

DIGITAL TOLL PAYMENT COLLECTION SYSTEM

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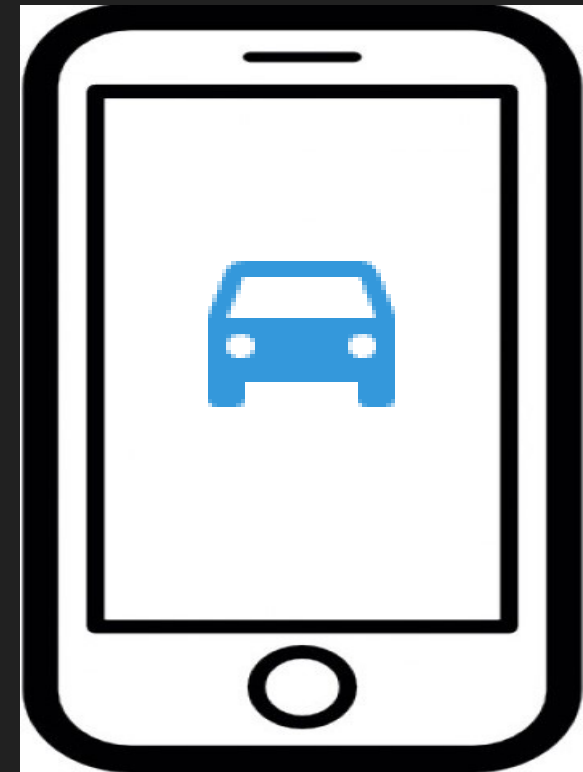
IDEA:

- We are designing an android application for online toll payment system.
- The basic aim of our app is to reduce the time , pollution and many other problems occurs at the toll plaza.
- There are mainly two main options:
 - 1.Prepayment
 - 2.Postpayement



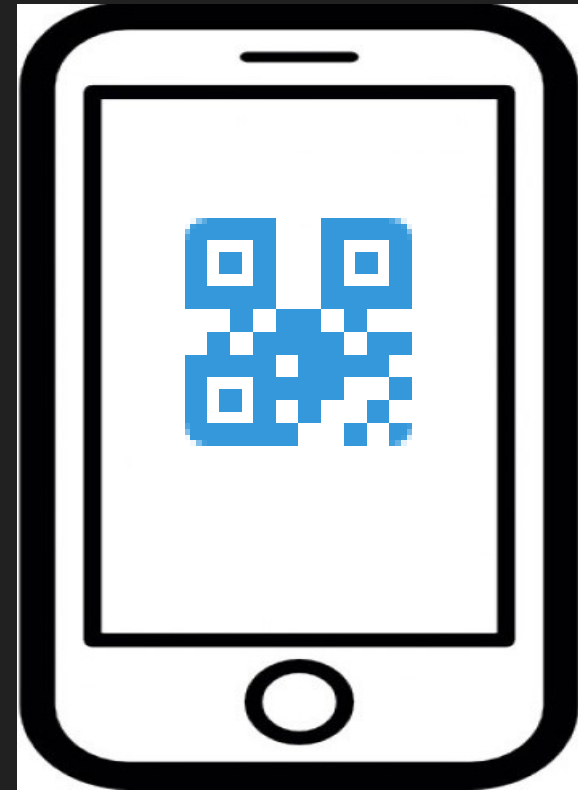
DESCRIPTION:

- When a new user sign up for a new account, he will have enter his personal details, vehicle details.
- The details will be matched up with the RTO database.
- Payment mode is through e-wallet like PayTm.



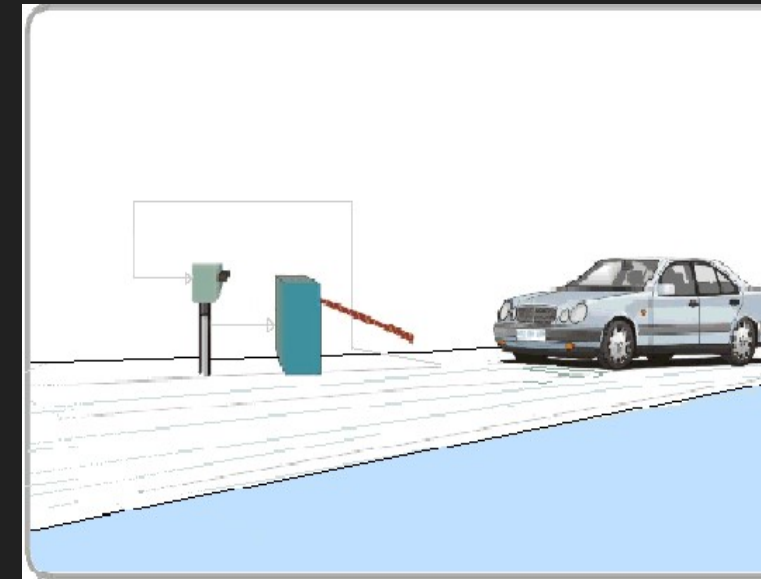
POSTPAYEMENT:

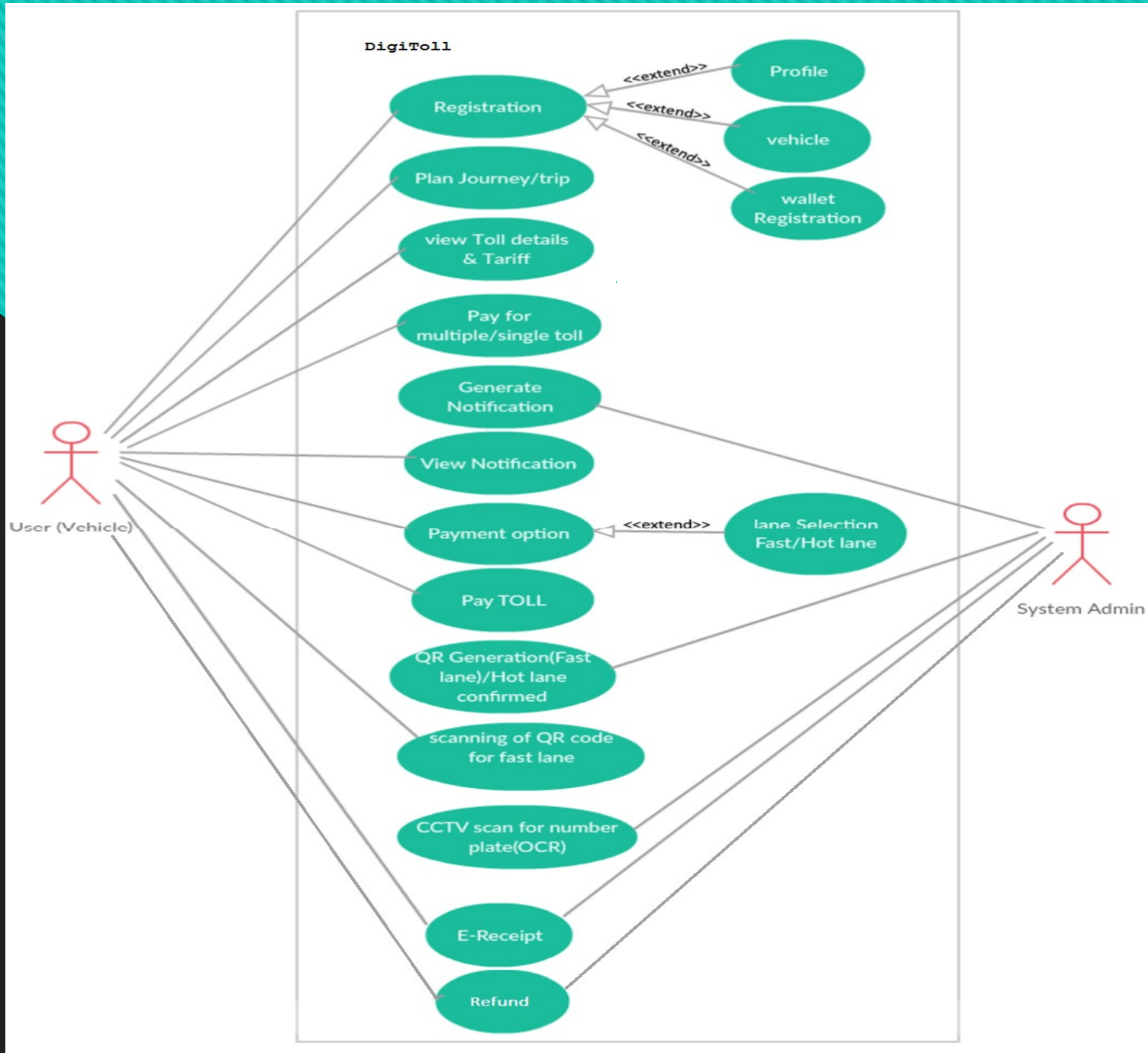
- Notification before 2 Km.
- One touch payment.
- Generation of QR code.
- Scanning of QR code.
- Passing the vehicle at the toll plaza through fast-lane.
- Generation of E-receipt.



PREPAYMENT:

- Pre-payment of multiple tolls.
- Generation of E-receipt.
- At toll plaza: Automatic number plate recognition using Image Processing.
- Validating the user.
- Passing the vehicle at the toll plaza through hot-lane.





INNOVATIONS:

- Concept of fast-lane(for QR code generation) and hot-lane(for ANPR).
- Notification prior to 2 Km of toll plaza using geofencing concept.
- List of tolls can be seen on app.
- Monthly pass for daily users.
- Prepayment of tolls.
- Payment through e-wallet.
- Crime activities can be controlled.

REVENUE MODEL

- DigiToll promotes cashless economy and digitization.
- Revenue generated through advertisement.
- Initial cost is moderate but less investment in manpower.
- By giving membership option, high revenue can be generated.
- Corruption can be controlled.
- Most of the technologies in technology stack are open source.
- User friendly UI based on android promotes marketing of the app .

REVENUE MODEL

1	Govt. / Company								
2	Expenditure Yearly			Income Yearly					
3	Capex	Opex		Unit Price	Total No.	Total	Yearly		
4	Payment Gateway		30000		Toll Plaza Collection	10000	6000	60000000	720000000
5	Google Maps		25200		Implementation (@10% Profit of Total Cost)	10%	6000	127200000	
6	Salary		1080000						
7	Server	1000000							
8	Internet Charges		36000						
9	Phone		24000						
10	Rent		240000						
11	Miscelleneuos		120000						
12									
13									
14		1000000	1555200						
15									
16									
17	Page 1 For Toll Plaza Owner					Page 2			
18	Assuming Number of Lanes	6							
19	CAPEX				OPEX				
20		Unit Price	No of Units	Total		Unit Price Monthly	Unit	Total Yearly	
21	Camera	25000	6	150000	Internet	1500	1	18000	
22	Server	50000	1	50000	Salary exp.	20000	3	720000	
23	Hardware Unit	2000	6	12000	Govt. /Company Charges	10000	1	120000	
24	Labour	15000	1	15000	Miscelleneuos	10000	1	120000	
25	Miscelleneuos	20000	1	20000				978000	
26				247000					
27									
28	Total Saving for toll Plaza Owner								
29		Unit Price	Total Units	Total Saving Monthly	Total Saving Yearly	Actual Saving Yearly			
30	Salary	15000	15	225000	2700000	1722000			