



Toll Booth Management System

Aim of the Project : To efficiently manage the collection of the toll in electronic form as well as manual toll collection. Keeping a record of the vehicles and the medium they choose for the payment of the toll.

Abstract : This project emphasizes the application of the current language in the tolling system. Project aims to betterment of the tolling system in the collection as well as retrieval of the data of the vehicles passing by the toll booth. It has got a lot of function enough to handle as well as easy in implementation. It counts on the payment method used by the toll payer (manual mode, UPI payment, FastTag deduction). If its FastTag payer then depending on the vehicle type registered it will deduct the amount from the payer FastTag wallet. There will be a list of fastTag users file in which registered fastTag users will be given with respective

fastTag Id(ex. FTG0001133). If it's the UPI payment then they will have to pay the enlisted amount depending on their vehicle type. Same goes for the manual payment. Also, this application bifurcates the vehicles and later proceeds for the payments. Before proceeding for the final payment, it also looks for the weight of the vehicle if it's in normal range nothing is added to the bill else it carries some goods the toll amount is doubled. It also stores Information about the vehicles and the type of vehicle. And later displays it by summarizing the numbers depending on the type. Features of the project is that it is fully user-based application. It will be convenient for the toll collectors to collect and manage the details easily. Its all-in-one application for toll booth management. It highlights the invoice for the user, and gives summary how much amount and for what is has been deducted. It is more user-friendly and as per the user's convenience. The project also has got admin login window so the security of the application has been increased. None other than the specified users can login to this application. It also follows the government norms to exempt two wheelers and it don't ask for toll for agricultural tractors. It allows smooth management of the toll collection and storage. It can excel on a large scale. It saves both time and fuel. This system improves the speed and efficiency of traffic flow and save drivers' time. This is also cost effective and maintenance cost is low.

Program Output :

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TollBoothSystem

-----Toll Booth Management System-----

-----Administration Login-----

Enter Login Id = 123

Password = *****

Access Granted. Welcome to our system

Press any key to continue . . .
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-----Enter Customer Details-----

Please enter customer name : Anirudh kumar

Please enter customer ID : 1100552021

Please enter customer vehicle registration number : 8808762345003

Please enter customer vehicle plate number : MH48AK4120
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Please select the vehicle type of the customer from following

- | | |
|--|--|
| 1. Two Wheeler | 6. Bus / Truck |
| 2. Three Wheeler - Auto-rickshaws / trishaws | 7. 4 to 6 Axle Vehicles |
| 3. Four Wheeler - Car/ Jeep/ Van/ and similar mini light commercial vehicles | 8. 7 or More Axle Vehicles |
| 4. Light Commercial Vehicles | 9. Heavy Construction Machinery(HCM) / Earth Moving Equipment(EME) |
| 5. Three Axle Commercial Vehicles | 10. Tractor / Tractor with trailer |

Enter the choice : 3

```

|-----Customer Details-----|
|
| Customer name : Anirudh kumar
|
| Customer ID   : 11000552021
|
| Customer vehicle registration number : 8808762345003
|
| Customer vehicle plate number : MH48AK4120
|
| Customer vehicle type   : Four Wheeler - Car/ Jeep/ Van/ and similar mini light commercial vehicles
|-----|

```

Press any key to continue . . . █

The following show the estimated weight of particular vehicle type

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Three Wheeler - Auto-rickshaws / trishaws          | GVWR <= 5000 kgs
Car/ Jeep/ Van/ and similar mini light commercial vehicles | GVWR <= 7500 kgs
Light Commercial Vehicles                          | GVWR > 7500 Kgs && GVWR <= 12000 Kgs
Three Axle Commercial Vehicles                    | GVWR > 16000 Kgs && GVWR <= 25000 Kgs
Bus / Truck                                       | GVWR > 25000 Kgs && GVWR <= 30000 Kgs
4 to 6 Axle Vehicles                             | GVWR > 35000 Kgs && GVWR <= 45000 Kgs
7 or More Axle Vehicles                         | GVWR > 45000 Kgs && GVWR <= 54000 Kgs
Heavy Construction Machinery(HCM)/ Earth Moving Equipment(EME) | GVWR > 44000 kgs && GVWR <= 50000 Kgs
Tractor / Tractor with trailer                  | GVWR > 12000 kgs && GVWR <= 15000 Kgs
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Enter the gross vehicle weight rating (GVWR) of the vehicle : 10000

Processing.....

Select your choice based upon following travelling options

1. Single Journey
2. Return Journey

Please enter the choice : 2

Generating the bill.....

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|           Toll Booth Management System - Customer Invoice           |
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| Invoice Number       : #SacZ41 |
| Customer Name      : Anirudh kumar |
| Customer ID       : 11000552021 |
| Vehicle registration number : 8808762345003 |
| Vehicle plate number : MH48AK4120 |
| Customer vehicle class : Four Wheeler - Car/ Jeep/ Van/ and similar mini light commercial vehicles |
| Customer Journey    : Return |
| Customer vehicle weight : 10000 KG |
| Customer vehicle weight is Overweight |
| Caution Money      : Rs. 0 |
| Advanced           : Rs. 0 |
-----
| Total Toll Amount : Rs. 320 |
-----

# This is a computer generated invoice and it does not
require an authorised signature #

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You are advised to pay up the amount.
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Press any key to continue . . . _

Please select the payment option from the following as per your convenient

1. UPI payment(Amazon pay/ PhonePe/ GPay/patym,.etc)
2. Manual Payment(Cash)
3. Fast Tag
4. Debit/credit card

Enter your choice : 1

Choice the method of UPI payment

1. Scan QR code and make payment
2. Enter the UPI ID to make payment

Enter the choice : 1

Confirming the payment !

Payment Successful !!!

THANK YOU !

Do you want to continue with the application [y/n] : n_