**TODARESKYU: A Mobile Application for Monitoring Tricycle Driver Behavior and Support Commuter Rights**

Bruto, Marc Louis B.

Cedeno, Patrick John M.

Celerio, Lizel A.

Lorredo, Artemio III

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Ms. Joanna De Torres

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**CHAPTER I**

**THE PROJECT AND ITS BACKGROUND**

**Introduction**

In today’s modern era, urban commuters mostly rely on public transportation systems for their everyday mobility needs. But even with the convenience and necessity that these services provide, drivers' reckless or disorderly actions and behaviours might have a negative effect on commuters' experience and safety, especially with tricycle drivers. Efficient methods to resolve these issues and maintain commuter satisfaction and safety are becoming more necessary in response to this challenge.

This research aims to develop a web and mobile application to resolve this problem, to empower commuters and help San Pablo City Transportation Management Office to have seamless process of organizing and documenting commuters who files complaints. Through this application, it allows commuters to directly report incidents of driver misconduct or misbehaviour to the San Pablo City Management Office.

Furthermore, our application will provide San Pablo City Management Office with a centralized system to receive, review, and process complaints from the commuters. Upon receiving the complaint, the SPCTMO will utilize the application to efficiently process and manage reported incidents, facilitating investigation and appropriate actions.

By enabling seamless complaint management process and communication between commuters and government, our application aims to have improvements in the quality and safety of public transit services.

**Project Context**

Commuting is a part of the daily life of the people who live in San Pablo City, Laguna, Philippines. However, just like any other transportation system, it has its share of issues such as driver misbehaviour and misconduct. These occurrences could be anything from small inconveniences to major threats for commuters. To address this issue and ensure a safer and dependable commuting experience, there is a need for a comprehensive system that allows commuters to report such incidents easily.

Enterprises and public services in San Pablo City, like the San Pablo City Management Office, play an important role in ensuring the well-being and safety of its residents. However, the lack of an effective system for handling complaints about driver misconduct can slow down their ability to address these issues quickly. To help to close this gap and enhance the city's transit system, a web and mobile application is recommended. This app is designed to empower commuters to report instances of driver misconduct in real-time. At the same time, it provides the San Pablo City Management Office with the tools to receive, process, and respond to these complaints effectively.

To improve the transportation system in the city, a web and mobile app has been suggested. This app will allow commuters to easily report any instances of driver misconduct or misbehavior, giving them more control over their commute. At the same time, it will help the San Pablo City Management Office handle and respond to these complaints more effectively. Furthermore, the application will incorporate features to concentrate on the complaint handling process, including categorization, tracking, and resolution status updates. This functionality will enable the authorities to prioritize and address complaints on time, practice transparency and accountability within the transportation sector.

Overall, the project seeks to utilize technology to promote a safer and more reliable commuting experience in San Pablo City. By empowering commuters to voice their concerns and facilitating efficient complaint management, the proposed application aims to contribute to the city's efforts in enhancing public transportation services and ensuring the well-being of its citizens.

**Project Purpose**

The TODARESKYU mobile application and website will be a new means of monitoring tricycle driver behavior and to ensure the safety and fair treatment of all passengers.

**To the Tricycle Commuters**

Commuters can use the mobile app and website to quickly report issues real-time while traveling. The website can scan the QR code or Plate number of tricycle to know the information of tricycle driver. It has also a synchronized map to compare the distance of travel and fare. It will help to safety, fair pricing, and empowerment of the commuters.

**To the Tricycle Drivers**

The TODARESKYU mobile app and website can help tricycle drivers to get feedback from commuters to improve their service. It also helps drivers to follow rules and keep passenger safe.

**To the San Pablo City Traffic Management Office (CTMO)**

The TODARESKYU mobile application and website will help CTMO for better rules for tricycle, making roads safer. It also provides real-time data on tricycle drivers behavior, helping CTMO understand incident patterns and improve management to different TODA organizations.

**To the Future Researchers**

This may serve as a basis for developers for their future research.

**Conceptual Model of the Project**

**Input Process Output**

1. Requirements
2. Design
3. Development
4. Testing
5. Deployment
6. Maintenance

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Knowledge Requirements

1. Knowledge about

the current

process of San Pablo City Traffic Managament Office

1. Knowledge about

Networking and security

1. Knowledge in

creating websites

1. Database

management and

programming

Software requirements

* Visual Studio Code
* XAMMP
* Browser
* Leaflet
* Three.js

Hardware requirements

during the development

* Computer with at

least 4gb RAM

Hardware requirements

during the implementation

* Computer with at

least 4gb RAM

* Mobile Phone

with at least 4gb

RAM

Evaluation

**Project Objectives**

**General Objective**

The general objective of the project is to develop a web and mobile application that will give tricycle commuters support to raise complaints regarding issues and violations that tricycle drivers commit.

**Specific Objectives**

The study specifically aims:

1. To design a web and mobile application for tricycle commuters around San Pablo City, Laguna.

2. To develop an application that has the following features:

1. To view passengers’ complaints and driver violations by the San Pablo City Traffic Management Office (CTMO).
2. To scan Tin plate and LTO plate number of tricycle for identification in complaint processing
3. To implement maps to define the distance of travel
4. To implement different categories of complaints for specification:
5. Overpricing
6. Reckless Driving
7. Selective drivers to passengers
8. Offensive Jokes
9. Disregarding student and senior discounts
10. Verbal and sexual assaults
11. Unsafe vehicle conditions
12. Can add, view, and update the information and complaints of user.

3. To test and evaluate the developed application; and

4. To document the developed web and mobile application.