Education Department
Government of Gujarat

A State-level
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Problem Statement : E-Challan Payment
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Education Department (Higher & technical) Government of Gujarat, Gandhinagar.

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Problem ID	: PID697
Challenge Title	: E-Challan Payment
Name Of The Office	: The Smart City Ahmedabad Development Ltd.
Challenge Description With Context	: Out of the total e-challans issued in the current times, only 30-35% are responded to by the citizens. Although lacs of challans are generated each day, the manpower limitation leads to issuing of only a thousand of them. This non-issuance of challans causes revenue loss as backdated challans can always be disputed. Therefore, currently only 30% citizens actually end up paying challans that are issued to them. The problem to be addressed here is how can the rate of fine payers be increased using a digital solution?
	Better e-challan collection.
Users	: City Traffic Police
Expected Outcomes	: Higher collections
Impact	: Better traffic law following

Abstract

- E-challan pay by effective way is a web-portal which will help the government in improving the e-challan collection. This system shall provide an alternative way of linking the e-challan issued to a citizen with a fixed cyclic bill that the citizen pays without fail such as their electricity bill. Linking of e-challan fines with a cyclic bill like electricity bill will restrain the citizens from ignoring it, shall facilitate the fine collection for traffic police department and shall bring in awareness amongst the citizens leading to lesser traffic violations.

Existing Innovation-Technology To Address Related To Your Problem

- Given that India is now moving towards automated solutions to curb traffic violations and road accidents, we focus our efforts on characterizing these violations in Indian cities.

- Currently only 30-35% of all e-challans generated for traffic are being paid by the errant public. In this work, we present an e-challan collection system for Ahmedabad. Characterizing the fine payment behavior, we find that 57% of unique vehicles in Ahmedabad are involved in repeat offenses.

Existing System

- The government of India has introduced Traffic e-Challan, which is an application and is combined with web portal applications which are namely Vahan and Sarathi.

- These two applications offer many benefits and features which cover all the main aspects of the Administration System. The traffic e-challan can be paid both online as well as offline by the traffic violators.

- A message will be sent to the offender's registered cell number. The fine amount is calculated automatically as per the offence and the Enforcement Officer then takes a print out of the traffic e-challan with all the necessary details and gives the same to the offender.

- The defaulter is allowed to pay online by scanning the QR code received or can make cash payment at the RTO office or can deposit cash at onsite.

- The traffic rules are very strict nowadays. There are legal consequences if you are not paying the e-challan penalty within the timeline. If you do not pay the same because of any reason, a summon is sent to your residential address as a license holder from the court where you will be called and questioned to clarify in front of the judge upon violation of the traffic rules. If you do not visit even after you have been called by the court and do not pay the traffic e-challan, then your driving license will be suspended.

Proposed System

- The e-challan collection system is a new way of collecting the penalty of e-challan from the traffic violators.

- The e-challan system is a technology-based solution which will assist government with a reduction in the manpower requirement and automated collection.

- The system will be integrating the e-challan payment system with a cyclic bill that the citizens pay (here Electricity bill).

- We reduce the manual work by digitizing the payment of challan online.

- If one fails to pay challan within the certain time period of 60 days then the challan amount will pass to the Electricity bill and one has to pay the original amount with 30% increment in fine.

- The system will help the Government to simplify the process of e-challan payment.

- Linking of e-challan fines with a cyclic bill (like electricity bill) will restrain the citizens from ignoring it, shall facilitate the fine collection for traffic police department and shall bring in awareness amongst the citizens leading to lesser traffic violations.

- We plan to provide the user their e-challan with a video proof (future prospect).
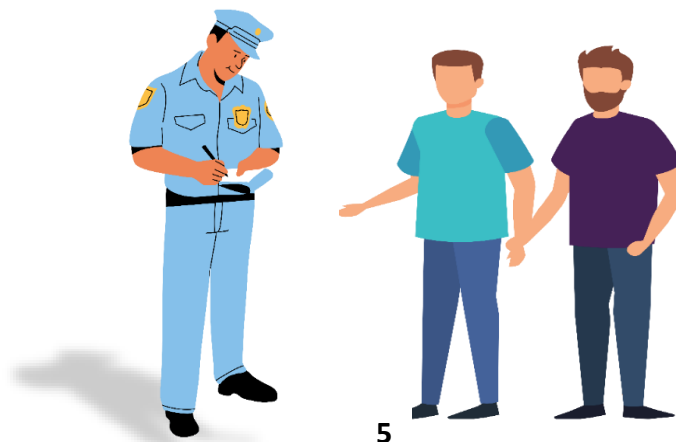
Approach

- By carefully understanding the problem, we came to know that the main reason behind the low e-challan collection is mentality of the citizens, they don't think it is their responsibility to follow traffic rules and pay fine if violated.

- Our approach is to make citizens aware of their responsibility by reminding them about their issued E-challan through various mediums and integrating the E-Challan payment system with their basic necessity of life. i.e- Electricity Bill.

Tools And Technology Used

- Backend-----------------> Node JS
- Frontend----------------> CSS, JavaScript
- Database----------------> MY-SQL
- Markup Language------> HTML
- IDE----------------------> VS CODE

Symbol	Symbol Name	Description
	Start / Stop	The terminator symbol marks the starting or ending point of the system. It usually contains the word "Start" or "Stop."
	Action or Process	A box can represent a single step, or an entire sub-process within a larger process.
	Input / Output	Represents material or information entering or leaving the system, such as total amount (input) or a bill (output).
	Decision	A decision or branching point. Lines representing different decisions emerge from different points of the diamond.
	Manual Search	Indicates a sequence of commands that will ease manual searching depending upon the output.
	Database	Indicates a list of information with a standard structure that allows for searching and sorting.

Flow Chart/Road Map
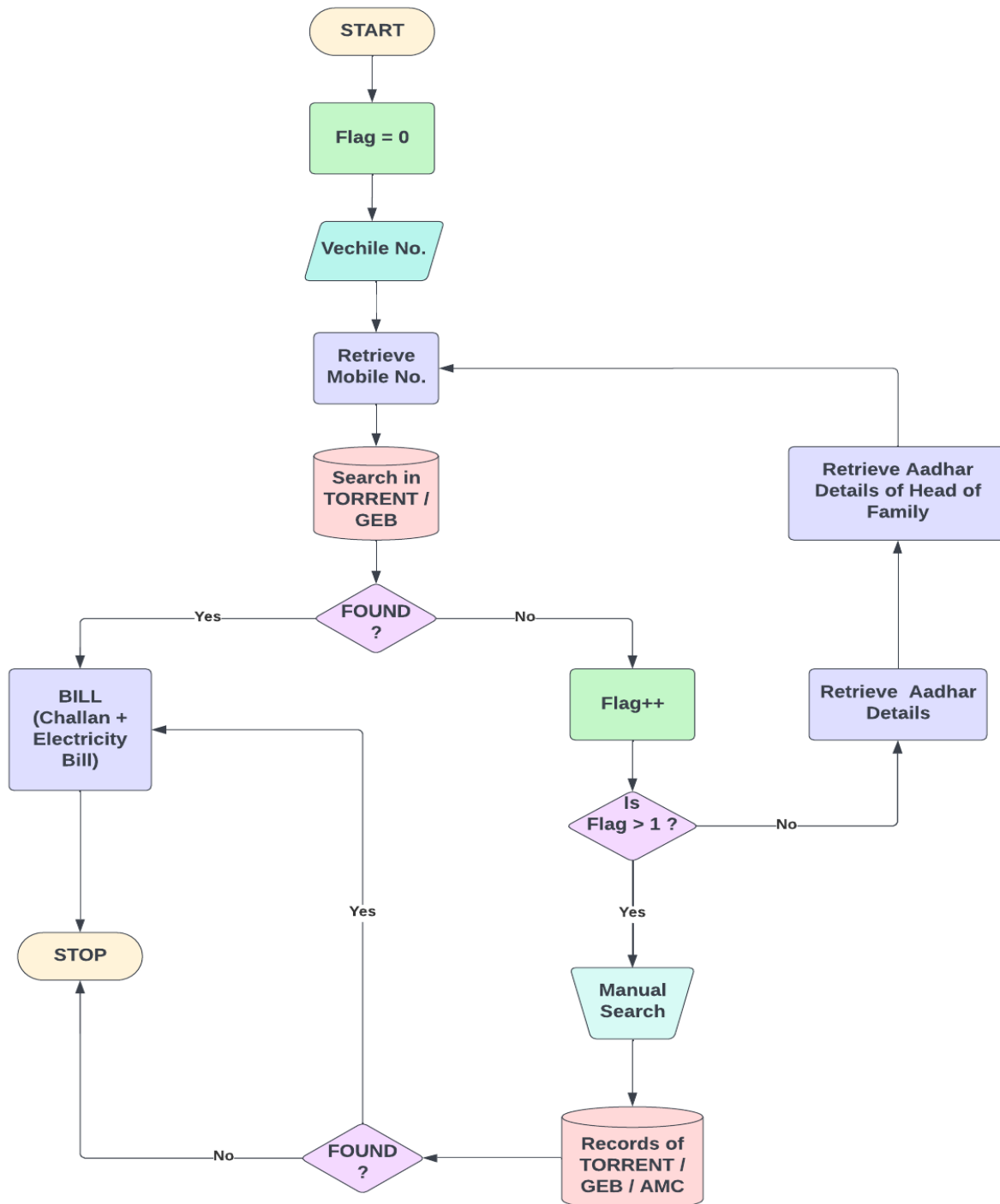
Project at a glance
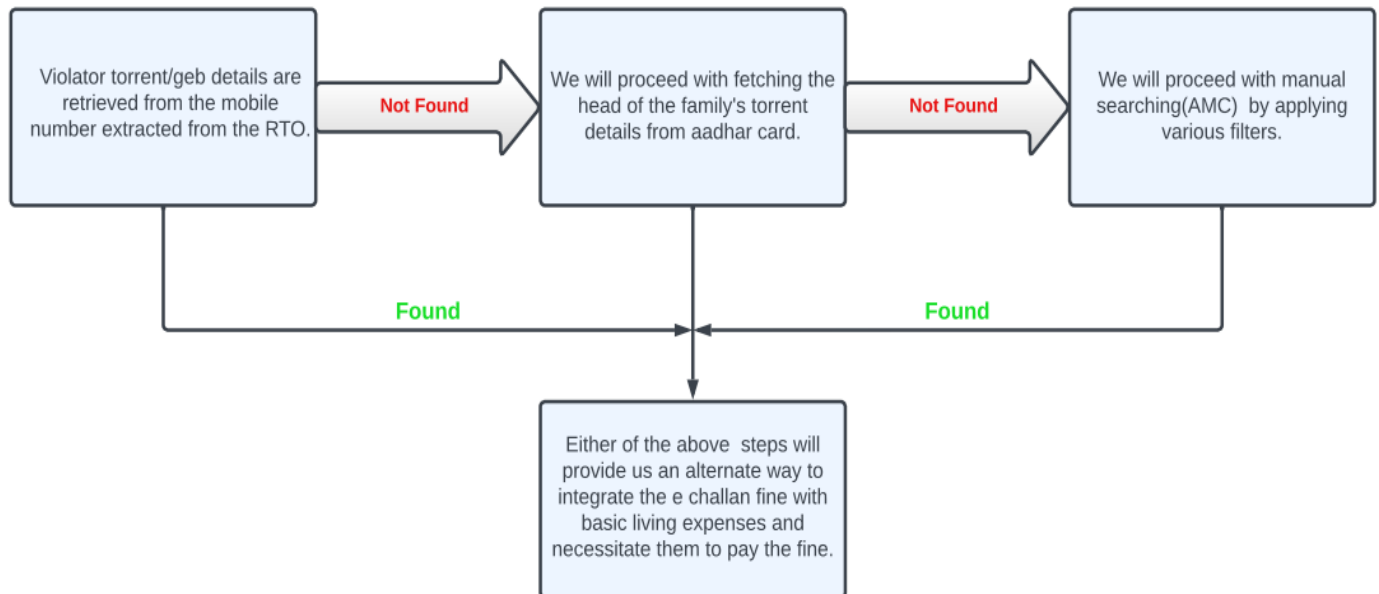
Challenges/Risk In Implementing Final Prototype

- Main challenge in our e-challan collection system is the collaboration of government with private sector.

- Managing large databases and servers of Government of Gujarat, Torrent Power and GEB and their database management is a big problem for developers.

- Outdated information provided by the RTO will be a barrier in our system.

- Outdated information provided by the user in Aadhar Card will be a barrier in our system.

- Currently, our system is applicable for limited scope. i.e., RTO's in Gujarat.

Work Done Till Date

- The portal is not completely ready but few interfaces for admin are partially ready which will require minor changes. The login page is almost ready with the validation in it and now we are working on the remaining web pages along with their database integration with portal.