**PROJECT BRIEF**

**TITLE**

Car Checker: A system to check registration and insurance of cars on a mobile Android device.

**BACKGROUND**

Police officer of the Motor Transport and Traffic (MTTU) check car registration and insurance using sticker’s card in the car.

These registration and insurance stickers are provided by the respective agents (Drivers’ Vehicle License Authority – DVLA and the Insurance Company). The sticker entails the car number, date of registration, date of insurance and expiration date of registration or insurance. This information are written with a permanent marker on a template sticker.

The police check the validity of the registration and insurance of the car with just looking at the information on the sticker. With the era of technology most drivers scan and edit an expired registration or insurance and rewrite a new expiration date to avoid any arrest.

The aim of this project is to develop an Android Mobile application to support the MTTU officers to check validation of car registration and insurance.

Investigation carried out so far suggest that the solution is likely to consist of a central database system with an internet based interface on the Mobile device to enable officer check validity of registration and insurance of cars.

**OBJECTIVES**

To identify best practice as used for designing database linkage.

To identify appropriate implementation technology for mobile application.

To design target technical design for MTTU car validation application.

To design an entire system for validation of car registration and insurance in Ghana.

To acquire and demonstrate mobile development skills using Android environment.

**JUSTIFICATION**

This project will enable me to explore, analyze and design techniques in depth in a real-word environment. It will also help me develop an understanding of how the skills acquired during my studies at the centre fits into the full system development life cycle.

The topic also offers an opportunity to investigate how database works on mobile applications.

The topic will offer me an opportunity to acquire some technical skills in mobile application development and the project that has sufficient depth to provide some challenges.

**SCOPE AND DELIVERABLES**

The functional scope of the project is limited to a mobile application for MTTU for;

* Validation of registration of cars
* Validation of insurance of cars

The project will cover the entire System Development life cycle using Software System Analysis and Design Method (SSADM) notation. The software implementation will be a prototype system with all functionalities.

The project will include a literature review and limited secondary data collection. No primary data collection will be carried out. The deliverables of the project will include;

* Requirements
* Functional specification
* Data model, database design and implementation
* Prototype application covering total functionality on an Android mobile device
* Test systems
* Test plans, implementation plans and user guide.

**MAJOR MILESTONES**

|  |  |
| --- | --- |
| **ACTIVITY** | **COMPLETION DATE** |
| Proposal Document | 12/12/2013 |
| Project Initiation Document | 16/12/2013 |
| Requirement Analysis | 18/12/2013 |
| Interim Project Report | 20/12/2013 |
| Functional Specification | 25/12/2013 |
| Technical design and development | 08/01/2014 |
| Test setup | 10/01/2014 |
| Application Software Deployment | 13/01/2014 |
| Final report | 20/01/2014 |

**CONSTRAINTS AND ASSUMPTIONS**

The functional specification, design and development must be completed by 25th December 2013 and 8th January 2014, as the centre faculty will not be available to me, to assist in any challenge.

The project assumes availability of information for development during requirement stage.

**RESOURCES**

The project is expected to make use of an Android mobile device, software and the internet that is available to the student.

**RISKS**

One significant risk is that the project assumes that the only skills that I will need to acquire is Android development and databases. If the system development requires additional new skills, the scope of the implementation will need to be restricted.

The other risk is the availability of data from secondary sources been on time and faculty supervisor also been available to assist.