**1.0 Overview of the Project**

In this project, we aim to enhance the current e-Hailing system to address its existing issues and improve user experience. E-hailing services allow users to book transportation via electronic applications, facilitating easy travel for students, workers, and the public. Despite the convenience, the current systems have problems related to complexity, data security, and efficiency. Our goal is to enhance the current e-Hailing system to a user-friendly, secure, and efficient e-Hailing system that caters to a broad range of users, including older generations and to those who are less familiar with the current modernized technology.

While identifying the problem statement and feasibility studies along with the project objectives and scopes, we need to identify the users’ feedbacks on the current issues of e-Hailing system in order for us to develop a more smoother and more user-friendly of the e-Hailing system, to ensure the system is applicable to everyone involved in booking public transportation online. Then, we need to arrive at a conclusion on the users’ feedback and proceed with the project objectives.

**2.0 Problem Statement**

Based on our analysis of the current e-hailing systems, we have identified three main problems:

* Price and affordability:

During peak hours or high-demand situations, e-hailing services often give high and unpredictable prices, making it not affordable at all to most users. This condition will also affect the accessibility and reliability of the e-hailing services

* Safety concerns:

Whether driver or customer, e-hailing services face significant challenges regarding the safety aspect. Incidents of harassment, assault, and theft have been reported, causing an untrusted environment among people in the e-hailing community

* Inefficiency in Handling High User Traffic:

The systems struggle with delays and inefficiencies, particularly during peak times. This leads to frustration among users who need timely transportation.

**3.0 Proposed Solutions**

To tackle these identified problems, we proposed the following solutions based on three aspects:

Price and affordability:

1. Implement a Cap on Surge Pricing

Introduce a maximum limit on how high surge prices can go during peak times. This cap can prevent exorbitant fare increases while still allowing some flexibility to incentivize drivers.

2-Driver Incentives during Peak Times

Offer additional incentives to drivers during peak hours without passing the extra cost directly to passengers. Ex: give bonus for completing a certain number of rides during high-demand periods

Safety concerns:

1- Anonymous Reporting System

Create an anonymous reporting system within the app that allows users to report safety concerns without revealing their identity, encouraging more users to report issues without fear of repercussions.

2- In-App Emergency Button

Integrate an emergency button within the app that allows passengers and drivers to notify local authorities or e-hailing service security teams in case of an emergency

Inefficiency in Handling High User Traffic:

1- Real-Time Data Processing

Use real-time data processing technologies to ensure that user requests and driver availability updated instantly, reducing delays.

2- Cloud-Based Infrastructure

Implement a cloud-based system to handle high volumes of data and user requests efficiently.

3- AI and Machine Learning

Utilize AI for demand forecasting and optimal driver allocation to improve response times and service reliability.

By addressing these key issues, the e-Hailing system will offer a more accessible, secure, and efficient service, enhancing overall user satisfaction.