approach to get vehicle location information in realtime for fleet planning. This has made and will probably continue to make satellite-based navigation systems into everyday used applications in many different areas. Positioning and Tracking is one strategy that would help businesses to increase its profit. The CCM-Rent Car is one of these kinds of businesses. The company is a car rental that is based here in Mindanao. Currently, the company is having trouble that they cannot quickly find location of vehicle with a car breakdown, and to know if the car is going outside the boundary agreement. The purpose of this study was to develop a Global Positioning Real-Time Locator which runs on computers and android device for CCM-Rent-A-Car. This study provided the users to track and to monitor their operations by having detailed information on the where about of the assets in real-time using Smartphone. This application runs on computers and android phones. User can track the location of the vehicle at real-time and has Geo-fencing function to alarm if a vehicle that should not leave the city is about to leave the city and the system will display the information of the vehicle. It runs on the Android operating system with at least 4.0 versions and has 1 GB RAM and 2GB internal memory.

Keywords: GPS tracking system, Bootstrap Geofencing