

Software Engineering Project

SYNOPSIS

Problem Statement : Taxi Management System

Software Requirements :

- 1.Operating System :** Windows / Ubuntu 20.04.1/ macOS
- 2.Backend :** MySQL server (version : 8.0.27)
- 3.Frameworks :** React, Express, NodeJS
- 4.Programming Languages :** HTML, CSS, JavaScript, SQL

Objectives :

1. The main objective of project is to create a location based reactive system where customers can book taxis that are in the proximity to their location and can plan a trip to new location.
2. To provide customers with the facilities to pay the billing amount using easier payment gateway and also provide them portal to share their feedback and ratings.

Background :

Transportation is the basic and one of the core need of working people in our society. There are many public transports available although people avoid to travel from them due to rush, crowd, traffic congestion, unavailability of seats, lack of maintenance, delay, etc. And due to this pandemic situation lot of people used to plan their journey via taxis to avoid contact with infected people. Also, we can find lot of people searching for a taxi in their locality as well as same case with taxi drivers, searching for customers.

So, better Taxi Management System can provide solutions to the above mentioned problems. The system with proper management and maintenance can help to customers as well as taxi drivers to overcome their problem and help them to plan a safer journey together. Also, asking for feedback to a customer can help to improve the system according to their needs so that they will find it easier, punctual and efficient.

Hardware Requirements :

- 1. Processor :** Intel 2GHz (or above)
- 2. RAM :** 4 GB
- 3. Hard Disk Space :** 120 GB (or above)

Features / Functionalities :

- 1.** Customer can register/login to the system and can use the service.
- 2.** Customer can view the list of available taxis on the basis of his source and destination location.
- 3.** The ratings of drivers will be made available to customer and customer can choose any taxi from the list .
- 4.** Customers can view booking status and their trip history.
- 5.** Drivers can login to their account and can update their location and shift timings.
- 6.** Drivers can also view their trip requests and also get notified when anyone book their taxi.
- 7.** Driver can approve the trip requests and can select fare and duration of the ride.
- 8.** At the end of the journey, customer can pay using payment modes available and also will be able to give feedback and ratings to the driver.
- 9.** The system will be managed and maintained by admin.
- 10.** Admin can view garage status, taxi details, etc. and can also view feedback given by customers and can take necessary actions to improve the system.