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CEYLON E- Traffic Fine Payment System

Final Project Proposal (G-8)

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CHAPTER 01

1.INTRODUCTION

This document provides an overview of the entire research project. The document is divided into six major sections. The first and second sections provide an overview of the research and its background. Sections three, four, and five describe the problem statement, literature review, and proposed solution, respectively. Justifications for the solution and the Scope of the System are presented in the sixth and seventh sections, respectively. Section eight describes the system's functionality. Section nine describes methodology and technology. And finally, a Gantt chart / Risks is drawn.

Most Sri Lankan drivers are aware of the dangers and inconvenience of careless driving. However, minimizing of current increased traffic density and protecting the law is based on two general factors as Sri Lankans effort of being law-abiding, and police proactivity. In order to protect the law, Sri Lankan government has introduced a method of charging fines from citizens who breach traffic rules as punishments. But in some instances, the offender (A motorist who violates traffic laws or regulations) might need to open in court cases for some reasons such like not paying fine on time (within 14 days from the date of issue of the fine receipt).

The scenario behind charging fines is issuing of an official fine receipt by a traffic officer as a notice of the fault the offender did including the amount of the penalty along with the due date of the payment. With the current economy and busy life schedules of present Sri Lankans, when we look at the traditional payment methods of physical transactions of paying fines these methods become more challengeable. As in the traditional method people have to go from one place to another for paying fines and collecting their driving license. As a result of that, paying fines have become more challengeable for people as well as for the fine collection and management of the traffic sector in Sri Lanka.

Every software project has a client. That client may be an imaginary client or a real client. In this (CEYLON E-Traffic fine payment system) project our team has chosen an imaginary client. According to (Senaratna, 2020), Sri Lankan police forces consists of 43 Territorial Divisions, 67 Functional Divisions, 432 Police Stations with more than 84,000 policemen.

Apart from them we have chosen only the traffic sector in Police stations of Kalutara district for our project.

The Traffic Police Center was formed in 1953 to assist the Inspector General of Police in making traffic policy choices, as well as to help implement and carefully monitor execution. Regulations and laws are implemented and enforced by powers granted to the police under the Motor Traffic Act of 1951. The Colombo Metropolitan Police realized the need for a separate force to control traffic within the city in 1950. As the volume of road traffic on the island increased, the Traffic Headquarters was established in 1953 to cover the entire island.

Currently, every station has a traffic branch just like police stations in Kalutara district has. Officers assigned to this task are distinguished by the white colored top section of their peak caps and the white belt with cross belt they wear. They have received significant training in vehicle inspection, traffic accident investigations, and court processes. Traffic wardens employed by regulatory bodies in cities and towns like Kalutara assist the police in a limited amount of parking within municipal limits. With a growth in the number of vehicles on the highways producing constant traffic congestions in cities, the demands on the police to meet the situation for smooth traffic operation have increased correspondingly.

Main Functionalities of the traffic police

- Engaging in charging fines and court cases for the ones who breach traffic rules.
- Enforce driving rules, prevent breaches of traffic regulations, and prosecute violators.
- Examine into the accidents.
- Highway traffic must be controlled.
- Provide VIPP with pilot services.
- Assist the public at numerous social events and gatherings involving vehicular traffic.

2.BACKGROUND STUDY

Currently, every police station, including those in Kalutara District, does not process or use any computerized information systems to manage traffic fines. Instead, they handle them all manually using papers (receipts & bills), books, and files as resources. However, this may not be an effective method of managing traffic penalties.

Step 1: If any driver who has been caught or reported breaking the traffic rule(s).

Step 2: Police confiscates his/her driving license.

Step 3: Particular police officer issues a spot fine statement mentioning name of the breached rules by the driver and their cost of penalties. The spot fine permit is issued to the driver as a temporary license provided that the driver makes the payment within 14 days.

Step 4: Then driver goes to office and receives a fine payment form from the traffic division.

Step 5: After, driver goes to post office and pays fine for which he/she receives a receipt to confirm payments made.

Step 6: After that, driver goes to respective police station (Traffic Division), shows receipt and police return driving license.

Note

- If driver didn't pay the fine (within 14 days), he/she will be submitted to court.
- If driver has been caught without the driving license. Police issue another permit (police 405- Code of criminal Procedure Section 109(6) Act, No. 15 of 1979).

Lastly, it's convenient to mention that every Police Station in Sri Lanka is available 24/7 a year, and every Post Office is open Monday through Friday from 8:00 a.m. to 3:00 p.m., and on Saturdays from 8:00 a.m. to 1.30 p.m., with Sunday being a holiday.

3. Problem Statement

3.1. Lack of Centralization

The current approach for processing penalties is decentralized. Because when an offender violates a traffic rule(s) at a certain location, the fine receipt issued by that policeman contains the name of the police station to which he/she is assigned in that fine ticket. However, due to vital reasons, another police officer from a separate police station is unable to explore for fine information if the offender has lost the fine receipt.

3.2. Lack of Real Data

Offenders are being arrested even if they have already paid their fines due to a lack of immediate data updating through the manual system as those records remain and reflect the same as an offender until they physically visit the traffic department offices for clearing.

3.3. Delay in Management

Every process necessitates physical tasks, particularly in the execution of fines. It can occasionally contribute to management delays.

3.4. Manual Based Documentation

From beginning to the end, the entire process of charging and paying fines is carried out using books of spot fine sheets, spot fine statements, court case files, and so on. Until the offender pays the penalty/fine and receives the driving license back, the fine receipt must be with him/her. Since the receipt is a piece of paper, it can be damaged/ lost mistakenly.

With the current manual system, its so hard to generate reports manually. Therefore, report generation have become more challengeable.

(dial1, 2019)

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சாரதி அழைவிப் பத்திரக்காட்டுப் பதினால் பொதுவில் உத்தியோகத்தறிவால் வழங்கப்

9/7643983 **27** 511499
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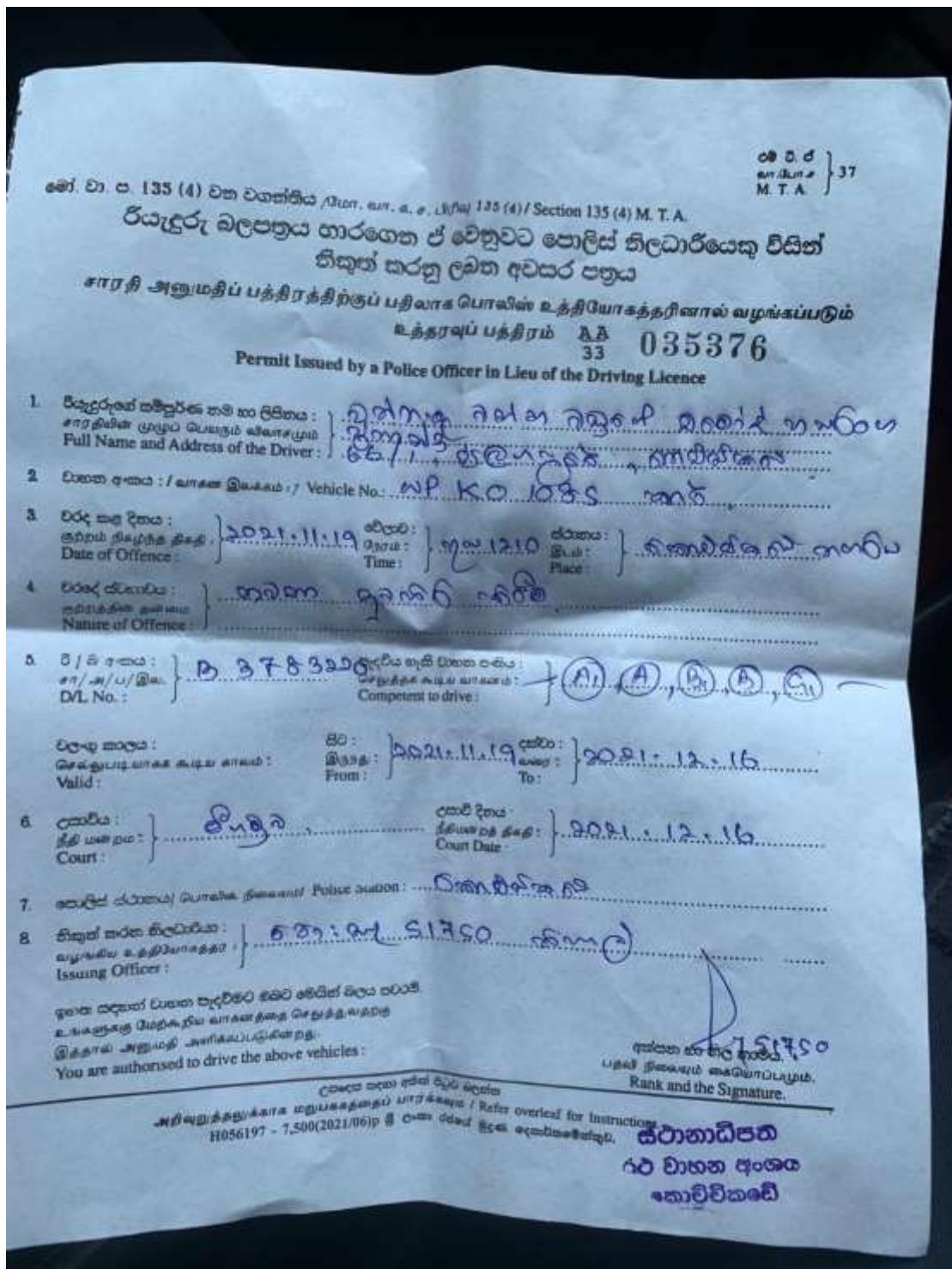
Permit Issued by a Police Officer in Lieu of the Driving License

தேவையில்லாத வாகனங்கள் செயல்படுத்த அனுமதி கிடைத்த வேண்டும். முறைப்படி வாகனங்கள் செயல்படுத்த அனுமதி கிடைத்த வேண்டும்.

అప్పిలు కూతురు వాటిక
ప్రశ్న నిమిషాల అవిష్యాల
సంక్లిషిత సమాచారాలు

(H.Hoole, 2020)

Following two images could be found and captured by us (Project team) after visiting a police station;



[View more posts by **John**](#)

Fines in view of Prosecution.

Section 211(a) of the Patent Trial Proceedings Act is amended respectively by Act No. 23 of 1998 and Act No. 18 of 2011, and Section 10(1)(b) is amended by the Transformation Circular No. 2016/06 on 31/03/2016.

கிட. ஓ. சு. 135 (4) கிட. ஒன் போன்ற ஒன்று முதல் முறையிலேயே 135 (4) / Section 135 (4) M. T. A.

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கார்தி அனுமதிப் பத்திரக்களிற்குப் பதிலாக பொலிஸ் உத்தியோகத்தினால் வழங்கப்படும் உத்தரவுப் பத்திரகம் **758220**

Permit Issued by a Police Officer In Lien of the Driving Licence

3. பொதுநகர் விடுப்புக் கடி மற்றும் இடைஞாலை :
ஏற்கனவே குடும்ப விடுதலை விடுதலை விடுதலை
Full Name and Address of the Driver :

Customer Address / Contact Number / Vehicle No.:

6. පෙක් වාරු දිනය : _____ ටැයැව : _____ මූල්‍යය : _____
 පොත් තුළුව නෑති : _____ ගෞරුව : _____ පොත් තුළුව : _____
 Date of Offence : _____ Time : _____ Value : _____
 පොත් තුළුව නෑති : _____ ගෞරුව : _____ පොත් තුළුව : _____
 Date of Offence : _____ Time : _____ Place : _____

கடார விதிகள் : }
விதிவிருத்தி விதம் }
Nature of Offence : }
.....

திருவாரூபம் : எண்/குடும்ப இடங் : முதல் வகுப்பு : குழுமத்தின் வகுப்பு : Competent to drive : D.L. No. : சென்றதாக விடுதலை வழங்கும் : Competent to issue : விடுதலை வழங்கும் : விடுதலை வழங்கும் : விடுதலை வழங்கும் : விடுதலை வழங்கும் :

குடியரசு : நிலாப்புற தெலி : கூடுதல் தேவை : நிலாப்புற தெலி : கூடுதல் தேவை :

Accredited by Government of Maharashtra Police Station : _____

வீட்டு வாட்டு விற்பனை : }
ஏழாணி க. திருமதி அ. ந. க.
Issuing Officer : }

www.purpledynamite.com

You are authorized to drive the above vehicles.

தமிழ்த் தூண் கு சிறை காலத்தில்
பதவி நினைவும் காக்கோப்பும்.

గ్రహిం ఉత్సవ గీతిన క్లెప అంగాల
అభివృద్ధికల్పనల ముఖ్యమైనద్దులు | Refer overleaf for instructions
శ్రీమతి రమేష్ బాబు

3.5.Complicated Administrative Procedure

A considerable amount of time is consumed, especially from the issuing to the clearance process. For example, payments can only be done at specific locations, such as the post office, which have lengthy queues with limited working hours and Sunday as a holiday. (S.M.Wijerathna, 2021)

3.6.Frauds

Unfortunately, there are some traffic policemen who act unethically in their duty by getting briberies from offenders.

<https://youtu.be/5rP2lp4NJmc>

3.7.Spreading of covid

In this pandemic situation people may get together in ques as well as when issuing and paying fine receipts. Also, people may get contact with papers and there is a risk of spreading covid-19 virus. (NewsWire, 2021)

4.Literature Review

The following literature has been reviewed in order to better understand the proposed research. The preliminary literature review's focus ideas include system features such as paying the penalty and diverse technologies, as well as a traffic fines management system and a theoretical framework for the dissemination of innovation.

A government uses rules to permeate in the breaches in legislation. However, legislation is essential for regulating motor traffic in a country. The Sri Lankan Motor Traffic Act (Motor Transport Act (No. 48 of 1957)) (Lawnet, 2016)has undergone numerous amendments in recent years to accommodate new requirements to properly regulate road traffic. Further, the application of such rules is primarily reliant on the police responding quickly and effectively to road traffic offenses, as well as court understanding and attitudes toward sentencing offenders in the interest of streamlining road traffic regulations.

People are safer when traffic rules are followed. In the wrong hands, a motor vehicle can be a lethal weapon. The safety of all road users is dependent on all motorists adhering to a strict set of laws. In 2010, approximately 26,847 individuals were badly injured and 2721 people died as a result of road accident trauma. In 2014, approximately 38,500 road traffic incidents were reported, with 36% classified as "serious" and roughly 7% fatalities. Between 1977 and 2004, there was a 249 percent rise in road accidents. Every 4.5 hours, one person in Sri Lanka is killed by road traffic trauma. Over 40,000 individuals died because of road traffic accidents between 1977 and 2007, with the cost of accidents estimated to be more than Rs100 billion. a significant amount of which can be traced to one or more drivers failing to respect traffic laws. (Perera, 2016)

However, managing payments and providing permissions remains a headache to this day. As mentioned in the above paragraph there are numerous traffic breaches and violations that can result in a fine being issued to a motorist by any law enforcement officer. Here are some of them; Failure to obey directions and signals of police officers, Non-compliance with traffic lights, Failure to wear protective helmet when driving, Violation of regulations, Failure to carry the emission certificate in the vehicle, Not displaying of revenue license of motor vehicles, Failure to carry a driving license when driving, etc. (Guruwaraya.lk, 2018) Currently in Sri Lanka all these fine managing criteria are done manually using booklets, papers, physical money, files etc.

4.1.Similar system analyzation

Europe has focused their eye on the significance of identifying the offenses and providing prompt assistance can be carried out in a timely manner as in. (de Fuentes, 2012) Here they have highlighted the benefits of automating the process of paying traffic fines. Despite the obvious benefits of automated operations, existing implementation approaches have three major flaws. Initially, a reliable identification of both the driver and the vehicle has not been achieved well. When a breach is detected by any automated device, no immediate feedback of the fine is provided. Finally, the offense displayed is typically based on a single information source of a police officer, which does not ensure that the offense is completely explained.

Not only the European countries but also Asian's countries have focused their eye on implementing online traffic fine payment systems. Thus, a real-world example for that is the **E-Challan** system which has issued by the Indian government. The system has been implemented and currently used in the states including Bihar, Chandigarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand, Jammu & Kashmir, Punjab, and Puducherry. The entire system is technologically driven. When it comes to functioning of this system, traffic policemen rely on CCTV evidence. A CCTV camera captures footages of ongoing vehicles in real time. When an individual breach a traffic rule, the incident is recorded on CCTV. The police will then confirm the vehicle number information using the screenshot obtained from the CCTV camera, and the offense(s) will be inserted into the system. The information gathered by the traffic policemen include the vehicle owner's information, the rules breached by the driver, the location where the rules were breached, and so on. Finally, an SMS will be sent on the registered phone number of the violator. (digit, 2021)

With the **E-Tilang** traffic ticket system, the drivers violating the traffic will be recorded through the application of the police. In Indonesia, this E-traffic ticket system is being used to resolve criminal cases of traffic offences. The results of **E-Tilang** traffic ticket system show that by using technology, the whole process ticket will be more efficient, effective and assist the police in administrative management. The implementation of E-Traffic ticket is an effort to make people obey traffic rules so as to create an orderly traffic culture based on CCTV recordings as valid evidence. (Pertiwi, 2020)

4.1.1Payment System

Due to the rising popularity of internet-based banking and shopping, the electronic payment system has developed in recent decades. As technology improves, we may observe the emergence of electronic payment systems and payment processing equipment. As these developed, improved, and ever more secured online payment transactions, the percentage of cheque and cash transactions are getting declined by now.

However, a payment system is an online payment service that functions when coupled with an e-commerce platform which serves as a route for payments to be made and received. Generally, when it comes to making a payment, in order to accept payments, consumers must fill out some data, such as credit/debit card number, expiration date, and CVV. The main role of a payment gateway is to approve a payment transferred by a specified person to another. (lyra, 2021)

4.1.1.1.Identified various Payment methods

As mentioned above, e challan system which is issued by the Indian government has online traffic fine payment facility. After the violation, violator receives the SMS, then he or she may go to the online site and verify if a challan/fine has been issued in relation to their vehicle by simply entering the vehicle registration numbers and then pay the fee online. If a violator is unable to pay the fine for whatever reason, such as forgetting, the court will issue a summon to the offender's home address, and the violator will be summoned to provide a statement to the judge about the violation. If the violator continues to refuse to appear in court and pay the e-challan, the violator's license will be suspended. (V. Geetha, 2021)

Following are the **steps of paying a traffic fine through E-Challan system:**

1. Visit the state's transport department website
2. Go to a section called e-challan payments
3. Under e-challan payments section go to traffic violation payment section
4. Then click on the type of violation for which you need to pay the fee
5. After, enter the e-challan or vehicle registration number

6. You will see the fine on your vehicle
7. Enter the unique captcha code
8. After that, enter your payment details, Debit/Credit/Paytm and pay the fine
9. Your payment will be confirmed through an SMS (digit, 2021)

As in Indian E-challan system, the process of ticketing in E-Traffic Ticketing (E-Tilang) system is also done based on the CCTV recordings that were deployed at some point before. E-Tilang is a system which has been implemented for E-Traffic Ticketing in Indonesia.

The police and the judiciary are the two types of users that can utilize this program. On the police side, the system will be run on an Android-powered tablet computer. **E-Ticketing is the way which the traffic policemen use to issue a payment ticket to the citizens who breach traffic rules in Indonesia.** The traffic police will use tablets and smartphones to do this. **Through the system, a violation article is issued and must be paid by the offender.** E-tickets allow the offender to entrust a direct penalty to his bank, using whatever facilities he has, such as e-banking, ATMs, or coming physically to the teller. The ticketing traffic officer will receive a notice on his or her phone after the payment has been completed. The offender can reclaim the letter he or she directed by simply producing evidence of payment or taking it up at the location specified in the notice, and then reclaim the officer got driver's license or vehicle registration.

The judiciary/ prosecutor's office is another user of the E-Tilang system. The system will operate as a website executor, similar to a manual trial procedure. Courts and prosecutors are linked to the E-ticket application. The judge will render the decision, and the prosecutor will carry it out.

The **E-Ticket application does not apply the function to pay a fine to the Bank/Registrar** since the method includes a form or a ticket paper. Instead, this application just sends a reminder in the form of a ticket ID, which maintains all data or records related to the chronology of a speeding ticket to be delivered to a court or prosecutor's office using a website that integrates the same database.

4.1.2.Identified Most Common Technologies

CCTV - All CCTVs deployed have been linked to and operated directly by the Office of Transportation's Automatic Traffic Control System (ATCS). The data gathered from all of the cameras is forwarded to the main traffic control room. At the traffic command center, a team of policemen monitors all of the data supplied by the various types of cameras listed above. The traffic officer issues a fine on the number registered on the vehicle engaged in any traffic offense after human verification.

SMS- This service allows networked devices to send brief text messages with a maximum length of 160 characters. SMS is widely available on a variety of networks and is used by both individuals and businesses.

5. Proposed Solution

As the drawbacks we have identified in the current system which we are going to implement we considered many other systems and compared with our existing system and came up with the solution of developing a web application. Reasons why we selected a web application are because a web application allows multiple users access to the same version of an application, no need to be installed like mobile and windows applications, accessible through various platforms such as a desktop, laptop, or mobile and can be accessed through multiple browsers.

In Sri Lanka when an offender breaches a traffic rule(s) at a specific place, the fine receipt he/she receives include the name of the officer and the police station. In such a case, a police officer from another location(province) is unable to obtain more details or issue a new fine on an offender. But through the E-challan system any police officer from any location (states) in India can obtain more details and check whether the offender/driver have to pay a fine or not. Therefore, as a solution for the above-mentioned issue in Sri Lankan system, our web application will allow all registered police officers to search and check the relevant offender's fine details as well as the status of fine payments (paid/not) using the reference number or driving license number.

When it comes to E-challan system, all the CCTV footages will be analyzed, and offender will be informed via a SMS just within few minutes. In Indonesian E-Tilang system also the same procedure happens as in E-challan system. However, due to a lack of quick data updating in the current system of Sri Lanka, even if an offender paid the fee, he/she may be called as a witness. This will not happen again when the records or data are entered in the database through our web application. Because the database will be updated when the offender pays the fine. As a result, offenders who have paid the fee will not be arrested. It happens because we have planned to insert a function of checking status as paid or not along with the offender details. That particular function is also functional for police officers.

After a police officer issued a spot fine receipt and took offenders driving license, also if the police officer change the duty location, even though offender has done the payment he/she won't be able to get the license back and he/she should stay in the police station until that police officer return to the relevant police station or else the offender has to move to the new current duty location of that police officer. Therefore, delay in management occurs in the manual system. But with the web application, offender can easily pay(online or card) the fine as soon as he/she received the fine receipt through an email. In E-challan system also the payment system happens as we planned.

In Sri Lanka, the process of paying a fine is carried out using books of spot fine sheets, spot fine statements, court case files, and so on. Until an offender pays the penalty/fine and receives the driving license back, the fine receipt must be with him/her. Since the receipt is a piece of paper, it can be damaged/ lost mistakenly. When using the web application, there is not any physical receipt. So, there will be no damages in receipts or loss of receipts. With the use of web application, there will be an online receipt and it can be downloaded very easily by just pressing a button.

When a ticket is issued by a policeman to the offender there is a considerable amount of time is consumed, especially from the issuing to the clearance process. And for the offender it may take some time to pay the fine because payments can only be done at specific locations, such as the post office, which have lengthy queues with limited working hours and Sunday as a holiday. This time wastage is reduced by the web application. The offender no need to go anywhere to pay the fine. He /She can pay the fine at the same point policeman issued the ticket from online and the offender can get his license back. In E-challan system also online payment facility is available and no need to physically move anywhere to pay the fine.

Unfortunately, there are some traffic policemen who act unethically in their duty by getting bribes from offenders. But with the implementation of the web application these type of frauds can be extinct by not enabling the option for deleting added records of offenders. The deletion functionality will be only valid for the traffic OIC as this web application has 4 user levels (Admin, Traffic OIC, Traffic Police officer, offender)

People may gather in queues during this pandemic, as well as while issuing and collecting fine receipts. People may also come into touch with documents, which increases the possibility of the covid-19 virus spreading. There is no need for individuals to gather in lines to pay fine receipts if they utilize an online application. They can pay the fine receipt without going out in public. As a result, we can limit the propagation of viruses like covid-19.

6.Scope & Functionalities of the System

The Web Application (CEYLON E- Traffic Fine Payment System) for this online traffic fine payment system will be developed by our project team from 21st November 2021 to 18th February 2022. The purpose of this pilot project is to develop a web application for traffic fine system by computerizing and centralizing all the police stations in Kalutara district also mainly to provide online traffic fine payment facility for citizens. Parallelly, this project will satisfy both citizens(offenders) and police officers under one roof where newest technology has been used.

The website is based on a relational database with **functions** such as,

6.1.Admin

In here Police IT department is the admin user of the website. The main functions of the admin are login, register, update and delete Traffic OIC(s). As the admin they are the one who can add Traffic OIC(s). If a new traffic OIC assigned in a certain area the admin has to create new user for them to get the access for the newly appointed Traffic OIC. As well as adding new users, admin has the ability to delete or update an existing user.

Functions of Admin

F1-Login

Login must be a major function for an admin in every system. Because admin has the fullest control and the backend. Therefore, in case if someone tried to access the admin panel if there is not any login or validation method used the whole system is in a huge risk. As well as if a system which is acting in an unsecured manner it can be considered as an unethical property. With the intention of providing a good security for the admin panel we hope to include the login function in our web application. According to our project, if there is no admin, the rest of the user levels will be non - operational.

F2- Register, Update and Delete Traffic OIC(s)

As IT department of the Sri Lankan Police, they have the access create a new user by adding Traffic OIC(s). And also, the admin could delete any existing Traffic OIC(s), if someone got retired from his service of police they cannot access the website as usual. So, that user needs to be deleted from the database. Then the admin is able to delete the existing user. And if in any existing user(s) data needed to be updated, the admin is the one who can update any data in the existing users Traffic OIC(s).

F3- Add, Update, Delete fine details

As IT department of the Sri Lankan Police, they have the access to the databases, they are the ones who can make any change in existing data. If any new fine(s) are introduced, admin had to add those new fines to the website. So, when any new fine is added, the IT department has to add all those new fines to the system(web pages). And also, if some existing fine needed to be deleted that data of the existing fine need to be deleted by the admin. And if some changes in the fines need to be added that changes also need to be changed and updated by the admin.

6.2.Traffic OIC

Traffic OIC is the head of the Traffic Department in a Police Station. In Sri Lanka, every police station has a Traffic Department. So, the head of that department or the one who controls that particular department is the Office In Charge of Traffic. He'll be the one who assigns traffic police officers for the traffic activities on the roads.

Functions of traffic OIC

F4 - Login

As mentioned above when admin registered a traffic OIC he/she can perform the login action. Once the police OIC is logged in he/she can perform the respective duties assigned. We are hoping to develop the police OIC's login with strict validation methods where it increases the security by preventing other people/users access the OIC's account. However, traffic police office is required just to enter the username and password in the relevant fields.

F5 - Register, Delete traffic police officers

After traffic OIC successfully logged with the login credentials issued by the admin, he/she has the options to create user accounts for police officers and also the chance to delete the created those user accounts of traffic police officers. The traffic OIC can perform those tasks simply by pressing a button as we are hoping to display the database table in a web page and provide the functionalities of registering and deleting.

F6 - Delete offenders records

In our web application, we have planned to give the access of deleting offenders records only for traffic OIC. As the head of the traffic department of the police station, traffic OIC can have the responsibility in case a mistake has done by a traffic police officer. We don't provide the facility of deleting user records of traffic police officers in our web application because the chance of engaging in briberies can be minimized through that.

F13 - Generating reports automatically

- Generating summary reports for each police station in Kalutara district. The report will include (number of offenders, the rules they breached, total costs of fines, locations where the offenders have breached the law, and the police officer names, the date / time, whether ended up in a court case.)
- Generating summary reports for the Kalutara district.
The report will include (name of the police station, number of fine records, number of court cases).

Police officers can obtain analyzed reports through the web application very easily without any use of papers or manual documents.

6.3.Traffic police officer

A traffic officer is a specialist police officer who is in charge of traffic-related issues. Traffic officers are fully trained and sworn-in members of the police force, but instead of dealing with crime, they focus exclusively on roads and the people who use the roads. In here, traffic police officer is also a key person in the traffic fine issuing procedure.

Functions of traffic police officer

F7- Login

As mentioned above, OIC will be the person who registers traffic police officers. As the registration is done, the police office is eligible to log into the web application and conduct his/her duty. We are hoping to make police officer's login with strict validations where this web application will be highly secured. However, traffic police office has to just fill the username and password fields using the username and password which are assigned and given to him/her by the OIC. This login procedure is also the same as OIC's login

F8 - Add offenders

After successfully logged in, traffic police officer has his functionalities to perform one is Add offenders which is a major function. The added offender lists will be stored in a database. In order to get offenders details a web form is used. In that form the breached rules can be selected where the police officer doesn't require to type or manually write the breached rule.

F9 - Issue spot fine statement

We make it easier the process of issuing a spot fine statement here. After filing the form, police officer has to just to press on a button to issue the spot fine statement and a link will be automatically sent to the offender's email.

F10 - View/Check offender fine details

As mentioned in the problem statement, a police officer from a different location is unable to check or confirm whether the offender has breached a law and received a spot fine statement in case the statement is lost or damaged mistakenly by the offender. But with the help of our web application this issue can be fixed since there is a separate function to search a relevant fine status or to check whether there is a record for that offender in the database by using the license number or the NIC number.

6.4.Offenders

Offender is the person who commits an illegal act. According to our project an offender can be considered as the person who breaches traffic rules. In our web application the offender has to perform simple functionalities along with user friendly interfaces.

Functions of offender

F11 - Pay fines online

The main function in our system is to enable the offenders to pay the fine online. This functionality results the offenders to do such a payment just in few seconds without consuming much effort and time. The payments can be done by any device at any time at any place. As steps the offenders have to enter payment details and proceed the payment by using a single button.

F12 – View and download spot fine and payment receipt

Another function included in our system for offenders is viewing the spot fine, spot fine payment receipt as well as downloading them. A link of the website will be sent to the respective email of the offender at the time the police officer issued the fine. So, he/she can click and then view it and download via the website. But to view the payment receipt the offender must pay the fine. After the payment is done, the receipt is sent to the offender's email, and he/she is able to view the payment receipt.

6.5.Non – Functional

❖ Performance Requirements

The web application should load and be usable within 3 seconds and the interface should be updated on interaction within 2 seconds. When considering about the database it should be normalized to prevent redundant data and improve performance. Further, the database should be distributed to prevent a period when a power supply or other service is not available or when equipment is closed down. The reason to enable these features in our web application is to make the users to experience the best performance.

❖ Safety Requirements

Databases should use sharing to be redundant to prevent loss of data and regular database backups should be done hourly and kept for one week.

❖ Security Requirements

When considering on the security the stored data in databases should be behind a firewall as well as secure the databases by assigning strong passwords. And in performing functionalities like login, registrations use validation methods.

❖ Availability

Because this web application is related to make fine payments online it should be available in 24*7 hours.

❖ Correctness

The web application should never allow anyone to read details of offenders. Because if something happened like that according to our project for example if an offender/unauthorized person logged in to a police officers account he/she may act illegally and unethically.

❖ Maintainability

The web application should continuously integrate so that features and bug fixes can be deployed quickly without downtime.

❖ Usability

The web application should be user friendly.

❖ Compatibility

This web application should perform in any device, any operating system and in any browser and should be responsive.

7.Methodology & Technology

7.1.SDLC Methodology (Waterfall Methodology)

Waterfall web development, the predecessor of the two methods, is a linear and structured approach in which a full specification is developed with phases (Requirements gathering and analysis, System design, Implementation, Integration and testing, Deployment of system, maintenance) occurring in the order we planned. Waterfall is more successful with our well-defined and established requirements; because of its predictability, you'll know exactly what we'll be receiving, from size and timeframe to cost forecasts. The police traffic service in our project is stable, and our deadline is strictly followed to. (Czech, 2021)

7.2.Techologies

For implementations, the project has used a number of front and back-end frameworks, including:

1. HTML: This is used for front-end development.
2. CSS is used for front-end development.
3. JS: Used for animations, show time and message box and for front end development.
4. PHP: Used for front and back-end connections, session generation, and querying.
5. AJAX: AJAX allows a web application to transmit and get data from a server asynchronously without interfering with the appearance and behavior of the existing page.
6. jQuery is used for animations.
7. MySQL: Back-end (Database) development

7.3.Teaм Structure

Role	Assigned to	Email
Project Manager	M.A.D.Kalika Sharith Perera	kalika.sharith@gmail.com
System Analyst	W.W.Chamod Hasaranga Fernando	hasarangafernando@gmail.com
UI/UX Engineer	M.A.Chamath Shyamal	arachchigechamath@gmail.com
Database Engineer	M.A.Chamath Shyamal	arachchigechamath@gmail.com
Software Engineer 1 (Backend)	P.H.Rajeev Uvindu Tharinda Silva	rajeewhesoyamuvinduaezakmi@gmail.com
Software Engineer 2 (Front end + Back end)	M.A.D.Kalika Sharith Perera	kalika.sharith@gmail.com
Quality Assurance Engineer	M.A.Chamath Shyamal	arachchigechamath@gmail.com

7.4.Roles and responsibilities of the team

7.4.1.Project Manager Responsible

The primary role of a project manager is to coordinate the work of other team members in order to complete all assignments on time and within budget. To get things done, a project manager develops a plan that covers the project scope, establishes goals for team members, establishes milestones and deadlines, and so on. A project manager must also retain comprehensive control over the project's entire development life cycle. This specialist should regularly assess job completion progress and compare it to the initial project development plan for this reason. Constant contact with the client and team members is required for speedy resolving problems and reporting on current developments.

7.4.2.Business analyst Responsible

The business analyst begins working on the project before the rest of the team. This specialist's primary responsibility is to turn the customer's vision of the future software product into technical requirements. In order to do this, the specialist must collect, analyze, and document product requirements. Other team members will subsequently refer to this documentation throughout the project's life cycle. Close collaboration between the client and the analyst is an important part of project development throughout the requirement analysis stage. The reason behind this is that knowing the customer's company's goals and the difficulties it plans to fix with the software product is critical. The application's demands from the customer must be converted into technical terms that other team members can discuss and work with. Business analysts must have sufficient technical knowledge to define how each component of a future web application must function. This information will assist in more properly determining the project scope and defining the estimated deadlines for completing certain stages of the project.

7.4.3.Database engineers Responsible

Database engineers create and manage databases, expand data storage capacity, and fix database operation problems. In addition, they examine database performance and user feedback.

7.4.4.Software engineer Responsible

The development team is in charge of the project's back-end and front-end components. To cut a long tale short, the back end is the component of the software that interacts with a server. Everything that happens on the other side of the user interface is, generally speaking, the duty of a back-end developer. These experts produce server-side programming in languages and frameworks designed for the purpose, such as Python, Node, JavaScript, .Net, and many more. These experts are also in charge of database creation and management.

Front-end, on the other hand, refers to what you see on the screen while engaging with an application. Front-end developers work on the client-side of web projects, employing CSS, HTML, JavaScript, and a variety of libraries and frameworks to make the project development process easier. Front-end developers design the application by following the specifications and prototype/wireframe established during the previous stages of the project.

7.4.5.Quality Assurance (QA) engineer Responsible

The primary responsibility of a Quality Assurance (QA) engineer is to reduce the number of problems before the product is released. In our ranking of important specialists, the QA team comes in last. However, this does not imply that you should only consider testing once your development team has completed developing the code. In fact, the sooner you begin testing efforts, the lower the probability of reworks, errors, and unforeseen difficulties. The testing process should begin with the development of project requirements. The list of requirements may be used by QA engineers to create the initial testing plan. Throughout the project life cycle, software engineers should send each version of the app to QA specialists to ensure that it meets the technical requirements and the expectations of the client.

Bug reports created by QA team members should be reported to the development team in order for the program to be improved. The following checkback should assist QA professionals in ensuring that developers successfully handled the bug.

7.4.6.UI/UX Engineer Responsible

The work of UI/UX designers has a major impact on the project's development and future success. First and foremost, it is critical to build an eye-catching design that will capture the attention of first-time consumers. To guarantee that these people stick with you, the app should be straightforward and simple to use, with all functionalities easily accessible.

The UI/UX designer begins work on the project by analyzing the requirements to determine what challenges the target audience may face and how to solve them via design. User stories, which describe how users interact with the program, may also be written by UI/UX designers. The UI/UX designer is also responsible for product graphics such as color scheme, fonts, buttons, and so on. Designers construct a wireframe to illustrate a schematic positioning of the UI elements in order to describe how the final version of the product will appear.

7.5.Cost

Budget Plan for CEYLON E- Traffic Fine Payment System	
TASK	COST
Hardware	
Server Machine	LKR 130,000.00
Desktop Computers & Laptops	LKR 50,000.00
Routers	LKR 15,000.00
UPS	LKR 16,000.00
Total	LKR 211,000.00
Software	
Adobe XD	LKR 6,000.00
Balsamiq	LKR 5,000.00
MS Project	LKR 6,000.00
MS Excel	LKR 6,000.00
MS Word	LKR 6,000.00
MS Visio	LKR 6,500.00
Total	LKR 35,500.00
Design and Development	
Designing Page colours scheme, buttons, etc.	LKR 15,000.00
Apply responsiveness	LKR 10,000.00
Web pages Layout	LKR 20,000.00
Web pages Contents	LKR 15,000.00
Web pages Finalizing	LKR 10,000.00
Payment Gateway Installation	LKR 30,000.00
CSS coding for payment gateway and other la	LKR 8,000.00
Developing the Email services	LKR 13,500.00
Creating Admin dashboard	LKR 24,000.00
For diagrams	LKR 5,000.00
For creating Database	LKR 10,000.00
Logo creating or refreshing	LKR 5,000.00
Proof reading for the of the main pages	LKR 2,000.00
Additional editings as per client editions	LKR 2,500.00
Compile all modules	LKR 10,000.00
Domain Registration	LKR 12,000.00
SSL Certificate	LKR 21,000.00
Hosting	LKR 35,000.00
Total	LKR 248,000.00
Testing	
Create test plans and test cases	LKR 6,000.00
Run system testing	LKR 3,000.00
Fix bugs	LKR 20,000.00
Finalizing testing reports	LKR 3,500.00
Create user manual	LKR 4,000.00
Total	LKR 36,500.00
Deployment	
Training users	Free
Website maintenance(monthly)	LKR 10,000.00
Total	LKR 10,000.00
Other	
stationary (papers,files,etc.)	LKR 1,800.00
Electricity bill	LKR 15,000.00
Internet bill	LKR 10,000.00
Total	LKR 26,800.00
SUB TOTAL	LKR 562,800.00

7.6.Hardware Requirements

Combined Web & Database Server

Processor-4 x 1,6 GHz CPU

RAM-8 GB RAM

HDD-1x 40 GB of free space or more is recommended for the data (non-system drive) is preferred)

1x 40 GB of free space or more is recommended for the software that is listed in the software requirements (system drive)

7.6.Software Requirements

Balsamiq

Adobe XD

MS Excel

MS Project

MS Visio

MS Word

Adobe Dreamweaver

CHAPTER 02

8.Feasibility Study

8.1.Financial Feasibility

Being a web application, Ceylon E-Traffic Fine Payment System will have an associated hosting cost. Also, there should be a separate cost allocated for the payment gateway.

The system will follow the freeware software standards. No cost will be charged from the general public(offenders). Testing (Bug fixes) and maintaining tasks will have an associated cost. There will be some associative costs with purchasing different and necessary hardware and software. At the initial stage the, the targeted space will be only the Traffic Police Officers in Kalutara North police station and general public (offenders).

Beside the associated cost, there will be many benefits for the Traffic Police OIC and traffic police officers of Kalutara South Traffic Police Department. Especially the extra effort that is associated with papers, documents, files, books, etc. will be significantly reduced while the effort to create descriptive statistical reports will be eliminated, since reports generation is fully automated. Also, general public (offenders) can have online/card payment facility to pay a fine.

Assumed summary of the Ceylon E Traffic Payment System.

- Hardware – Rs. 200,000
- Software – Rs. 25,500
- Design & Development – Rs.238,000
- Testing – Rs. 26,500
- Deployment – Rs.10,000
- Other – Rs. 16,000

From these it's clear that the project of developing Ceylon E-traffic Fine Payment System is financially feasible.

8.2.Techical Feasibility

Project Ceylon E-traffic Fine Payment System is a complete web-based application. The main technologies and tools that are associated with Ceylon E-traffic Fine Payment System are:

Front-end Technologies

1. HTML: This is used for front-end development.
2. CSS is used for front-end development.
3. JS: Used for animations, show time and message box and for front end development.
4. jQuery is used for animations.
5. AJAX: AJAX allows a web application to transmit and get data from a server asynchronously without interfering with the appearance and behavior of the existing page.
6. Diagram drawing tools (Microsoft Project, Visio, Draw.IO, Adobe XD)

Back-end Technologies

1. PHP: Used for front and back-end connections, session generation, and querying.
2. MySQL: Back-end (Database) development

Some of the technologies are freely available while some are not and the technical skills required are manageable as there is a Project manager, a System Analyst, two Software Engineers, a Database Engineer, a UI/UX Engineer and a QA Engineer in our team. Product development limits and the ease of using these technologies are organized.

Initially the web site will be hosted in a free web hosting space (in XAMPP Server) for the demonstration purpose, but for later implementations it will be hosted in a paid web hosting space with a sufficient bandwidth. Bandwidth required in this application is at an average state, since its corporates with some multimedia aspect.

From these it's clear that the project Ceylon E-traffic Fine Payment System is technically feasible.

8.3.Resource and Time Feasibility

- Resource feasibility

Resources that are required for the Ceylon E-traffic Fine Payment System project includes,

- Programming device (desktop computers/laptops)
- Hosting space (a server)
- Routers
- Programming tools (software)
- Programming individuals

So, it's clear that the project Ceylon E-traffic Fine Payment System has the required resource feasibility.

8.4.Risk Feasibility

Risk feasibility can be discussed under several contexts.

Risk associated with size

- Estimated size of the product may be exceeded:

Being a web application and as the system contain some multimedia aspect, the file sizes and the complete project size may be extended.

- Estimated size of product in number of programs

The application supports many users, it will not be constructed as a single web application. It will have many numbers of sites for different users. Depending on the access rights, the contents will be showed or hidden.

- Size of database created or used by the product:

Database size will not exceed the values supported by MySQL (65526 entries per table). Because this is a pilot project. Number of relations and entities will be minimized by using best practices of normalization theories.

Users of the Web Application:

- General Public (Offenders)
- Traffic Police OIC of Kalutara South Police Station
- Traffic Police Officers of Kalutara South Police Station
- Admin (OIC of Kalutara South Police Station)

Number of projected changes to the requirements for the product [Before delivery/After delivery]:

The requirements are clearly identified before the implementation phase. The requirements will be changed only if new functionalities are added to the system.

Business impact risks

- Effect of this product on Sri Lanka's Treasury's' revenue:

OES can be implemented an individual system. Since it automates some key features associated in sending spot fine statements to offenders, issuing spot fine statements, paying fines online/cards, the Sri Lankan government can increase the revenue.

- Reasonableness of delivery deadlines:

Being a 65 days project, the project Ceylon E-traffic Fine Payment System will have several deadlines and deliverables that are scheduled successively. Depending on the coding and designing cost and effort, the deadlines are quite reasonable.

- Number of users who will use this product and the consistency of their usage relative to the product:

As mentioned above, we have categorized four user levels. This system can support four those users simultaneously.

- Smoothness of end users:

Web Application of Ceylon E-traffic Fine Payment System is designed while maintaining the complexity at a very low level. Usability is highly improved by providing help documents and making GUIs easy to use.

- Amount and quality of product documentation that must be produced and delivered to the users:

All respective users will be provided with a complete online user manual.

- Costs associated with delivery:

At the initial stage the associated cost will be for the hosting cost.

Customer related risks:

For the completion of this pilot project, the Ceylon E-traffic Fine Payment System will be a single type of product as it is designed just for a single police station in Sri Lanka. Before implementing the system in the Kalutara South police station's traffic department, there will be some basic modifications required.

Development environment risks

Software project management tool available: Microsoft Project will be used as the main project management tool.

Tools for analysis and design:

- Draw.IO (database design-ER)
- Visio (Software related diagrams)

The environment makes use of a database or repository:

- This is a database-oriented system that will use MySQL

The software tools integrated with one another:

- Main deliverables will be packaged under a single project. All the users will have a single login page.

Process issue risks

- The Ceylon E-traffic Fine Payment will follow the Waterfall SDLC and SOP software development methodology. Thus, there won't be any flexibility to accommodate changing software requirement whereas requirement gathering has done perfectly will all relevant requirements.

Technical issue risks

- Specific conventions for code documentation:

Software code will be available, and the code documentation will be provided

Specific method for test case design:

Test plans and Test Cases will be prepared in the traditional way

Technology risks

- Technology to be built new:

All the technologies are very well established and old enough.

8.5.Social/Legal Feasibility

Development, Hardware and Software costs are there, and the testing and maintenance cost will be charged from the government.

Since this new system eliminates the effort to make summary reports, issue spot fine statements, online/card payment facility, multi-level user logins, an automated emailing system, etc. it will have a great impact in the Traffic Fine Management Sector in Sri Lankan police stations.

8.6.Considerations

- Performance

Ceylon E-traffic Fine Payment System requires an average level of a bandwidth; hence the performance may degrade with increasing number of users (offenders/traffic police officers). At the development and demonstration stage, a free hosting service will be used. But when installing the system to Kalutara North police station, it will be hosted in a much more reliable server to increase the performance.

MySQL will provide the adequate speed for database transactions MySQL is the ideal database for this project as no big data analysis is done at the deployment and demonstration stage,

- Response time: should be less than 2 seconds
 - Processing time: should be less than 2 seconds
 - Query and reporting times: should be within 5-10 seconds
 - Storage: yet to be tested
- Security

Security measures will be provided in many aspects in this system.

- User authentication

Users will have to authenticate using the username and passwords Depending on the access level each user will gain functionality of the system. Passwords can be changed only by the Traffic OIC and Admin.

- Register details

Each user's (police officers/traffic police OICs) registered details will be recorded in the system, to make the tractability process easy in case of a faulty action.

- Usability and ease of use

Users will be provided with a complete user manual. The interfaces are designed to make it easy for all users to get familiar with the system within few hours. No additional training is required to use the system.

- Capacity and scalability

Ceylon E-traffic Fine Payment System can accommodate many simultaneous users.

- Availability

System will be available throughout the 24 hours. Mean time to failure and mean time to repair will be decided to increase the availability. With a paid hosting space, the availability can be guaranteed to a great precision.

- Maintainability

Ceylon E-traffic Fine Payment System is designed using the best practices of SOP. Since every single segment in the system is very well structured, the system is highly maintainable.

9.Requirement Gathering Technique & document

Requirements are the “blueprints” that everyone involved on the project uses to work from whereas, they are one of the most vital pieces to ensuring the success of a system or project. To ensure the optimal requirements are received, the methods in which those requirements are obtained are equally important. Through this paper, we will look at what requirements, techniques as well as the different methods gathered by our project team for the web application of Ceylon E Traffic Fine Payment System which is our final project of Higher Diploma in Software Engineering (HDCSE).

Methods used to gather the necessary requirements include techniques such as interviewing, questionnaires, observations, document analysis, brainstorming and focus groups. Among many requirements gathering techniques, we chose only the above-mentioned techniques which we considered as the most effective and helpful techniques to obtain data and information from a police station in Sri Lanka. Below explanations depict the details about the techniques we used, evidence and how they are important to develop the web application for Ceylon E Traffic Fine Payment System.

9.1.Interviews

Group interview

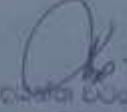
As group interviews work best with interviewees, the whole idea which is inside the interviewee's mind can be taken out from their mouth easily. In order to generate more urgent information sharing, we scheduled the session as one in the morning and the other one in the evening and that also within one day. The reason to held two sessions is because people justify their viewpoints with supporting evidences. Therefore, we could often gain deeper insights than on a one-on-one interview and that is the main reason for conducting only a group interview. Another reason is because it allowed us to refine and clarify the requirement, which lead to better outcomes and understanding useful to the project.

Scheduling a group interview was a challenge, since finding a time that works well for our project team members and police officers requires a free time and effort. However, by visiting to Kalutara North police station many times, we could allocate and schedule a proper time to do the interview with officers in the traffic department of Kalutara North police station. After visiting there, we had the chance to interview the Traffic OIC and four other traffic police officers of Kalutara North Police station. In order to properly weigh and address their inputs and to obtain the correct and appropriate requirements from them, we recognized the perspective of each interviewee. In that interview, listening skill helped us to get more values from the interview.

In order to conduct a structured interview, we used a set of prepared questions to ask from the traffic police OIC of Kalutara North police station. At the end of the interview with the traffic police OIC, we could obtain his signature as well as his official seal. The following image shows that and the questions we asked.

Interview Questionnaire

- * Are you satisfied with the current system?
අතින්දු නො සඳහා ඇති පිරියෙහි
- * Do you identify any issues regarding the current manual traffic management system in Sri Lanka?
අතින්දු නො සඳහා නො අඩංගු නො ඇති මූල්‍ය පිරියෙහි
- * If so, what are the issues you face?
අතින්දු නො සඳහා නො ඇති මූල්‍ය පිරියෙහි
- * What are the suggestions or improvements that you would like to make in the current system?
අතින්දු නො සඳහා නො ඇති මූල්‍ය පිරියෙහි
- * Is there anything you wish to be automated in managing traffic fines?
අතින්දු නො සඳහා නො ඇති මූල්‍ය පිරියෙහි



ධීන් විජේසිංහ
මහත් ජනරාල
ප්‍රංශක්‍රියා දේප
වැඩිත අධ්‍යක්ෂ
ඹෙදා යුතු

In addition to gathering requirements from traffic police OIC, we gathered many requirements from three other traffic police officers and one policewoman who work in the traffic police department of Kalutara North police station. We gathered information such as the procedure behind the current system, how it works, the daily process, books/documents they use inside the traffic department for fine management etc. They showed us how the

documentation process is done. We were able to see and understand the documentation process through our own eyes when two offenders came to the police station as one to get his license back and another person to get the spot fine statement. Below shows the evidence of that we conducted an interview session to gather requirements.





9.2.Questionnaires

Offering a questionnaire or survey allows to collect information from many people in a relatively short amount of time, particularly helpful for interacting with people in different geographic locations. This was the main reason for us to use questionnaires as a requirement gathering technique for our project. When preparing our questionnaires, we considered the following tips:

- Keep them shorter vs longer so the traffic police officers are more likely to complete them.
- Included both Sinhala and English languages.
- Use open-ended and close-ended questions to allow free-form responses to get detailed inputs.

We prepared several questionnaires in the form of a form to be filled by two traffic police officers with both open ended and close ended questions as techniques for questionnaires. We included open-ended questions to get more clarifications that require more than a yes or no answer. It helped us to obtain honest and insightful answers. We gave questionnaire forms to the traffic police officers because they are the best choice as they are the ones who are mostly targeted through the system. We included close-ended questions as they are helpful to gain information in a short amount of time or to get details that open-ended questions doesn't provide since it offers only to select two answers. Thus, below shows the questionnaires we prepared.

Open ended

1. What's your full name?

(ඔබේ සම්පූර්ණ නම කුමක්ද?)

2. What 's your post?

(ඔබේ තනතුර කුමක්ද?)

3. Under whose (Higher officer) control do you work?

(ඔබ වැඩ කරන්නේ කාගේ (ඉහළ නිලධාරී) පාලනය යටතේද?)

4. What's the police branch you are assigned (Name of the policed station, Division, District, Province)?

(ඔබට පවරා ඇති පොලිස් ගාබාව කුමක්ද (පොලිස් ස්ථානයේ නම, කොට්ඨාය, දිස්ත්‍රික්කය, පළාත))

5. What are your duties?

(ඔබේ රාජකාර මොනවාද?)

6. How many police stations are there in Kalutara district?
(කළුතර දිස්ත්‍රික්කයේ පොලීස් ස්ථාන කීයක් නිලධාරී?)
-

7. At what time do traffic policemen work?
(රජවාහන පොලීස් නිලධාරීන් සේවය කරන්නේ කුමන වේලාවටද?)
-

8. How are traffic police officers assigned for their respective duties?
(රජවාහන පොලීස් නිලධාරීන් ඔවුන්ගේ රාජකාරී සඳහා අනුයුත්ත කරන්නේ කෙසේද?)
-

9. What are the documents or resources used for current fine payment system?
(එසේ නම්, වත්මන් දඩ ගෙවීමේ පද්ධතිය සඳහා භාවිතා කරන ලියකියවිලි හෝ සම්පත් මොනවාද?)
-

10. What are the things traffic police officers get from offenders?
(එසේ නම්, රජවාහන පොලීස් නිලධාරීන් ඔවුන්ගෙන් ලබා ගන්නා දේවල් මොනවාද?)
-

11. Why it is necessary to get those things?

(එම දේවල් ලබා ගැනීමට අවශ්‍ය වන්නේ ඇයි?)

12. What are the data you collect from an offender who breached traffic rules?

(මාර්ග නීති කඩ කළ වැරදිකරුවෙකුගෙන් ඔබ රිස් කරන දත්ත
මොනවාද?)

13. Why it is necessary to obtain those data from offenders?

(වැරදිකරුවන්ගෙන් එම දත්ත ලබා ගැනීමට අවශ්‍ය වන්නේ ඇයි?)

14. What documents will be issued after collecting data from offenders?

(වැරදිකරුවන්ගෙන් දත්ත එකතු කිරීමෙන් පසු නිකුත් කරනු ලබන ලේඛන
මොනවාද?)

15. Describe the current manual fine management procedure.

(වත්මන් අන්පොත දඩ කළමනාකරණ ක්‍රියා පටිපාලිය විස්තර කරන්න.)

16. Where do you record the details of an offender who breached traffic rules?

(මාර්ග නීති කඩ කළ වැරදිකරුවෙකුගේ විස්තර ඔබ සටහන් කරන්නේ
කොතැනින්ද?)

17. Clearly state the documents issued by traffic police officers to offenders.

(රථවාහන පොලිස් නිලධාරීන් විසින් වැරදිකරුවන්ට නිකුත් කරන ලද
ලේඛන පැහැදිලිව සඳහන් කරන්න)

18. What is the validity of those document(s)?

(අම ලේඛනවල වලංගුභාවය කුමක්ද?)

19. What are the details included in the documents issued by the traffic police officers?

(රජවාහන පොලිස් නිලධාරීන් විසින් නිකුත් කරන ලද ලේඛනවල ඇතුළත් විස්තර මොනවාද?)

20. How the police officers calculate the cost of a respective penalty?

(පොලිස් නිලධාරීන් අදාළ දෙඩි මූදල ගණනය කරන්නේ කෙසේද?)

21. Where are the fines records stored end of the day?

(දිවස අවසානයේදී දෙඩි වාර්තා ගබඩා කර ඇත්තේ කොහොදු?)

22. After a traffic police officer issued a spot fine statement and obtained offenders

license, what are the steps followed by the police officer after coming to the
respective police station where he/ she assigned

(රජවාහන පොලිස් නිලධාරීයෙකු ස්ථානීය දෙඩි ප්‍රකාශයක් නිකුත් කර
වැරදිකරුවන්ගේ බලපත්‍රය ලබා ගැනීමෙන් පසු, පොලිස් නිලධාරියා
ඡනු/ඇය පැවරු අදාළ පොලිස් ස්ථානයට පැමිණීමෙන් පසු අනුගමනය
කරන පියවර මොනවාද?)

23. After issuing the spot fine statement for an offender, how long he/she can take to pay the fine

(වරදිකරුවෙකු සඳහා දඩ් ප්‍රකාශය නිකුත් කිරීමෙන් පසු ඔහුට/අුයට දඩ් ගෙවීමට කොපමණ කාලයක් ගත විය හැකිද)

24. Where to pay fines?

(දඩ් මූදල් ගෙවිය යුත්තේ කොතැනින්ද?)

25. What are the necessary documents needed to pay the fine?

(දඩ් ගෙවීමට අවශ්‍ය ලියකියවිලි මොනවාද?)

26. After done the payment, what will be received by the offender?

(ගෙවීම සිදු කළ පසු, වරදකරුට ලැබෙන්නේ කුමක්ද?)

27. After successfully done the payment, what is there to be done by the offender to get license back?

(ගෙවීම සාර්ථකව සිදු කළ පසු, බලපත්‍රය ආපසු ලෙබා ගැනීමට වරදකරු විසින් කළ යුත්තේ කුමක්ද?)

28. What's the document issued by traffic police officers after the payment is done and after the offender went to the police station?

(මුදල් ගෙවීමෙන් පසු සහ වැරදිකරු පොලිස් ස්ථානයට ගිය පසු රජ්‍ය රංචාහන පොලිස් නිලධාරීන් විසින් නිකුත් කරන ලද ලේඛනය කුමක්ද?)

29. What are the details included in that document?

(එම ලේඛනයේ ඇතුළත් විස්තර මොනවාද?)

30. Where the money/ fine paid by the offender are sent?

(වරදකරු විසින් ගෙවන ලද මුදල්/ දඩ මුදල් යවන්නේ කොතැනවද?)

31. Finally, what will happen to the paid and issued fines

(අවසාන වගයෙන්, ගෙවූ සහ නිකුත් කරන ලද දඩවලට කුමක් සිදුවේද?)

32. Have you noted any issues/ difficulties with the current fine management system?

(වත්මන් සියලුම කළමනාකරණ පද්ධතිය සමඟ ඔබ කිසියම් ගැටළු/
දුෂ්කරතා සටහන් කර තිබේද?)

Close ended

33. Do you possess any idea about IT (Information Technology)?

(ඔබට තොරතුරු තාක්ෂණ (තොරතුරු තාක්ෂණය) ගැන කිසියම්
අදහසක් තිබේද?)

Yes

No

34. Is there a traffic department in each of the police stations in Kalutara District?

(කළමනා දිස්ත්‍රික්කයේ සුම පොලීස් සේවානයකම රථවාහන දෙපාර්තමේන්තුවක් තිබේද?)

Yes

No

35. Do traffic police officers work daily?

(රථවාහන පොලීස් නිලධාරීන් දිනපතා වැඩ කරන්නේද?)

Yes

No

36. Are there any holidays for traffic police officers and when?

(රථවාහන පොලීස් නිලධාරීන් සඳහා නිවාඩු තිබේද සහ කවදාද?)

Yes

No

37. Are there any computerized systems or information systems used by the Sri Lankan police?

(ශ්‍රී ලංකා පොලීසිය භාවිතා කරන පරිගණකගත පද්ධති හෝ තොරතුරු පද්ධති තිබේද?)

Yes

No

38. Is current fine management system handled manually?

(වත්මන් දීම කළමනාකරණ පද්ධතිය අතින් හසුරුවන්නේද?)

Yes

No

39. If not, is the current fine management handled using a computerized system?

(නොඑසේ නම්, වත්මන් දඩ කළමනාකරණය පරිගණක ගත පද්ධතියක් භාවිතයෙන් සිදු කරන්නේද?)

Yes

No

40. Is everything done through papers, documents, files?

(හැම දෙයක්ම කරන්නේ කඩදාසී, ලේඛන, ලිපිගොනු හරහාද?)

Yes

No

41. When an offender violates a traffic rule, do traffic police officers get anything from the offender?

(වැරදිකරුවෙකු මාර්ග නීති කඩ කරන විට, රථවාහන පොලිස් තිලඳාරින් වැරදිකරුගෙන් කිසිවක් ලබා ගන්නේද?)

Yes

No

42. Is there any other document/ place where the details are sent or stored?

(විස්තර යවන ලද හෝ ගබඩා කර ඇති වෙනත් ලේඛනයක් / ස්ථානයක් තිබේද?)

Yes

No

43. If an offender who breached traffic rules from another district/ province/ country, does he/she need to follow the same procedure?

(වෙනත් දිස්ත්‍රික්කයකින්/පළාතකින්/රටකින් මාර්ග නීති කඩ කළ වැරදිකරුවෙකු නම්, ඔහු/අය එම ක්‍රියා පටිපාටියම අනුගමනය කළ යුතුද?)

Yes

No

44. Does the offender need to come back to the respective police station to pay the fine and receive the license back?

(දිඩිය ගෙවීමට සහ බලපත්‍රය ආපසු ලබා ගැනීමට වැරදිකරුට නැවත අදාළ පොලිස් ස්ථානයට පැමිණීමට අවශ්‍යයාද?)

Yes

No

45. Can an offender drive vehicle when a spot fine is issued?

(ස්ථානීය දිඩියක් නිකුත් කරන විට වැරදිකරුවේකුට වාහනය පැදිවිය හැකිද?)

Yes

No

46. Is there any online or card payment facility to pay the fine?

(දිඩිය ගෙවීමට මාර්ගගත හෝ කාඩ්පත් ගෙවීමේ පහසුකමක් නිලධාරීද?)

Yes

No

47. Are the paid fines recorded in somewhere or deleted?

(ගෙවන ලද දිඩි මූදල් කොහේ හරි වාර්තා කර නිලධාරී නැතහොත් මකා දමා නිලධාරීද?)

Yes

No

48. Would you prefer to work with a computerized system (Web Application)?

(මෙම පරිගණකගත පද්ධතියක් සමග වැඩ කිරීමට කුමතිද (වෙබ් යෙදුම)?)

Yes

No

9.3.Interview Questionaries

- Are you satisfied with the current system?

(පවතින කුමය ගැන ඔබ තාප්තිමත්ද?)

- Do you identify any issues regarding the current manual traffic management system in Sri Lanka?

(ග්‍රී ලංකාවේ දැනට ක්‍රියාත්මක වන මැනුවල් රථවාහන කළමනාකරණ පද්ධතිය සම්බන්ධයෙන් ඔබ යම් ගැටු හඳුනා ගන්නවාද?)

- If so, what are the issues you face?

(එසේ නම්, ඔබ මූහුණ දෙන ගැටු මොනවාද?)

- What are the suggestions or improvements that you would like to make in the current system?

(වත්මන් කුමය තුළ ඔබ කිරීමට කැමති යෝජනා හෝ වැඩිදියුණු කිරීම් මොනවාද?)

- Is there anything you wish to be automated in managing traffic fines?

(රථවාහන දීම් කළමනාකරණයේදී ස්වයංක්‍රීය වීමට ඔබ කැමති දෙයක් තිබේද?)

9.4.Observations

Observations is one of the best ways we used to understand what users of our web application truly need. We used active observation which is asking questions from traffic police officers while observing their works. It was the best approach which helped in gaining an understanding of the existing current manual system and how the process happens when issuance and paying fines within the police station inside and outside. When we were observing the processes, we recorded the meeting explaining of how actions and activities happens. Through observations we understood what the users (traffic police officers and offenders) are up against and what improvements they need so in order to perform better.

9.5.Document Analysis

Document analysis is another highly effective technique we used for gather requirements. Reviewing the documentation of the current system which we were seeking to replace helped us in performing gap analysis in improving the user's process. Also, helped in determining where the police officers' needs.

9.6.Brainstorming

Brainstorming which is a method of generating ideas and sharing knowledge to solve a particular commercial or technical problem, in which our team members were encouraged to think without interruption. Ideas were shared among our members as soon as they came into our mind. While following brainstorming we clearly defined on the topic to be addressed which is our project Ceylon E Traffic Payment System. Our group members linked directly with the subject as well as those who can contribute novel and unexpected ideas.

As steps our project team began to generate and share ideas. We held teams meetings as a technique to discuss project innovative ideas. This section of the meeting usually lasted about two hours in defining problems, discussing about gathering requirements, about solutions etc. Then the ideas are categorized and ranked by our project team. Follow-up actions are agreed and the meeting closes.

In order to ensure a productive session, there are several brainstorming rules we followed as.

- Encourage innovative ideas.
- The group members are not criticized, and ideas are shared among the group
- Build on the ideas put forward by team members
- Every member's idea has equal worth
- Each idea generated belongs to the group rather than the individual who thought of it.

10.Result of Requirement Gathering

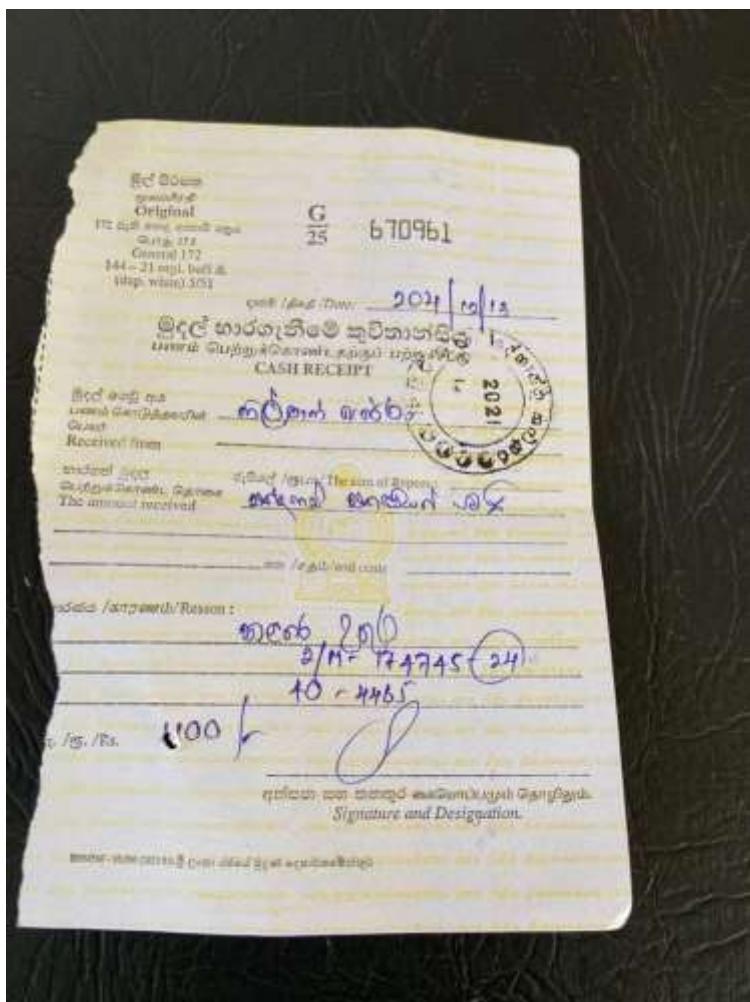
As results of the requirement gathering phase, we received some answers provided by the traffic police officers for the form we provided as questionaries, and we clearly identified how the current system works.

10.1 Evidences of Requirement Gathering



Figure 1 Recording of The Interview

Below shows a picture of a spot fine and a payment receipt which is received by the offender once he/she is done with the payment.



Ques. ended

1. What's your full name?
(With signature and stamp)
বিজি মোস্তাফা জাহান
2. What's your post?
(With signature and stamp)
পুলিশ উচ্চ
3. Under whose (Higher officer) control do you work?
(not included in self post, those controls others)
ডেট
4. What's the police branch you are assigned (Name of the police station, Division, District, Province)?
(With signature and stamp) (কেন্দ্রীয় পুলিশ সদর দপ্তর কলকাতা, পশ্চিম বঙ্গ)
কলকাতা পুলিশ সদর দপ্তর - ২০১৪-০৩৩৩০
5. What are your duties?
(With signature and stamp)
পুলিশ পোল প্রতিষ্ঠান বাসু পুরু
6. How many police stations are there in Kaliakati district?
(With signature and stamp)
৫
7. At what time do traffic policemen work?
(With signature and stamp)
১০:৩০ এপ্রিল ২৫, ১২
8. How are traffic police officers assigned for their respective duties?
(With signature and stamp)
পুরু পোল
9. What are the documents or resources used for instant fine payment system?
(With signature and stamp)
বাণিজ্য পোজ প্রোগ্ৰাম প্রক্ৰিয়া কোম্পানি লিমিটেড

நீ | சோ | கு | பே | வி | புது | தீ | கு

କେବୁଳ ଲେଖି ଏ ଶତାବ୍ଦୀରେ ଲେଖିଲା ଯାହା

（原註：此句為王氏所著《中國哲學史新編》第二卷第15章「宋明理學」中的一段文字）

ଅତେ ମନ୍ୟା ଶିଖି କାହିଁ କାହିଁ ଏବଂ ଏବଂ ଏବଂ

ବେଳାନ୍ତି ଉପରେ

• Which documents will be issued after concluding the new contract?

ଦେଖିବାକୁ ପାଇଁ ଏହା କିମ୍ବା ଏହାରେ କିମ୍ବା ଏହାରେକିମ୍ବା କିମ୍ବା

18. What is the validity of those document(s)?
(ఈ నమ్రం సమానాల విషయం)
-
19. What are the details included in the documents issued by the traffic police officers?
(ఈ నమ్రం సమానాల విషయం)
- పోలీసుల ద్వారా ఇచ్చిన గానీ లేదా ఉన్న ఎలా కిమ్
20. How the police officers calculate the cost of a respective penalty?
(ఈ నమ్రం సమానాల విషయం)
- ఈ విధి క్రమం కుడి బయటి
21. Where are the fines records stored end of the day?
(ఈ నమ్రం సమానాల విషయం)
- ప్రాథమిక ఆంగ్ల రిపబ్లిక్
22. After a traffic police officer issued a spot fine statement and obtained offenders license, what are the steps followed by the police officer after coming to the respective police station where he/ she assigned.
(ఈ నమ్రం సమానాల విషయం)
- పోలీసుల ద్వారా ఇచ్చిన గానీ లేదా ఉన్న విధి కుడి బయటి
23. After issuing the spot fine statement for an offender, how long he/she can take to pay the fine?
(ఈ నమ్రం సమానాల విషయం)
- రూ 12.5
24. Where to pay fines?
(ఈ నమ్రం సమానాల విషయం)
- ప్రాథమిక ఆంగ్ల రిపబ్లిక్
25. What are the necessary documents needed to pay the fine?
(ఈ నమ్రం సమానాల విషయం)
- పోలీసుల ద్వారా ఇచ్చిన గానీ లేదా ఉన్న విధి

26. After done the payment, what will be received by the offender?
(වෙත ඇදුම් යා පරිභාරි ගැනීමෙන් ඇත්තේ?)

ඩුජු මෝසු

27. After successfully done the payment, what is there to be done by the offender to get license back?
(වෙත නැත්තා ඇදුම් යා පරිභාරි ගැනීමෙන් ඇත්තේ එක්ස් පිළිබඳ මෘදු කිරීමෙන්?)

එන්ඩු මෝසු ම නි බුජ ව්‍යුහ තීරණ මුදල නිවාස

28. What's the document issued by traffic police officers after the payment is done and after the offender went to the police station?
(මූදල නැවත්තා ඇදුම් යා පරිභාරි ගැනීමෙන් ඇත්තේ ප්‍රතිඵලි පිළිබඳ මෘදු කිරීමෙන් ඇත්තේ?)

29. What are the details included in that document?
(තින්ම අනුග්‍රහ මීටර් නැත්තා?)

30. Where the money/ fine paid by the offender are sent?
(මුදල/ පිළිබඳ නැත්තා ප්‍රතිඵලි පිළිබඳ මෘදු කිරීමෙන්?)

බඳ යුතු

31. Finally, what will happen to the paid and issued fines
(මුදල නැවත්තා ඇදුම් යා පරිභාරි ගැනීමෙන් ඇත්තේ?)

යුතු නො වෙයි නිවාස

32. Have you noted any issues/ difficulties with the current fine management system?
(මුදල නැවත්තා ඇදුම් යා පරිභාරි ගැනීමෙන් ඇත්තේ මුදල නැවත්තා ඇදුම් යා පරිභාරි ගැනීමෙන් ඇත්තේ?)

එය ප්‍රතිඵලි නිවාස නිවාස ප්‍රතිඵලි නිවාස දැඩ්ඩු නිවාස
එය නිවාස නිවාස

Close ended

33. Do you possess any idea about IT (Information Technology)?
(යොමු වන්නේ මත්ස්‍ය ප්‍රංශයෙහි නො ඇත්තා යොමු කළේ)

Yes

No

34. Is there a traffic department in each of the police stations in Kalutara District?
(කළුතා දිස්ත්‍රික්ටුවෙහි නොමැත්තා නො ඇත්තා නො ඇත්තා නො ඇත්තා)

Yes

No

35. Do traffic police officers work daily?
(ස්ථිර නො ඇත්තා තිබුණු නො ඇත්තා නො ඇත්තා)

Yes

No

36. Are there any holidays for traffic police officers and when?
(ස්ථිර නො ඇත්තා තිබුණු නො ඇත්තා නො ඇත්තා)

Yes

No

37. Are there any computerized systems or information systems used by the Sri Lankan police?
(යොමු නො ඇත්තා නො ඇත්තා නො ඇත්තා නො ඇත්තා)

Yes

No

38. Is current fine management system handled manually?
(පරිග්‍රීක නෘත්‍ය නො ඇත්තා නො ඇත්තා)

Yes

No

39. If not, is the current fine management handled using a computerized system?
(නො ඇත්තා නො ඇත්තා නො ඇත්තා නො ඇත්තා)

Yes

No

40. Is everything done through papers, documents, files?
(තොරතුරු නො ඇත්තා නො ඇත්තා)

Yes

No

41. When an offender violates a traffic rule, do traffic police officers get anything from the offender?
(නිර්දේශකාලීන අත්‍ය සිත් නො යොමු විට, උච්චතා සංඝ්‍යා හිඳුවෙන් ප්‍රතිඵලික ප්‍රාග්ධන යොමු කළ යුතු වෙයිද?)

Yes

No

42. Is there any other document/place where the details are sent or stored?
(ප්‍රතිඵලික මේ සොයී යොමු කර ඇත් සිත් විවෘත නොමැති ප්‍රාග්ධන වෙයිද?)

Yes

No

43. If an offender who breached traffic rules from another district/province/country, does he/she need to follow the same procedure?
(නිවෙස් දෙපාර්තමේන්තුවක් තුළ ප්‍රාග්ධන කළ ඇති විට සිර්දේශකාලීන ප්‍රතිඵලික ප්‍රාග්ධන යොමු කළ යුතු ඇති ප්‍රාග්ධන වෙයිද?)

Yes

No

44. Does the offender need to come back to the respective police station to pay the fine and receive the license back?
(නිවෙස් ආවැන්තා තුළ ප්‍රාග්ධන විට ප්‍රතිඵලික ප්‍රාග්ධන වෙයිද, ප්‍රතිඵලික ප්‍රාග්ධන වෙයිද?)

Yes

No

45. Can an offender drive vehicle when a spot fine is issued?
(නිවෙස් දුන් මිශ්‍ය විට සිර්දේශකාලීන ප්‍රාග්ධන වෙයිද?)

Yes

No

46. Is there any online or card payment facility to pay the fine?
(නිවෙස් ආවැන්තා තුළ ප්‍රාග්ධන විට ප්‍රතිඵලික ප්‍රාග්ධන වෙයිද?)

Yes

No

47. Are the paid fines recorded in somewhere or deleted?
(නිවෙස් ආවැන්තා තුළ ප්‍රාග්ධන විට ප්‍රතිඵලික ප්‍රාග්ධන වෙයිද?)

Yes

No

48. Would you prefer to work with a computerized system (Web Application)?
(තම ප්‍රතිඵලික සොයී යොමු කර ඇත්තා විෂ්ඩ්‍යා ත්‍යාගක් වෙයිද?)

Yes

No

10.2. Summary of the interview and the questionnaire forms from the police officers

We gathered requirements by using both the requirement gathering techniques interviews & questionnaires. As the major outcome of the interview and the questionnaires we were able to understand the whole process behind the current system from the beginning to end.

Here is a summary of the current system that we identified. When the day begin, first the traffic police officers, have to fill some details in a book called **TIB**. In that book, they have to record their working hours, and a paragraph about their duty and the location of the duty for the day.

When the traffic police officer goes the road for his/her duty, they should bring the book which includes the **permits issued in Lieu of the Driving License**. It is mandatory to take that book with them when they are in duty. That book has a facility of obtaining a carbon copy when issuing a permit in Lieu of the Driving License. The permit form includes some details as inputs to be filled from an offender. The details included are the full name and address of the driver, vehicle number, date of offense, time, place, nature of the offense, driving license number, competent to drive, valid time period (from date to date), court, court date, police station, issuing officer, rank and the signature. When a police officer caught an offender who breach the law, the details of the offender will be recorded in the permit in Lieu of the Driving License and the license of the offender is taken by the police officer. In the permit in Lieu of the Driving License the due date (to date) and the court date are same while the court is the nearest court for the police station.

After the permit is received by the offender a copy of the permit is recorded in the book which consists of permits in Lieu of the Driving License. At the end of the day the police officers are pasting the carbon copies of the permits in Lieu of the Driving License which they issued on their duty in the same book **TIB**. The details included in the carbon copies of permits in Lieu of the Driving License are recorded in another book named **TOR**. That book includes the fields of TOR number, Nature of offense, Place of offense, date of offense, name of the accuse, driving license number, vehicle number, 172 receipt number, spot fine number, result, officer detecting and remarks.

The license of the offenders is with the police officer. He/she brings them to the police station and the license details are recorded in a book named **DLR**. In that book it records the details of the offenders' driving license which are license number, consecutive number, date of receipt of Driving license, name of the offense, name of the owner, date of offense, officer detecting, handout date, date return, sign of the receiver, **TOR** & Case number, receiver's sign, vehicle number.

Next it is the offender's duty which is to pay the fine. Initially when an offender breach a traffic rule he/she need to get a spot fine statement from the police station. The spot fine statement is issued as Fines in lieu of prosecution. It can also be taken from the police officer who issues the permit in Lieu of the Driving License in order to do the payment. The spot fine statement consists details of vehicle number, date, venue, place, nature of offense, full name and address of the driver, driving license number. In this statement the nature of the offense is being included in a different manner when compared to the permit in Lieu of the Driving License which is by a number where the offenses lists are printed below the statement. The respective number of the offense is being recorded in the statement.

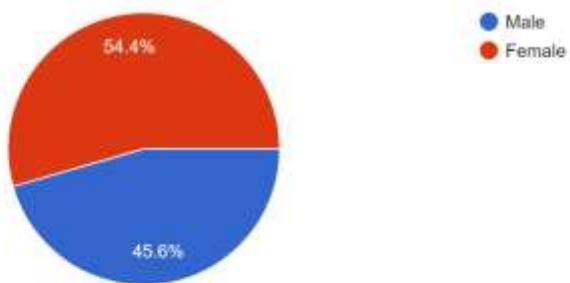
At the time when the offender is in the police station to take the spot fine statement those respective fine details are recorded in a book called **SFR**. In that book all the details of spot fines issued are recorded. The details recorded in the SFR are name of the driver, vehicle number, spot fine number, date of issued, receipt number, date of payment, **TOE** number, Result (Payment amount)

After the details are recorded in the **SFR** book the offender gets the spot fine statement with the permit in Lieu of the Driving License and he/she is able to pay the fine. The fines should be paid to the post office. The post office requires the spot fine statement. Once the offender gave the spot fine statement to the post office and done with the payment the offender receives a payment receipt. The payment receipt is a yellow color paper which includes a receipt number, offenders name, reason, price, and signature & designation. Then the offender is free to get his/her license back. They are required to visit the police station and handover the payment receipt along with the permit in Lieu of the Driving License. Then the license is given to the offender.

Analysis of general public responses from google form regarding traffic fine payment system in Sri Lanka

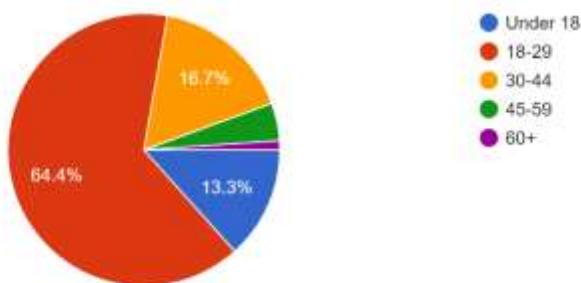
Geder:

90 responses



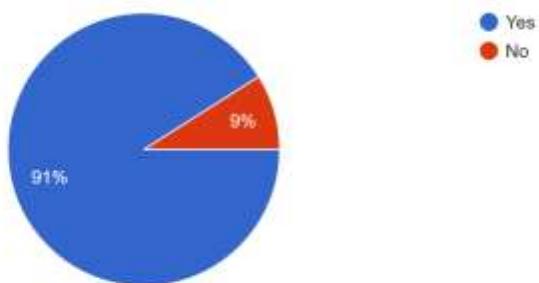
What is your age?

90 responses



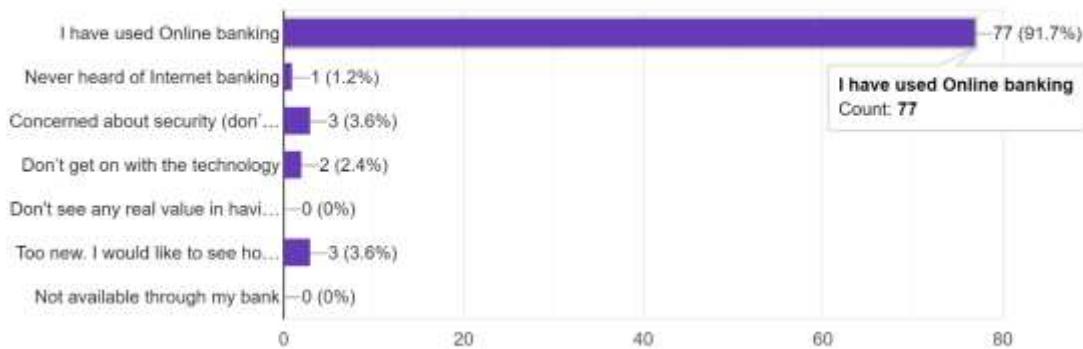
Do you use Online payment?

89 responses

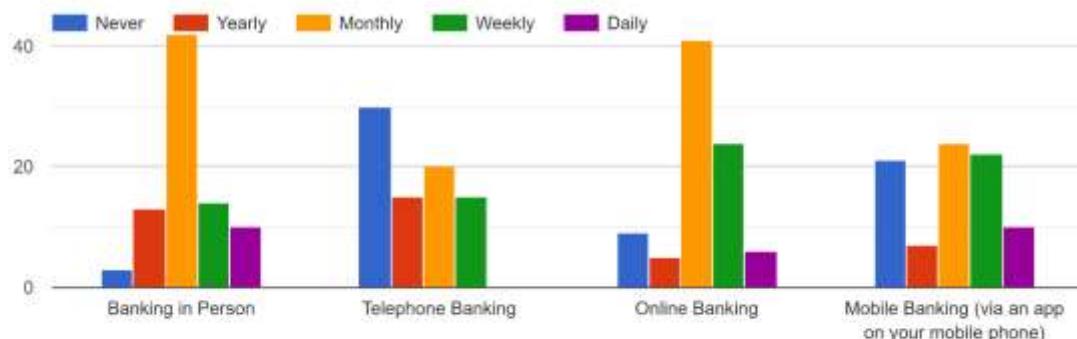


If you have never used online banking, what are the main reasons? (Check all that apply)

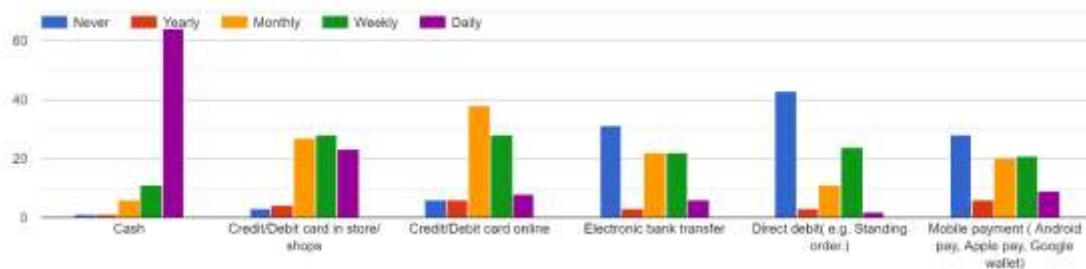
84 responses



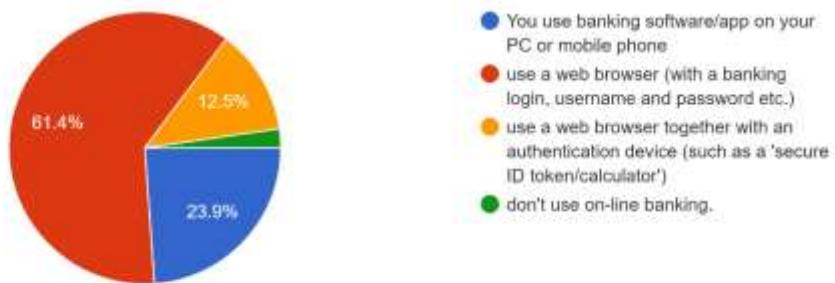
How do you bank and how often?



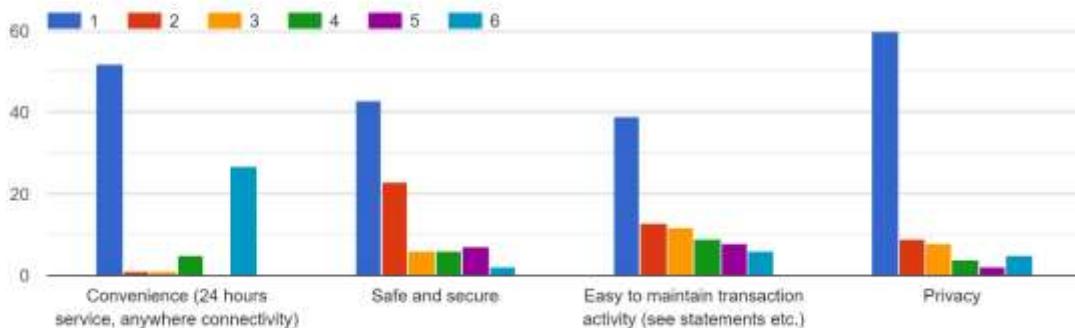
How often do you use the following payment methods?



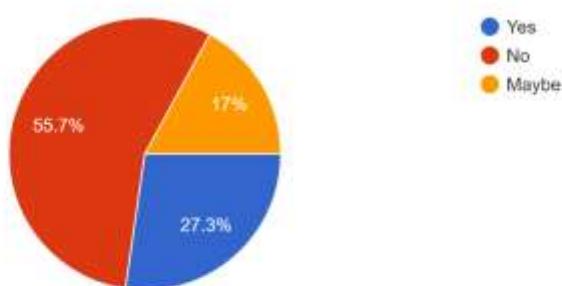
For your on-line banking, which of the following categories best explains your usual situation?
88 responses



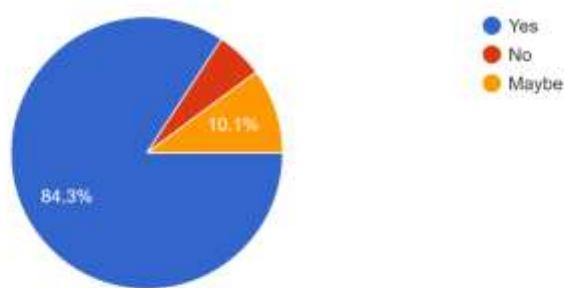
What do you think about existing traffic payment system? (Please prioritize the following list in the order of importance. 1: the most important 6: the least important).



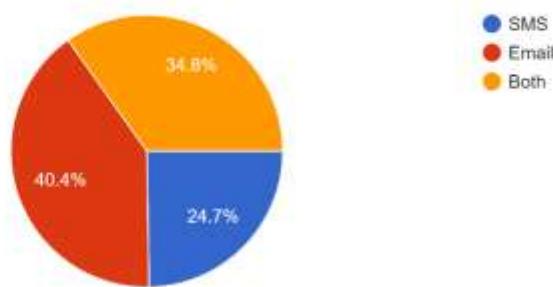
Are you satisfied with the current manual traffic fine payment system?
88 responses



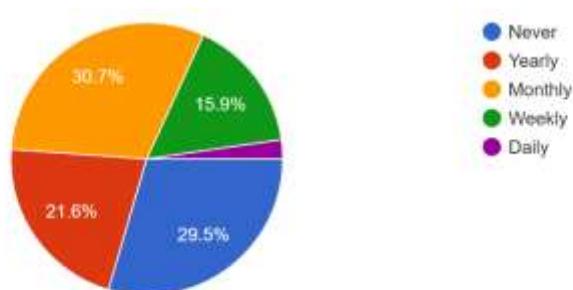
Are you okay with paying traffic fines online/credit and debit cards using a website?
89 responses



What is most reliable method for getting notifications, if a computerized system is implemented for paying traffic fines?
89 responses

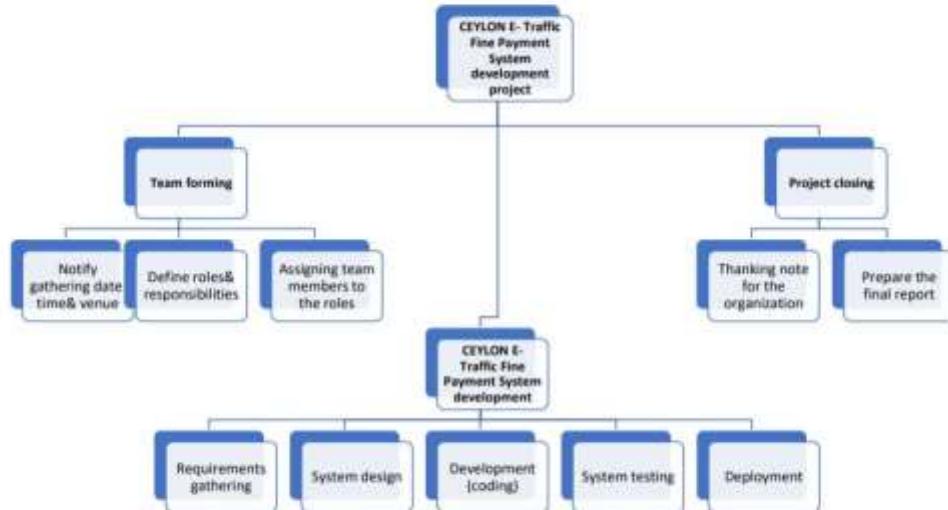


How often you get traffic fines?
88 responses

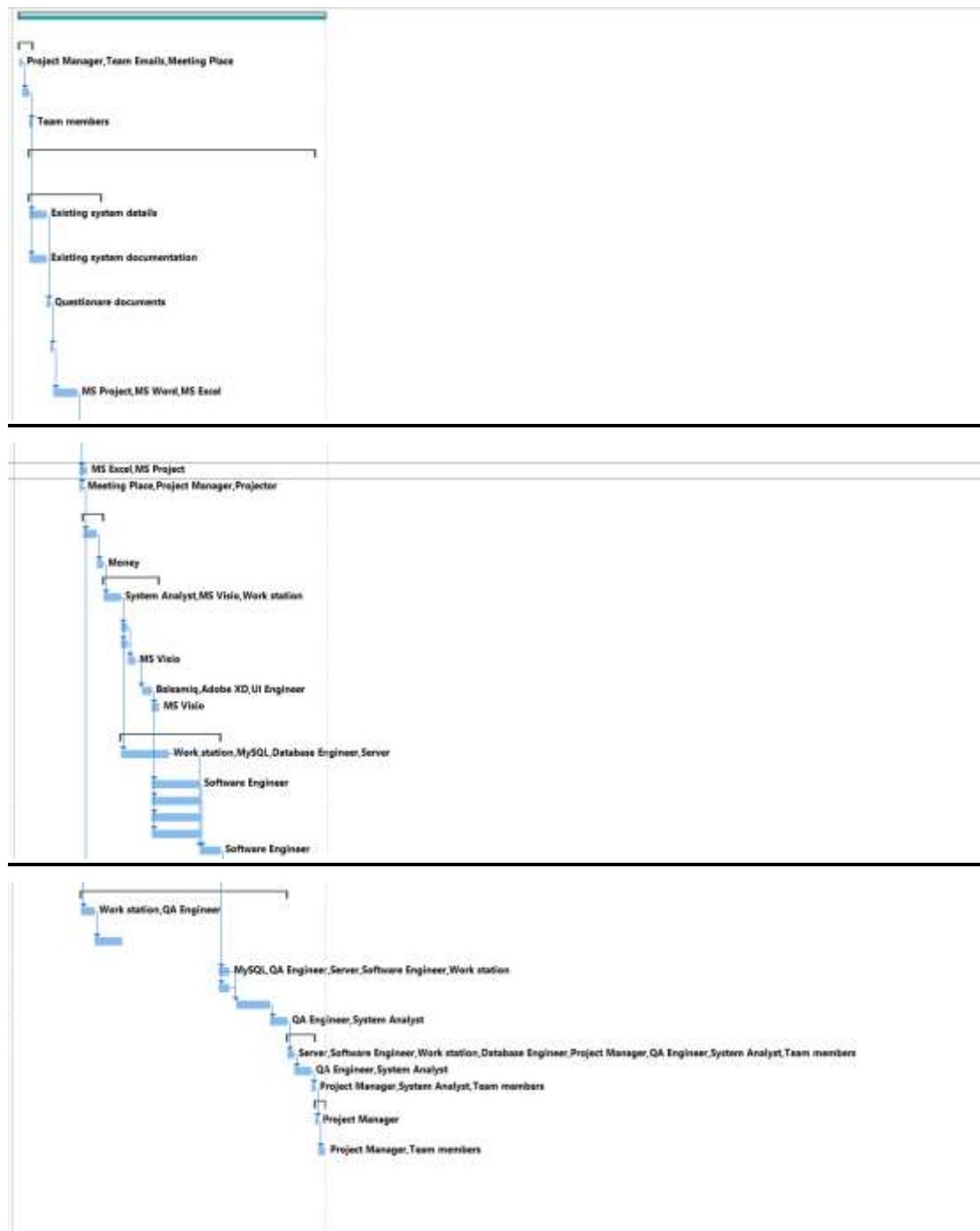


11. Work Breakdown Structure & Gantt Chart

11.1 WBS



11.2 Gantt Chart



12.Risk Analysis

RID	Risk	Probability	Impact	Score	Resolutions
R01	Covid19 virus pandemic	10	10	100	Mitigate – Vaccinations, Surgical mask, Sanitizers, Social distance
R02	Lack of manpower	8	10	80	Accept – hire freelancers, arranging regular meetings
R03	Bad weather conditions	5	8	40	Accept – lightning conductors, work from home
R04	Delay on approval	8	10	80	Avoid – prior scheduling
R05	Delay of issuing budget	8	10	80	Accept – getting budget advance
R06	Data lost	7	10	70	Accept – Upload to Google drive, Keep backups in external devices (Hard disks, pen drives), Assign strong passwords.
R07	Undefined requirement from client side	8	4	32	Accept – More interviews, Questionaries, recorrecting SRS
R08	Unexpected lockdown	5	8	40	Accept – Permissions for project completion, Work from home
R09	Power failure	5	10	50	Accept – Generators

R10	Network issues	5	7	35	Accept – Better quality network, Activating additional data plans, Keep network drivers up to date.
R11	Theft of material or intellectual properties	5	10	50	Transfer – Security firm
R12	Political influences	4	9	36	Transfer – police department

R01 – Covid 19 Virus pandemic

- Members may get infected
- Members may be quarantined
- Hard to gather requirements
- Delay in receiving resources
- Sudden deaths of members

R02 – Lack of manpower

- Based on the risks in covid 19 it affects this too
- Members may get absent
- Accidents may occur for members

R03 - Bad weather conditions

- Members may get absent
- Accidents also may occur for members
- Property may get damaged

R04 - Delay on approval

- Legal action delays
- Covid pandemic
- Project approval delays

R05 - Delay of issuing budget

- Delay approval of budget from respective parties
- Delay of issuing cheques

R06 – Data lost

- Data might get deleted
- Data might be stolen

R07 - Undefined requirement from client side

R08 - Unexpected lockdowns

R09 - Power failure

R10 - Network issues

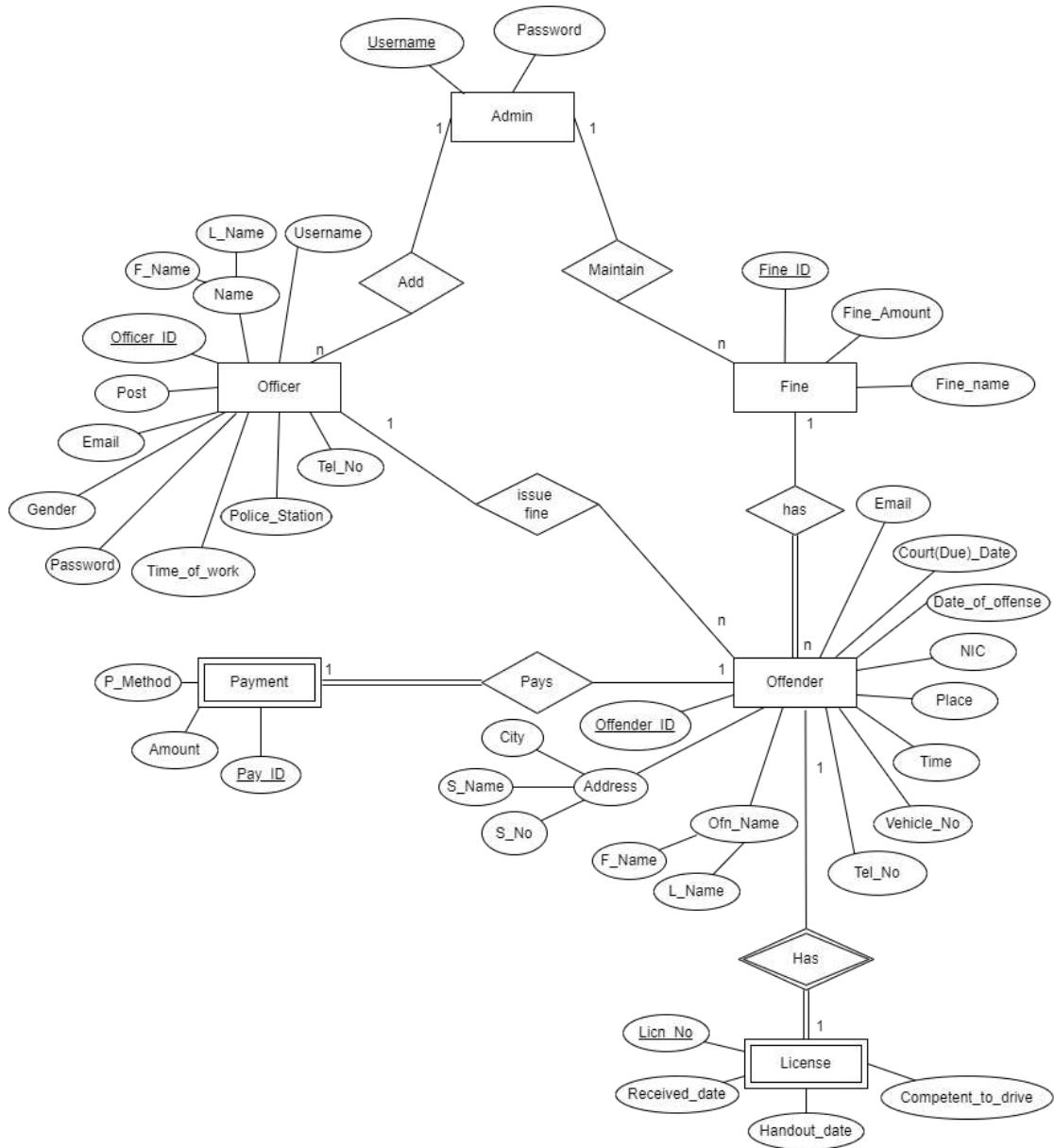
R11 - Theft of material or intellectual properties

R12 - Political influences

CHAPTER 03

13.Design of the system

13.1 E-R Diagram



Normalization

Mapping Strong entity

Admin (Username, Password)

Officer (Officer_ID, F_Name, L_Name, Username, Password, Gender, Post, Email, Time_of_work, Police_Station, Tel_No)

Fine (Fine_ID, Fine_Name, Fine_Amount)

Offender (Offender_ID, F_Name, L_Name, S_No, S_Name, City, Tel_No, Vehicle_No, Time, Place, NIC, Date_of_offense, Court(Due)_Date, Email)

Map Weak entity

License (Offender_ID(FK), Licn_No, Received_date, Handout_date, Component_to_drive)

Payment (Offender_ID(FK), Pay_ID, P_Method, Amount)

Map one to one

~~Offender (Offender_ID, F_Name, L_Name, S_No, S_Name, City, Tel_No, Vehicle_No, Time, Place, NIC, Date_of_offense, Court(Due)_Date, Email)~~

~~Payment (Offender_ID, Pay_ID, P_Method, Amount)~~

Offender (Offender_ID, F_Name, L_Name, S_No, S_Name, City, Tel_No, Vehicle_No, Time, Place, NIC, Date_of_offense, Court(Due)_Date, Email)

Payment (Offender_ID, Pay_ID, P_Method, Amount)

Map one to many

Admin (Username, Password)

Officer (Officer_ID, F_Name, L_Name, Username, Password, Gender, Post, Email, Time_of_work, Police_Station, Tel_No)

Offender (Offender_ID, F_Name, L_Name, S_No, S_Name, City, Tel_No, Vehicle_No, Time, Place, NIC, Date_of_offense, Court(Due)_Date, Email)

Fine (Fine_ID, Fine_Name, Fine_Amount)

Officer (Officer_ID, F_Name, L_Name, Username, Password, Gender, Post, Email, Time_of_work, Police_Station, Tel_No, Username(FK))

Fine (Fine_ID, Fine_Name, Fine_Amount, Username(FK))

Offender (Offender_ID, F_Name, M_Name, L_Name, S_No, S_Name, City, Tel_No, Vehicle_No, Time, Place, NIC, Date_of_offense, Court(Due)_Date, Email, Officer_ID(FK), Fine_ID(FK))

Map many to many

No many to many relationship

All mapped

Admin (Username, Password)

Officer (Officer_ID, F_Name, L_Name, Username, Password, Gender, Post, Email, Time_of_work, Police_Station, Tel_No, Username(FK))

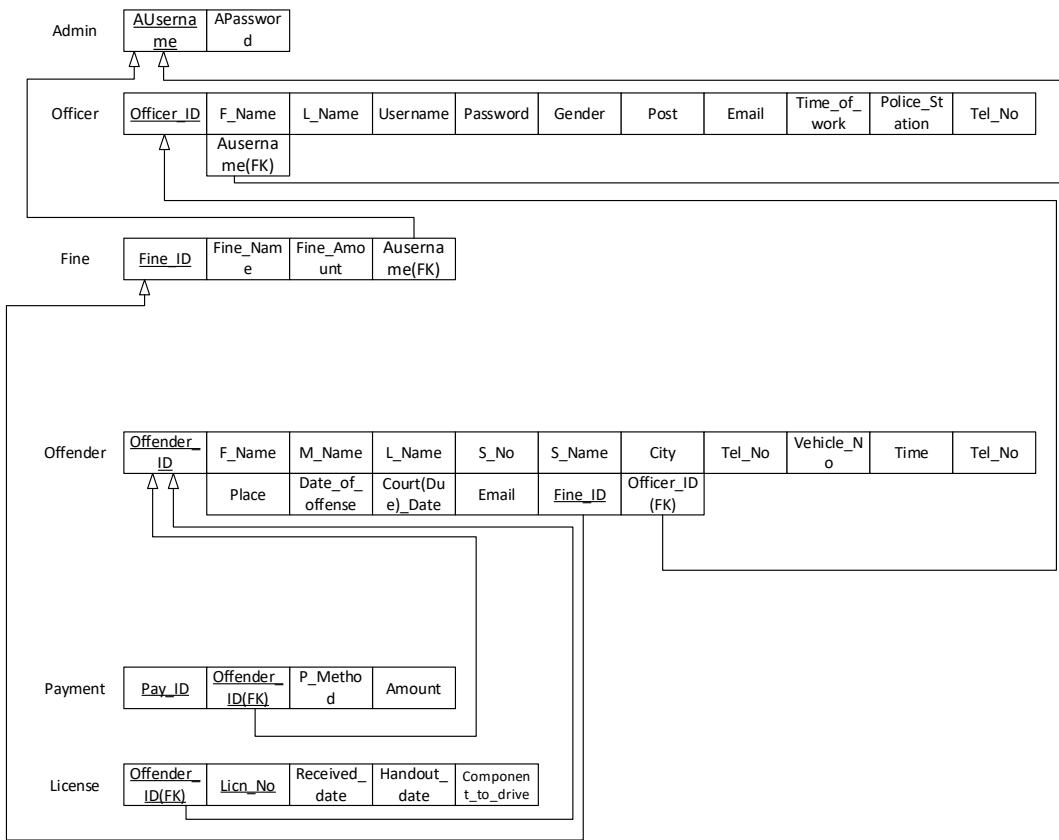
Fine (Fine_ID, Fine_Name, Fine_Amount, Username(FK))

Offender (Offender_ID, F_Name, L_Name, S_No, S_Name, City, Tel_No, Vehicle_No, Time, Place, NIC, Date_of_offense, Court(Due)_Date, Email, Officer_ID(FK), Fine_ID(FK))

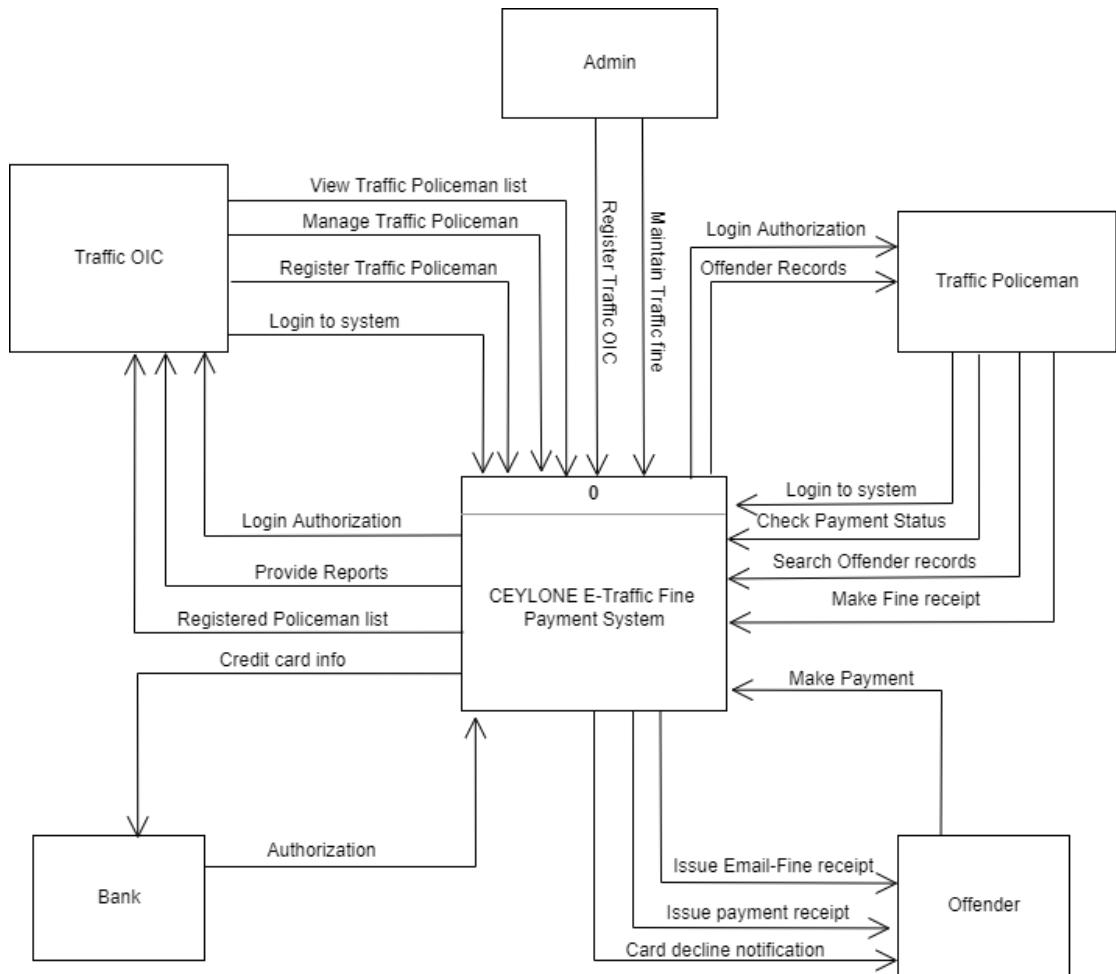
Payment (Offender_ID(FK), Pay_ID, P_Method, Amount)

License (Offender_ID(FK), Licn_No, Received_date, Handout_date, Component_to_drive)

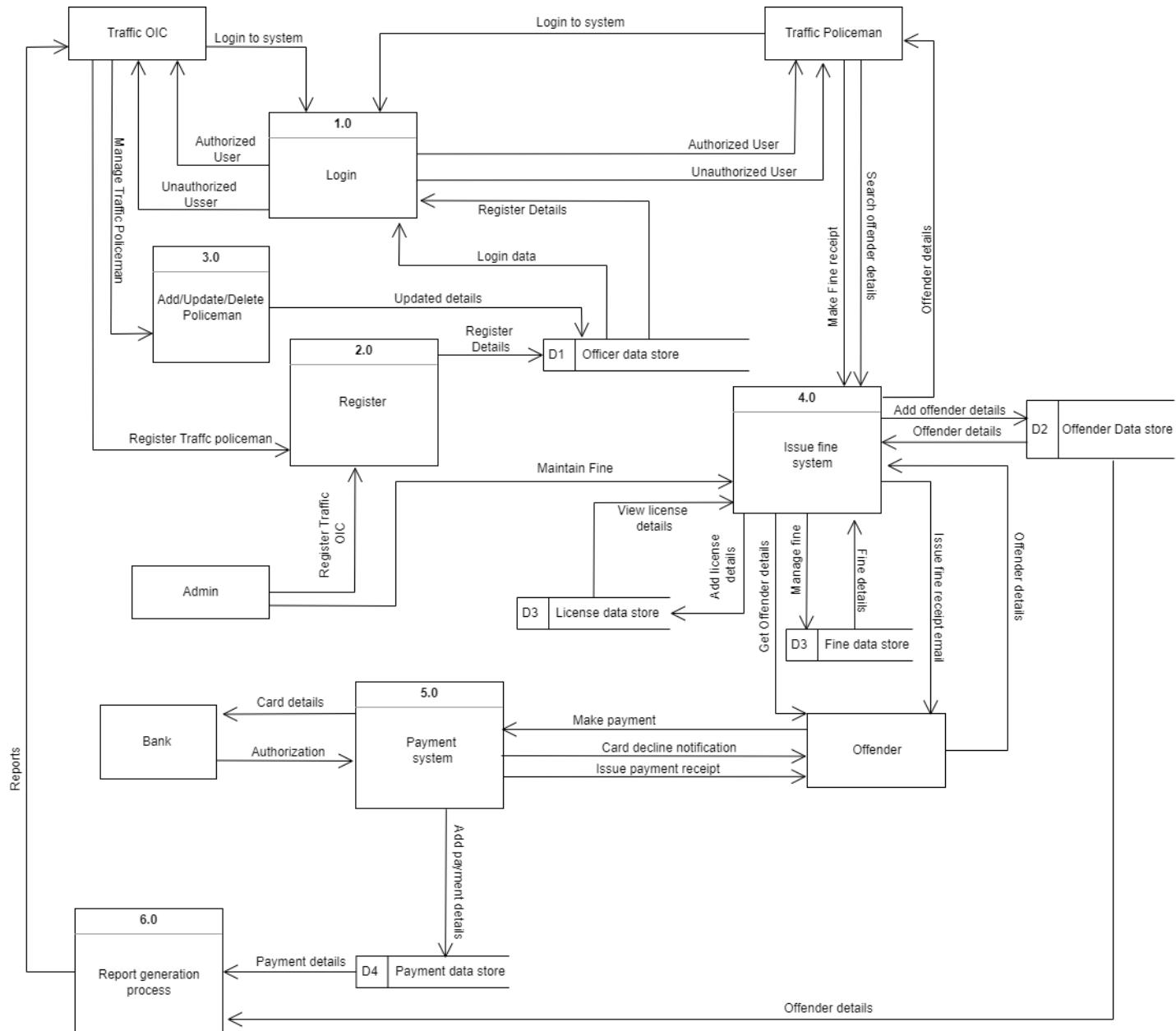
License (Offender_ID, Licn_No, Received_date, Handout_date, Component_to_drive)



13.2 Context Level Diagram

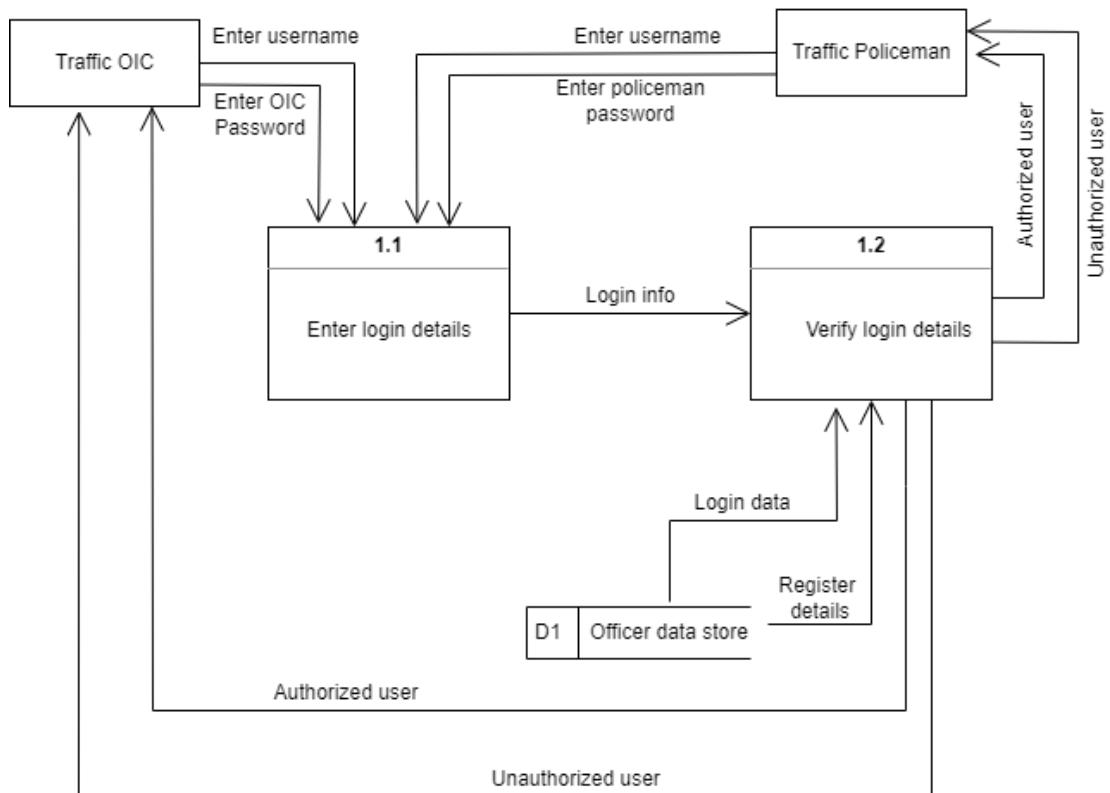


13.3 Level 0

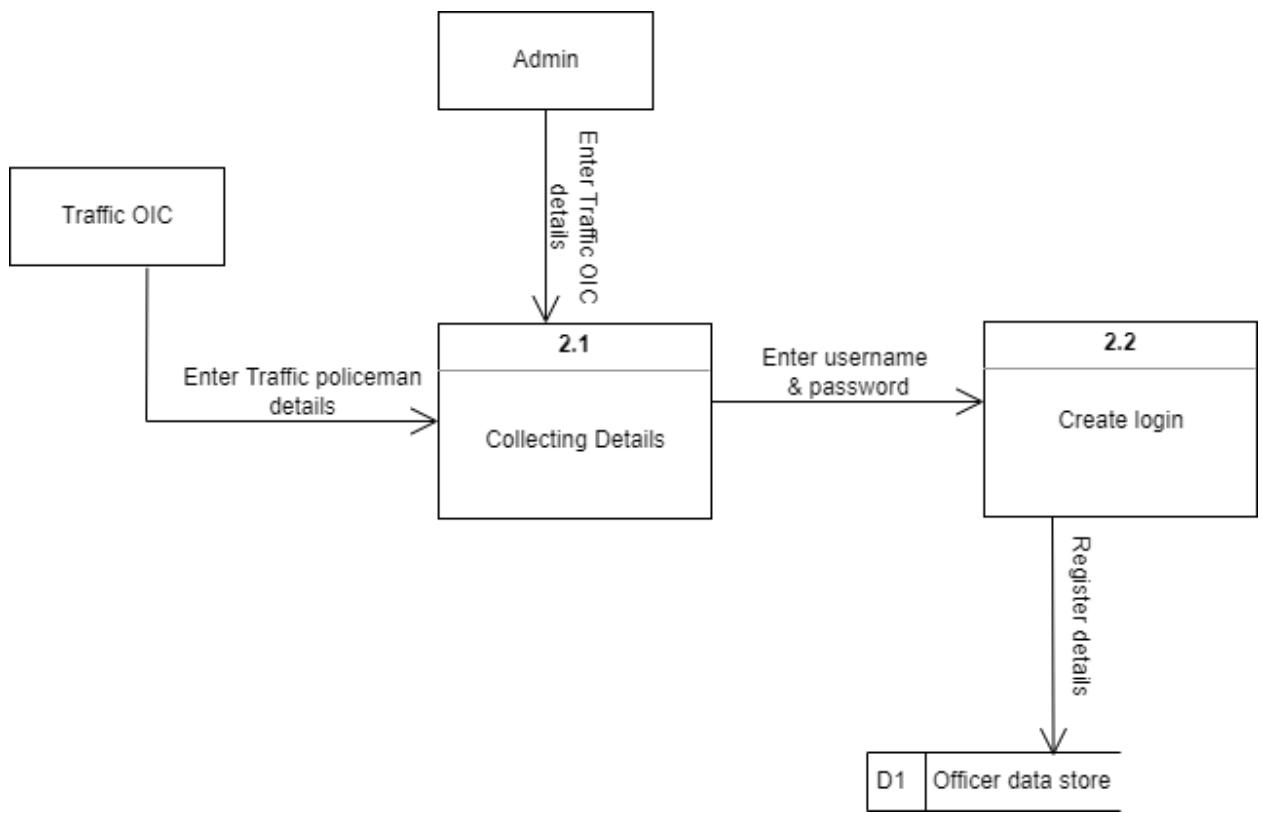


13.4.Level 1

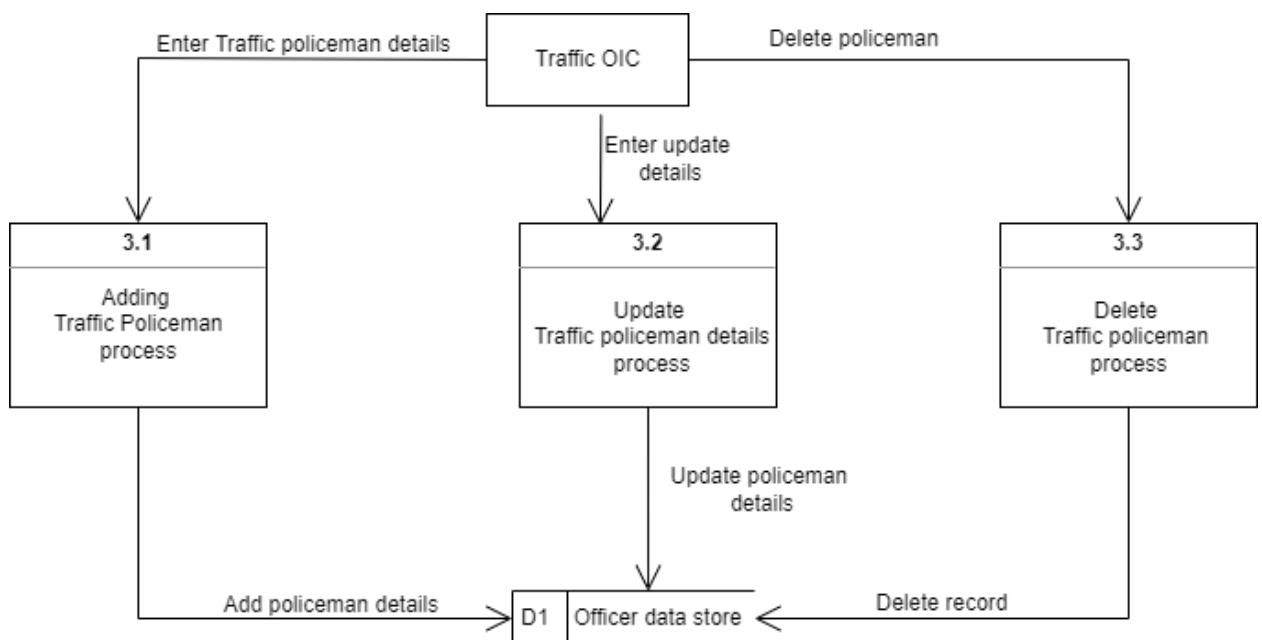
Login



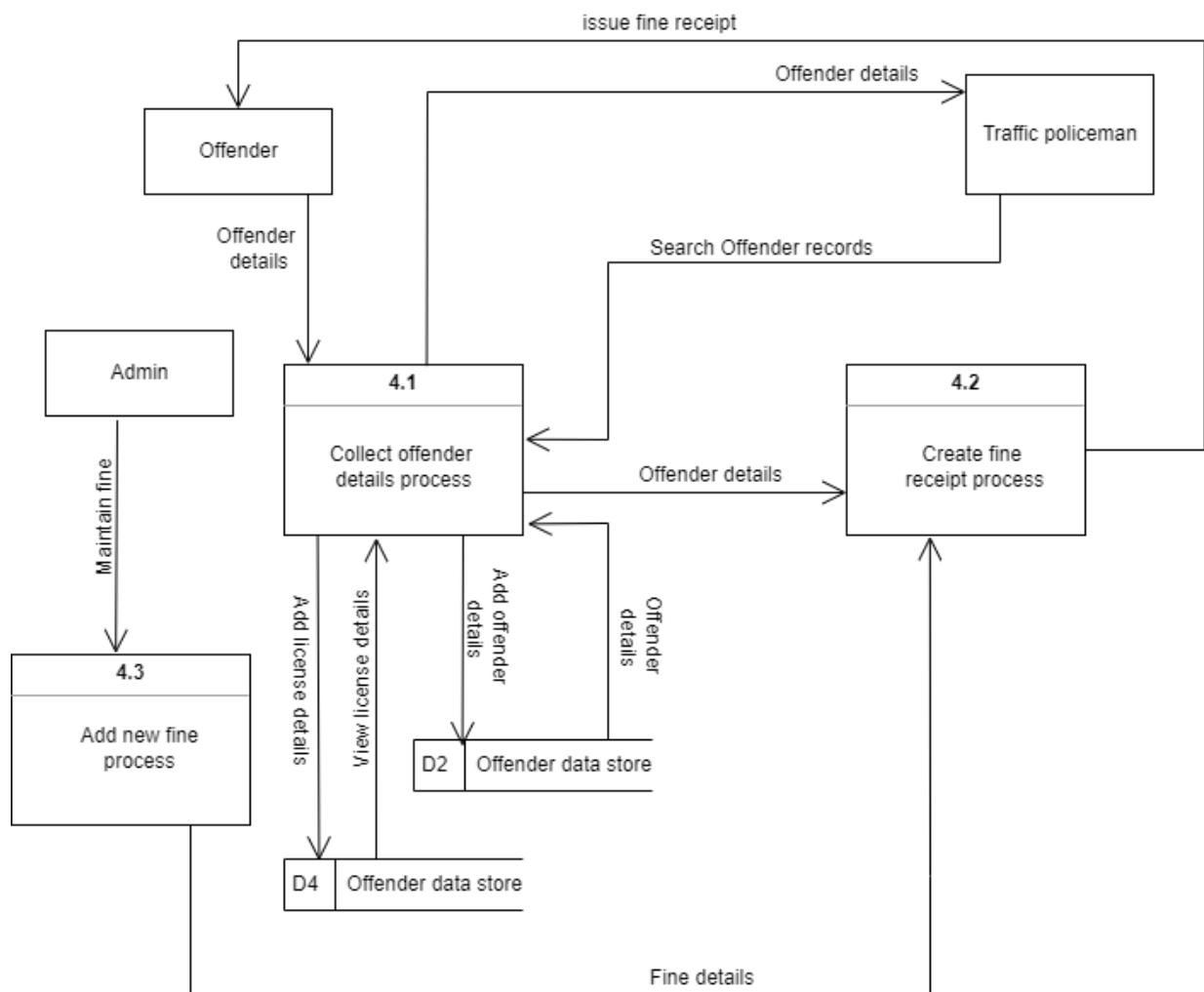
Register



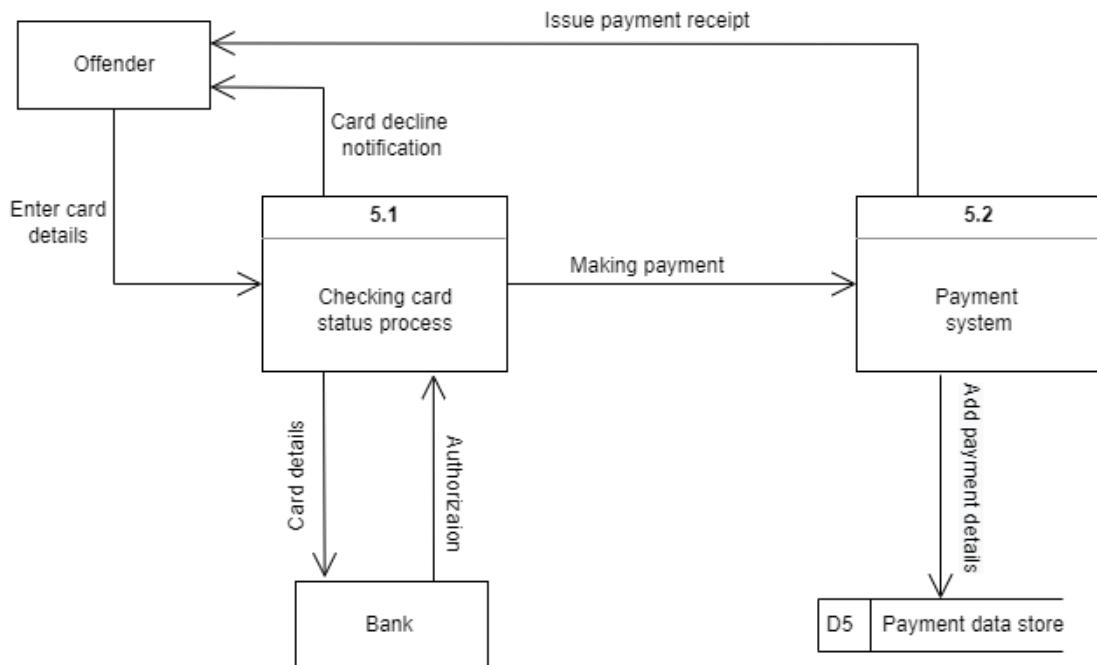
Manage policeman



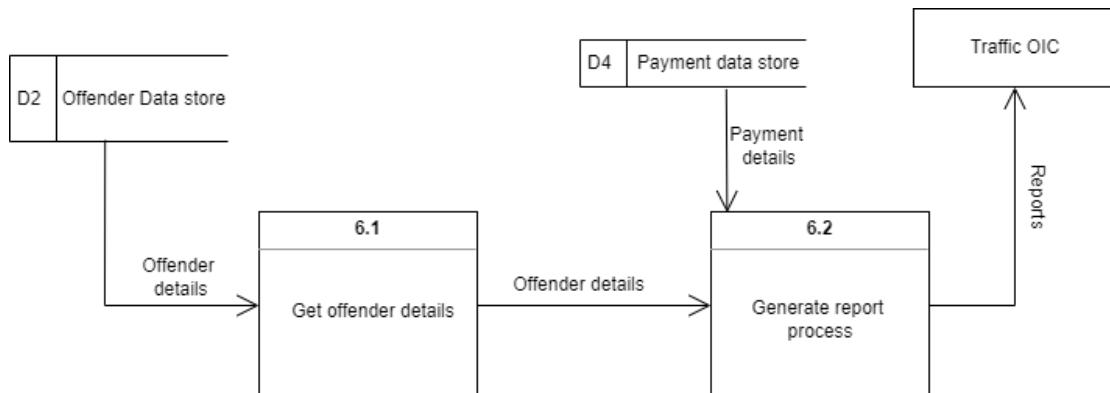
Issue fine



Payment Process



Report Generation



13.5. Pseudo Code

Search Fine

```
BEGIN  
DECLARE VARIABLES offenderSearchFine  
ENABLE CONNECTION  
IF CONNECTION EQUALS True  
SELECT * FROM TABLE WHERE OFFENDERLICENSENO= ADD VARIABLE  
ELSE  
DISPLAY "NO RESULTS FOUND"  
END
```

Login

```
BEGIN  
DECLARE VARIABLES  
Username, Password, Post  
ENABLE CONNECTION  
IF  
Username = username  
Password = password  
Post = OIC  
DISPLAY Register Officer interface  
ELSE IF  
Username = username  
Password = password  
Post = Offender regist  
DISPLAY Register Offender interface  
ELSE  
DISPLAY "Username or Password is incorrect"  
END
```

Register Officer

```
BEGIN  
DECLARE VARIABLES  
Officer's Police ID, Police Station, First Name, Last Name, Username, Password,  
Confirm Password, Time of work, Telephone, Email, Gender, Post  
ENABLE CONNECTION  
IF CONNECTION EQUALS True  
DISPLAY "Officer register sucessful"  
ELSE  
DISPLAY "Error Message"  
END
```

Register Offender

```
BEGIN  
DECLARE VARIABLES  
Offender ID, Police ID, First Name, Last Name, Street Number, Street Name,  
City, Email, Telephone, License Number, Vehicle Number, Date of Offense,  
Due(court) Date, Time, Place, Gender, Copetentet To Drive  
ENABLE CONNECTION  
IF CONNECTION EQUALS True  
DISPLAY "Offender register sucessful"  
ELSE  
DISPLAY "Error Message"  
END
```

Add fine

```
BEGIN  
DECLARE VARIABLES  
OffenderNic, PoliceId, FisrtName, LastName, StreetNum, StreetName,  
OffenderCity, OffenderEmail, OffenderTelephone, OffenderLicenseNum,  
OffenderVehicleNum, DateofOffense,  
DueCourtDate, Time, Place, OffenderGender, NameofOffense, CompetentToDrive  
ENABLE CONNECTION  
IF CONNECTION EQUALS True  
INSERT INTO TABLE VALUES Add the Variables  
ELSE  
DISPLAY "Error Message"  
END
```

Download Fine by offender

```
BEGIN  
DECLARE GET VARIABLE OffenderID  
ENABLE CONNECTION  
DECLARE VARIABLE sql EQUALS SELECT * FROM TABLE WHERE  
OFFENDERID= ADD GET VARIABLE OffenderID  
DECLARE VARIABLE result INCLUDE VARIABLE AND CONNECTION inside  
MYSQLI_QUERY function  
IF CONNECTION EQUALS True  
DISPLAY "FINE DOWNLOADED"  
ELSE  
DISPLAY "ERROR IN DOWNLOADING FINE"  
END
```

Report generation

BEGIN

ENABLE CONNECTION

GET DATES FROM INPUTS

DECLARE VARIABLES AS d1, d2, array, dates, month, year, array2, dates2,
month2, year2

CONVERT DATE FORMAT

DECLARE VARIABLES date1, date2

DECLARE VARIABLE query EQUALS "SELECT ALL FROM OFFENDERS
WHERE DATE OF OFFENSE GREATER THAN EQUAL date1 AND LESS THAN
EQUAL date2"

DECLARE VARIABLE result EQUALS CONNECTION AND QUERY

IF result IS TRUE

DECLARE VARIABLE result1 EQUALS CONNECTION AND QUERY

DECLARE VARIABLE result2 EQUALS CONNECTION AND QUERY

CREATE PDF USING FPDF

END

Payment

BEGIN

GET offenderid

ENABLE CONNECTION

DECLARE VARIABLES firstName, lastName, cardNumber, expireDate,
paymentMethod, cvv, cardNumAssigned, expireDateAssigned, cvvAssigned,
bankAmount

ASSIGN VALUES TO VARIABLES cardNumAssigned, expireDateAssigned,
cvvAssigned, bankAmount AS 1234567891011121, date('Y-m-d'), 123, 60000

IF cardNumber EQUALS cardNumAssigned

IF expireDateAssigned EQUALS expireDate

IF cvvAssigned EQUALS cvv

"SELECT offenders.Offender_ID, offenders.Fine_Id, fine.Fine_Amount FROM
offenders LEFT JOIN fine ON offenders.Fine_Id = fine.Fine_Id WHERE
offenders.Offender_ID={\$offenderid}"

DECLARE VARIABLE result EQUALS CONNECTION AND QUERY

IF sql query EQUALS TRUE

"INSERT into payments (Payment_Method, Amount, Offender_ID)
VALUES('paymentMethod','fineAmount','offenderid')"

DECLARE VARIABLE result2 CONNECTION AND QUERY

IF sql query EQUALTS TRUE

ALERT"Payment Done Successfully"

bankAmount EQUALS bankAmount SUBSTRACT fineAmount

ALERT " Bank Balance: "EQUALS bankAmount

ELSE

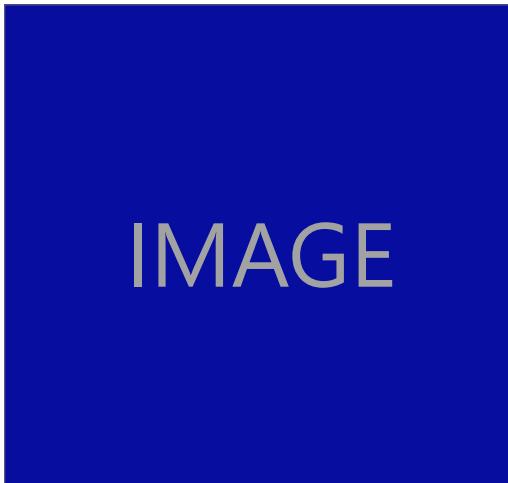
```
ALERT "Payment Failed"  
ELSE  
ALERT "WRONG CVV ENTERED"  
ELSE  
ALERT "Card Expired"  
ELSE  
ALERT "Wrong Card number"  
END
```

Payment receipt

```
BEGIN  
ENABLE CONNECTION  
DECLARE VARIABLE offenderid EQUALS GET Offender id  
DECLARE VARIABLE EQUALS QUERY  
DECLARE VARIABLE result EQUALS CONNECTION AND QUERY  
IF result EQUALS TRUE  
GENERATE PDF USING FPDF  
END
```

13.6. Interfaces(UI design)

Login Interface



The image shows a dark blue login interface for the Sri Lanka Traffic Police. On the left, there is a large white text "IMAGE". On the right, the text "WELCOME TO LOGIN" is displayed in bold blue capital letters. Below it is a horizontal line. A "Username" input field is followed by a "Password" input field. A dropdown menu labeled "Post" contains the option "Admin". There is also a "Remember Me" checkbox and a blue "Login" button.

SRI LANKA TRAFFIC POLICE

HOME HOME HOME HOME

ADDRESS
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social media

UI 1 login

Admin Interface

The screenshot shows the 'SRI LANKA TRAFFIC POLICE' Admin Interface. At the top, there are navigation links: 'Add Fine', 'Search&Update Fine', 'Register Officers', and a menu icon. Below this is a large central form titled 'ADD NEW FINES'. It contains two input fields: 'Fine Name' (placeholder: 'Enter Fine Name Here') and 'Fine Amount' (placeholder: 'Enter Fine Amount Here'). A blue 'Add' button is located at the bottom of the form. The background features a gradient from purple to pink.

SRI LANKA TRAFFIC POLICE

Add Fine Search&Update Fine Register Officers

ADD NEW FINES

Fine Name
Enter Fine Name Here

Fine Amount
Enter Fine Amount Here

Add

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social media

UI 2 admin add fine

The screenshot shows the 'SRI LANKA TRAFFIC POLICE' Admin Interface. At the top, there are navigation links: 'Add Fine', 'Search&Update Fine', 'Register Officers', and a menu icon. Below this is a large central form titled 'SEARCH FINE DETAILS'. It features a search bar with a 'Search' button and a placeholder 'Search By Fine Details'. Below the search bar are four rows of 'Fine Details' with 'Update' buttons next to them. The background features a gradient from purple to pink.

SRI LANKA TRAFFIC POLICE

Add Fine Search&Update Fine Register Officers

SEARCH FINE DETAILS

Search Search By Fine Details

Fine Details Update

Fine Details Update

Fine Details Update

Fine Details Update

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UI 3 admin search fine

SRI LANKA TRAFFIC POLICE

Add Fine Search&Update Fine Register Officers 

TRAFFIC POLICE OFFICERS REGISTRATION

Officer's Police ID:	Police Station:
<input type="text"/>	<input type="text"/>
First Name:	Last Name:
<input type="text"/>	<input type="text"/>
Username:	Employee ID:
<input type="text"/>	<input type="text"/>
Current Password:	Date of Birth:
<input type="password"/>	<input type="text"/>
Telephone:	Email:
<input type="text"/>	<input type="text"/>
Gender:	
<input type="text"/>	
Role:	

SRI LANKA TRAFFIC POLICE

Add Fine Search&Update Fine Register Officers

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social media

UI 4 Admin officer's register

SRI LANKA TRAFFIC POLICE

Add Fine Search&Update Fine Register Officers 

UPDATE FINE DETAILS

Fine ID:	Fine Name:	Amount:
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="button" value="Update"/>		

Fine Details:

SRI LANKA TRAFFIC POLICE

Add Fine Search&Update Fine Register Officers

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 TELEPHONE
 EMAIL

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UI 5 Admin update fine

OIC Interface

The screenshot displays the Sri Lanka Traffic Police OIC Interface. At the top, there is a navigation bar with links for "Add Offender", "Search Offender", "About Us", "Register Officers", "Manage License", and a menu icon. Below the navigation bar, there is a large blue rectangular area containing the word "IMAGE". To the right of this area, the word "ABOUT US" is displayed in bold capital letters, followed by a horizontal line and the text "CEYLON E-TRAFFIC FINE PAYMENT SYSTEM" repeated five times. A "Read More" button is located at the bottom right of this section. Further down, the word "GALLERY" is displayed in bold capital letters, followed by a horizontal line and a large blue rectangular area containing the word "IMAGES". At the bottom of the page, there is a footer section with the "SRI LANKA TRAFFIC POLICE" logo and links for "Add Offender", "Search Offender", "About Us", "Register Officers", and "Manage License". To the right of these links, there are icons for "ADDRESS", "TELEPHONE", and "EMAIL", each accompanied by a small circular icon. On the far right, there is a section titled "ABOUT THE ORGANIZATION" with a repeating text snippet and four small square icons labeled "social media".

SRI LANKA TRAFFIC POLICE

Add Offender Search Offender About Us
Register Officers Manage License

ADDRESS

TELEPHONE

EMAIL

ABOUT THE ORGANIZATION

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UI 6 OIC about us

SRI LANKA TRAFFIC POLICE Add Offender Search Offender About Us Register Officers Manage License 

TRAFFIC POLICE OFFICERS REGISTRATION

Officer's Police ID:	Police Station:
<input type="text"/>	<input type="text"/>
First Name:	Last Name:
<input type="text"/>	<input type="text"/>
Username:	Station ID:
<input type="text"/>	<input type="text"/>
Current Password:	Date of Birth:
<input type="password"/>	<input type="text"/>
Telephone:	Email:
<input type="text"/>	<input type="text"/>
Gender:	
<input type="text"/>	
Role:	
<input type="button" value="Register"/>	

SRI LANKA TRAFFIC POLICE

Add Offender Search Offender About Us
Register Officers Manage License

ADDRESS

TELEPHONE

EMAIL

social media

UI 7 OIC Officer register

SRI LANKA TRAFFIC POLICE Add Offender Search Offender About Us Register Officers Manage License 

MANAGE LICENSE

Offender Id: License Id: License No: Received Date: Handout Date: Competent To Drive: Offender First Name: Set Handout Date

Fine Details:	<input type="text"/> MM/DD/YY	<input type="button" value="Set Handout Date"/>
Fine Details:	<input type="text"/> MM/DD/YY	<input type="button" value="Set Handout Date"/>
Fine Details:	<input type="text"/> MM/DD/YY	<input type="button" value="Set Handout Date"/>
Fine Details:	<input type="text"/> MM/DD/YY	<input type="button" value="Set Handout Date"/>

SRI LANKA TRAFFIC POLICE

Add Offender Search Offender About Us
Register Officers Manage License

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social media

UI 8 OIC Manage License

GENERATE REPORT

From To

Generate The Report

GENERATE REPORT BY LOCATION

Search

Details

GENERATE REPORT BY OFFENCE

Search

Details

GENERATE REPORT BY OFFICER

Search

Details



ADDRESS



TELEPHONE



EMAIL

T officer Interface

The screenshot displays the Sri Lanka Traffic Police website interface. At the top, there is a dark blue header bar with the text "SRI LANKA TRAFFIC POLICE" on the left and three navigation links ("Add Offender", "Search Offender", "About Us") on the right. A vertical menu icon is located at the top right corner.

The main content area has a purple-to-pink gradient background. On the left side, there is a large dark blue rectangular placeholder with the word "IMAGE" in white capital letters. To the right of this placeholder, the word "ABOUT US" is centered above a list of repeated text entries: "CEYLON E-TRAFFIC FINE PAYMENT SYSTEM". Below this list is a small blue button labeled "Read More".

Further down the page, the word "GALLERY" is centered above another large dark blue rectangular placeholder with the word "IMAGES" in white capital letters.

At the bottom of the page, there is a dark blue footer bar. It features the "SRI LANKA TRAFFIC POLICE" logo on the left, followed by three small circular icons with the labels "ADDRESS", "TELEPHONE", and "EMAIL" next to them. To the right of these icons, the text "ABOUT THE ORGANIZATION" is displayed, followed by a short description: "about the organization about the organization about the organization about the organization". Below this text are four small square icons representing social media platforms, with the label "social media" positioned to their right.

UI 9T- OFFICER *About us*

OIC/T officer Interface

The screenshot shows the 'OFFENDERS REGISTRATION' form. It contains fields for: Officer ID, Post No., First Name; Last Name, Street Number, House Number; City, Local, Telephone; License Number, Vehicle Number, Date of Offense; Offense Date, Time, Place; Gender; Offense Type; and Offense Description. A large blue 'Add Offender' button is at the bottom right.

SRI LANKA TRAFFIC POLICE

Add Offender Search Offender About Us

OFFENDERS REGISTRATION

Officer ID: _____ Post No: _____ First Name: _____
Last Name: _____ Street Number: _____ House Number: _____
City: _____ Local: _____ Telephone: _____
License Number: _____ Vehicle Number: _____ Date of Offense: _____
Offense Date: _____ Time: _____ Place: _____
Gender: _____
Offense Type: _____
Offense Description: _____

Add Offender

ADDRESS TELEPHONE EMAIL

ABOUT THE ORGANIZATION
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UI 10 Offender Register

The screenshot shows the 'SEARCH OFFENDERS DETAILS' form. It features a 'Search' button and a search bar labeled 'Search by offender Details'. Below the search bar are four input fields for 'Offender Details'.

SRI LANKA TRAFFIC POLICE

Add Offender Search Offender About Us

SEARCH OFFENDERS DETAILS

Search Search by offender Details

Offender Details
Offender Details
Offender Details
Offender Details

ADDRESS TELEPHONE EMAIL

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UI 11 Search Offender

Offender Interface

The screenshot shows the 'SEARCH OFFENDERS DETAILS' page of the Sri Lanka Traffic Police website. At the top, there's a navigation bar with links for 'Search Offender', 'Contact Us', and 'About Us'. Below the navigation is a search form titled 'SEARCH OFFENDERS DETAILS' with a 'Search' button and a 'Search by offender Details' input field. Underneath the search form are four horizontal input fields labeled 'Offender Details'.

SRI LANKA TRAFFIC POLICE

Search Offender Contact Us About Us

SEARCH OFFENDERS DETAILS

Search Search by offender Details

Offender Details

Offender Details

Offender Details

Offender Details

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ADDRESS TELEPHONE EMAIL

social media

UI 12 Search Offender

IMAGE

ABOUT US

CEYLON E-TRAFFIC FINE PAYMENT SYSTEM

[Read More](#)

GALLERY

IMAGES



ADDRESS



TELEPHONE



EMAIL

ABOUT THE ORGANIZATION

about the organization about the organization about the organization about the organization about the organization



social media

SRI LANKA TRAFFIC POLICE

Search Offender Contact Us About Us

CONTACT SRI LANKA TRAFFIC POLICE

First Name: Last Name:
 Email: Telephone:
 Your Message:
 write something...

SRI LANKA TRAFFIC POLICE

Search Offender Contact Us About Us

ADDRESS 
TELEPHONE 
EMAIL 

ABOUT THE ORGANIZATION
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 social media

UI 14 Offender contact us

SRI LANKA TRAFFIC POLICE

Search Offender Contact Us About Us

PAY FINES

ACCEPTED CARD

Name On Card: Card Number:
 Expiry: Expiry Date:
 Cardholder Type:

SRI LANKA TRAFFIC POLICE

Search Offender Contact Us About Us

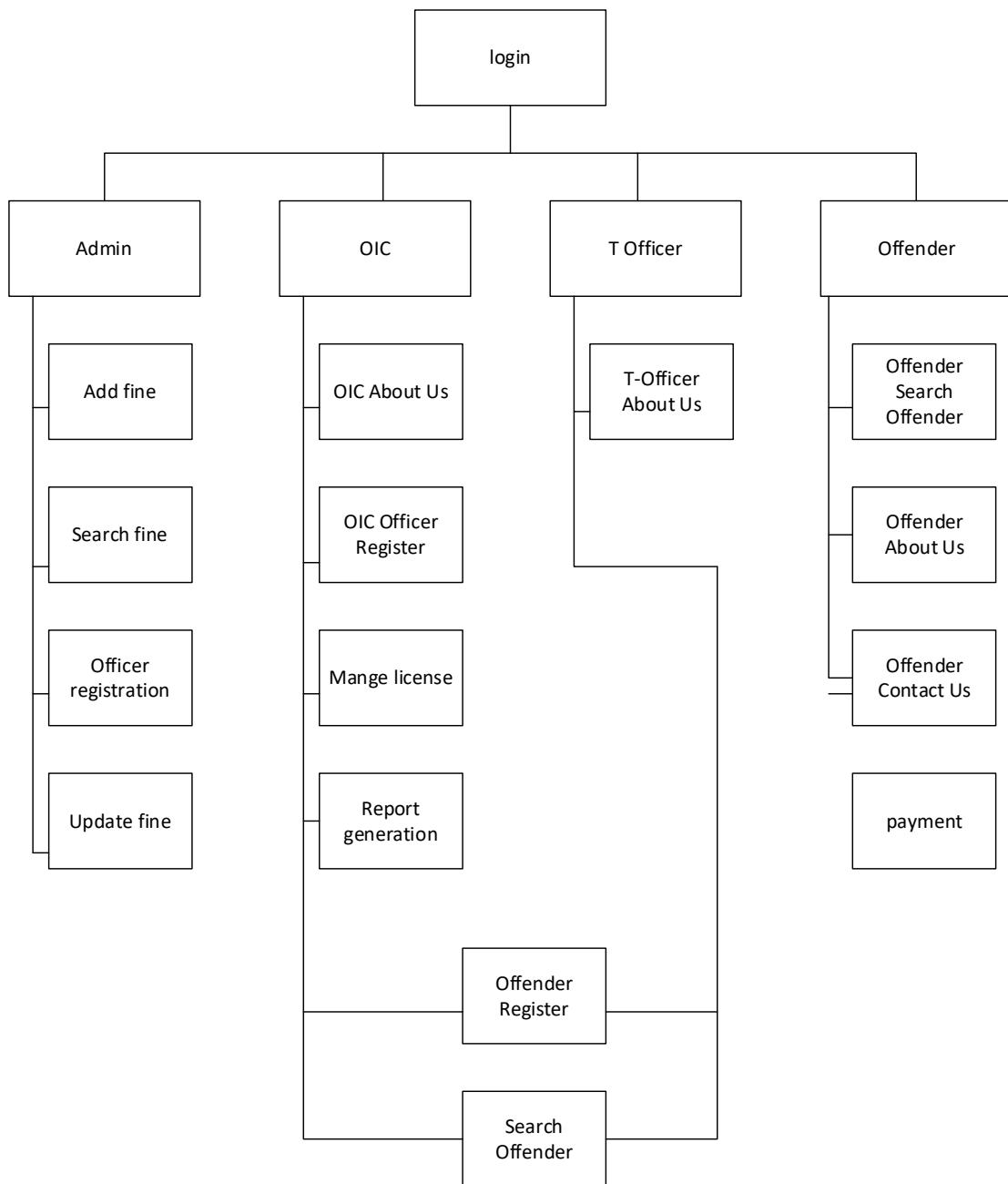
ADDRESS 
TELEPHONE 
EMAIL 

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UI 15 Payment

13.7. Site Map



CHAPTER 04

14.Explain functionalities with evidence

Function	Description
F1-Login	Admin login function to the system .
F2- Register, Update and Delete Traffic OIC(s)	Create and maintain traffic OIC.
F3- Add, Update, Delete fine details	Create and maintain traffic fine.
F4 - Login	OIC login function to the system .
F5 - Register, Delete traffic police officers	Create and maintain traffic police officers
F6 - Delete offenders records	Deleting offender record if mistake happened.
F7- Login	Traffic officer login function to the system.
F8 - Add offenders	Adding offender who breached the traffic law.
F9 - Issue spot fine statement	issue the spot fine statement, simply an email notification will be sent to offender automatically allow with a link after the police officer insert offenders fine details into the database.
F10 - View/Check offender fine details.	Check and view offender payment status and fine details. Even police officers can check past records (history) of offenders.

F11 - Pay fines online	The main function in our system is to enable the offenders to pay the fine online
F12 – View and download spot fine and payment receipt	offender can click and then view/download via the website
F13 – Generating reports automatically	<ul style="list-style-type: none"> • Generating summary reports for each police station in Kalutara district. The report will include (number of offenders, the rules they breached, total costs of fines, locations where the offenders have breached the law, and the police officer names, the date / time, whether ended up in a court case.) • Generating summary reports for the Kalutara district. <p>The report will include (name of the police station, number of fine records, number of court cases)</p>

CHAPTER 05

15.Testing

15.1.Testing methodology and justification

Black box testing is a form of software testing that tests a software or application's functionality without understanding the design, internal components, or structure of the application being evaluated. Specifications-based testing is another name for it. The black box testing method is most often used to identify missing features, consistency issues, initialization issues, and database access errors.

15.2.test plan

Test Case Id	Test Case Name	Scenario	Expected result
1.	Login page 1	Login with empty username	Display username can't be empty.
2.	Login page 2	Login with empty password	Display password can't be empty.
3.	Login page 3	Login with incorrect username	Display incorrect username
4.	Login page 4	Login with incorrect password	Display incorrect password
5.	Login page 5	Login with empty fields	Display fields can't be empty.
6.	Login page 6	Login with correct username, password and incorrect post	Display incorrect username or password
7.	Login page 7	Login as an admin with correct username, password.	Display admins add new fine page.

8.	Login page 8	Login as an OIC with correct username, password.	Display OIC about us page.
9.	Login page 9	Login as a T-officer with correct username, password.	Display T-officer about us page.
10.	Admin header 1	Click on header add fine	Display admins add fine page
11.	Admin header 2	Click on header search and update fine	Display admins search and update fine page
12.	Admin header 3	Click on header register Officers	Display register Officers page
13.	Admin header 4	Click on header hamburger menu	Display hamburger menu
14.	Admin footer 1	Click on footer add fine	Display admins add fine page
15.	Admin footer 2	Click on footer search and update fine	Display admins search and update fine page
16.	Admin footer 3	Click on footer register Officers	Display admins register Officers page
17.	Admin add fine 1	Click add with empty fields	Display fields can't be empty.
18.	Admin add fine 2	Click add with empty fine name	Display fine name can't be empty
19.	Admin add fine 3	Click add with empty fine amount	Display fine amount can't be empty

20.	Admin add fine 4	Click add with fine name and fine amount	Display fine added successfully
21.	Admin search fine 1	Search with empty fine details	Display all fines
22.	Admin search fine 2	Search with fine name	Display fine details
23.	Admin search fine 3	Search with fine amount	Display fine details
24.	Admin search fine 4	Search with non-existing fine detail	Display no fine details to show
25.	Admin search fine 5	Click update in fine details	Display update fine page
26.	Admin update fine 1	Click update with empty fields	Display fields can't be empty.
27.	Admin update fine 2	Click update with empty fine name	Display fine name can't be empty
28.	Admin update fine 3	Click update with empty fine amount	Display fine amount can't be empty
29.	Admin update fine 4	Click update with fine name and fine amount	Display fine updated successfully
30.	Admin Police Officer registration 1	Click register with empty fields	Display fields can't be empty
31.	Admin Police Officer registration 2	Click register with empty police ID	Display police ID can't be empty.

32.	Admin Police Officer registration 3	Click register with empty police station	Display police station can't be empty.
33.	Admin Police Officer registration 4	Click register with empty first name	Display first name can't be empty.
34.	Admin Police Officer registration 5	Click register with empty last name	Display last name can't be empty.
35.	Admin Police Officer registration 6	Click register with empty username	Display username can't be empty.
36.	Admin Police Officer registration 7	Click register with empty password	Display password can't be empty.
37.	Admin Police Officer registration 8	Click register with empty confirm password	Display confirm password can't be empty.
38.	Admin Police Officer registration 9	Click register with not matching password and confirm password	Display password and confirm password should match.
39.	Admin Police Officer registration 10	Click register with empty time of work	Display time of work can't be empty.
40.	Admin Police Officer registration 11	Click register with empty telephone	Display telephone can't be empty.

41.	Admin Police Officer registration 12	Click register with incorrect format of telephone	Display incorrect format of telephone.
42.	Admin Police Officer registration 13	Click register with empty email	Display email can't be empty.
43.	Admin Police Officer registration 14	Click register with incorrect format of email	Display incorrect format of telephone.
44.	Admin Police Officer registration 15	Click register with all fields entered	Display officer added successfully
45.	OIC header 1	Click on header add offender	Display add offender page
46.	OIC header 2	Click on header search offender	Display search offender page
47.	OIC header 3	Click on header about us	Display search OIC about us
48.	OIC header 4	Click on header register Officers	Display OIC register Officers page
49.	OIC header 5	Click on header hamburger menu	Display hamburger menu
50.	OIC footer 1	Click on footer add offender	Display admins add offender page
51.	OIC footer 2	Click on footer search offender	Display search offender page

52.	OIC footer 3	Click on footer about us	Display OIC about us page
53.	OIC footer 3	Click on footer register Officers	Display OIC register Officers page
54.	OIC about us 1	Click read more button	Redirect police.lk
55.	OIC Police Officer registration 1	Click register with empty fields	Display fields can't be empty
56.	OIC Police Officer registration 2	Click register with empty police ID	Display police ID can't be empty.
57.	OIC Police Officer registration 3	Click register with empty police station	Display police station can't be empty.
58.	OIC Police Officer registration 4	Click register with empty first name	Display first name can't be empty.
59.	OIC Police Officer registration 5	Click register with empty last name	Display last name can't be empty.
60.	OIC Police Officer registration 6	Click register with empty username	Display username can't be empty.
61.	OIC Police Officer registration 7	Click register with empty password	Display password can't be empty.
62.	OIC Police Officer registration 8	Click register with empty confirm password	Display confirm password can't be empty.
63.	OIC Police Officer registration 9	Click register with not matching password and confirm password	Display password and confirm password should match.
64.	OIC Police Officer registration 10	Click register with empty time of work	Display time of work can't be empty.

65.	OIC Police Officer registration 11	Click register with empty telephone	Display telephone can't be empty.
66.	OIC Police Officer registration 12	Click register with incorrect format of telephone	Display incorrect format of telephone.
67.	OIC Police Officer registration 13	Click register with empty email	Display email can't be empty.
68.	OIC Police Officer registration 14	Click register with incorrect format of email	Display incorrect format of email.
69.	OIC Police Officer registration 15	Click register with all fields entered	Display officer added successfully.
70.	T-Officer header 1	Click on header add offender	Display admins add offender page
71.	T-Officer header 2	Click on header search offender fine	Display search offender page
72.	T-Officer header 3	Click on header about us	Display T-officer about us page
73.	T-Officer header 4	Click on header hamburger menu	Display hamburger menu
74.	T-Officer footer 1	Click on footer add offender	Display add offender page
75.	T-Officer footer 2	Click on footer search offender	Display search offender page
76.	T-Officer footer 3	Click on footer about us	Display T-Officer about us page
77.	T-Officer about us 1	Click read more button	Redirect police.lk

78.	Offender register 1	Add offender with empty fields.	Display fields can't be empty.
79.	Offender register 2	Add offender with empty offender NIC.	Display offender NIC can't be empty.
80.	Offender register 3	Add offender with empty police ID.	Display offender police ID can't be empty.
81.	Offender register 4	Add offender with empty first name.	Display offender first name.
82.	Offender register 5	Add offender with empty last name.	Display offender last name.
83.	Offender register 6	Add offender with empty street number.	Display offender street number.
84.	Offender register 7	Add offender with empty street name.	Display offender street name.
85.	Offender register 8	Add offender with empty city.	Display offender city.
86.	Offender register 9	Click register with empty email	Display email can't be empty.
87.	Offender register 10	Click register with incorrect format of email	Display incorrect format of email.
88.	Offender register 11	Click register with empty telephone	Display telephone can't be empty.
89.	Offender register 12	Click register with incorrect format of telephone	Display incorrect format of telephone.
90.	Offender register 13	Click register with empty license number	Display telephone can't be license number.

91.	Offender register 14	Click register with incorrect format of license number	Display incorrect format of license number.
92.	Offender register 15	Click register with incorrect format of Offender NIC	Display incorrect format of Offender NIC.
93.	Offender register 16	Click register with empty Vehicle number	Display Vehicle number can't be empty.
94.	Offender register 17	Click register with empty Date of Offense	Display Date of Offense can't be empty.
95.	Offender register 18	Click register with empty Due(court) Date	Display Due(court) Date can't be empty.
96.	Offender register 19	Click register with empty time	Display time can't be empty.
97.	Offender register 20	Click register with empty place	Display place can't be empty.
98.	Offender register 21	Click register with all fields	Display offender added successfully.
99.	Search offender 1	Click search with empty field	Display fields can't be empty.
100.	Search offender 2	Click search with filled field	Display offender details.
101.	Search offender 3	Click download on offender details	View/download pdf offender details.
102.	Search offender 4	Click pay on offender details	Display payment page.

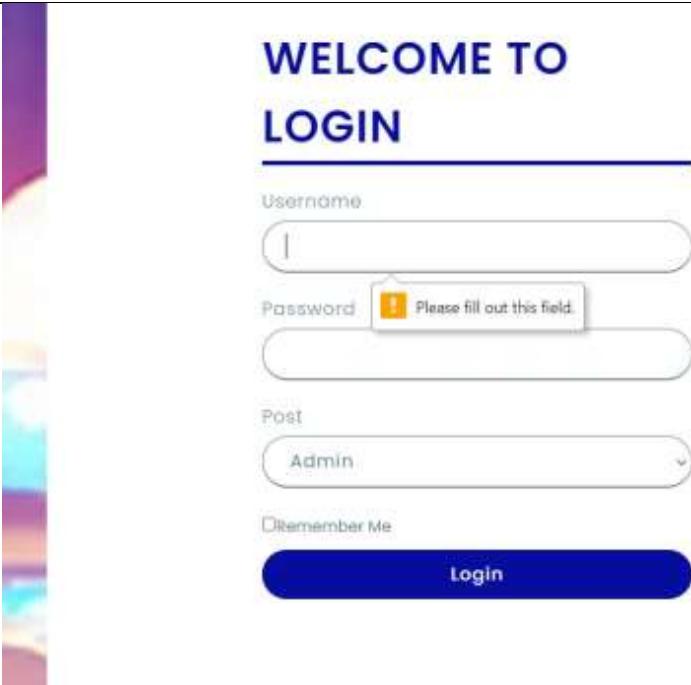
103.	Search offender 5	Click print on offender details	print payment receipt.
104.	Offender header 1	Click on header Search offender	Display offender Search offender page
105.	Offender header 2	Click on header contact us	Display offenders contact us page
106.	Offender header 3	Click on header about us	Display offenders about us page
107.	Offender header 4	Click on header hamburger menu	Display hamburger menu
108.	Offender footer 1	Click on footer Search offender	Display offender Search offender page
109.	Offender footer 2	Click on footer contact us	Display offenders contact us page
110.	Offender footer 3	Click on footer about us	Display offenders about us page
111.	Offender search offender 1	Click search with empty field	Display fields can't be empty.
112.	Offender search offender 2	Click search with filled field	Display offender details.
113.	Offender search offender 3	Click download on offender details	View/download pdf offender details.
114.	Offender search offender 4	Click pay on offender details	Display payment page.
115.	Offender search offender 5	Click print on offender details	print payment receipt.

116.	Offender about us 1	Click read more button	Redirect police.lk
117.	Contact us 1	Click send with empty fields	Display fields cant be empty.
118.	Contact us 2	Click send with filled fields	Display acknowledgement message
119.	OIC Manage license 1	Set hand out date with empty field.	Display fields cant be empty.
120.	OIC Manage license 2	Set hand out date with filled field.	Display acknowledgement message
121.	Payment 1	Pay now with empty fields	Display fields can't be empty.
122.	Payment 2	Pay now with incorrect card no	Display error msg
123.	Payment 3	Pay now with incorrect cvv	Display error msg
124.	Payment 4	Pay now with incorrect exp date	Display error msg
125.	Payment 5	Pay now with incorrect card type	Display error msg
126.	Payment 6	Pay now with correctly filled fields	Display Payment successful
127.	Generate report 1	Generate report with non-filled from date to date	Display error message

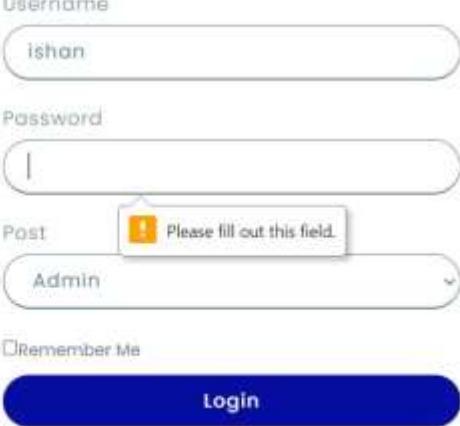
128.	Generate report 2	Generate report with filled from date to date	Display within date range report data
129.	Generate report 3	Generate report with location	Display filtered by location report data
130.	Generate report 4	Generate report with offence	Display filtered offence report data
131.	Generate report 5	Generate report with officer	Display filtered officer report data

Table 1 test plan

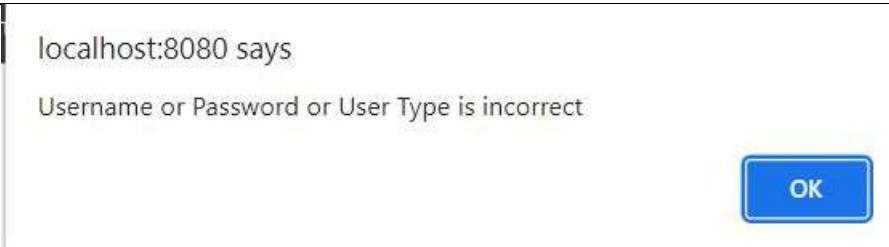
15.3.Test cases

Testcase id	1
Scenario/ objective	Login with empty username
Test data	Login.php (Username)
Expected result	Display username can't be empty.
Screen shot output	 A screenshot of a login interface. At the top, it says "WELCOME TO LOGIN". Below that is a "Username" input field containing a single character. Below it is a "Password" input field which is empty, highlighted with a red border, and has a yellow warning icon with the text "Please fill out this field." To the right of the password field is a dropdown menu set to "Post" and a checkbox for "Remember Me". At the bottom is a large blue "Login" button.
Actual result	Display username can't be empty.
Conclusion	Expected result and actual result are matched

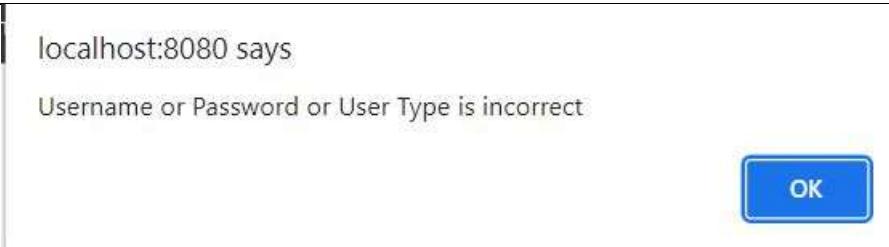
Test Case 1

Testcase id	2
Scenario/ objective	Login with empty password
Test data	Login.php (Password)
Expected result	Display password can't be empty.
Screen shot output	<p style="text-align: center;">WELCOME TO LOGIN</p> <hr/> <p>Username <input type="text" value="ishan"/></p> <p>Password <input type="password" value=""/></p> <p>Post <input type="text" value="Admin"/></p> <p><input type="checkbox"/> Remember Me</p> <p style="text-align: center;">Login</p> 
Actual result	Display password can't be empty.
Conclusion	Expected result and actual result are matched

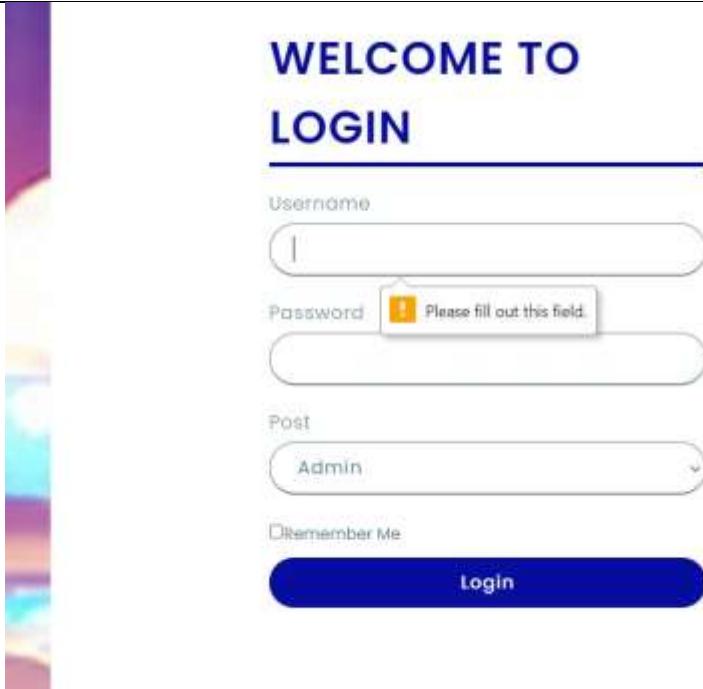
Test Case 2

Testcase id	3
Scenario/ objective	Login with incorrect username
Test data	Login.php (Username)
Expected result	Display incorrect Username or password or Usertype
Screen shot output	<p>localhost:8080 says</p> <p>Username or Password or User Type is incorrect</p> 
Actual result	Display incorrect username
Conclusion	Expected result and actual result are matched

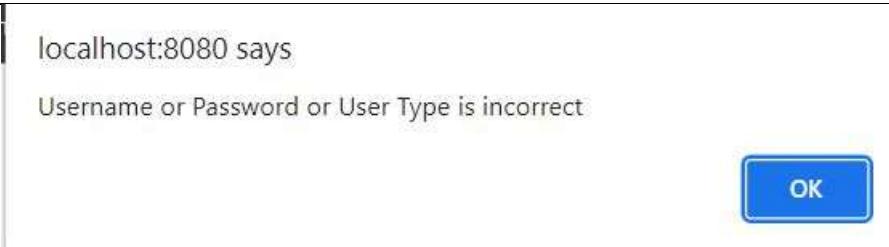
Test Case 3

Testcase id	4
Scenario/ objective	Login with incorrect password
Test data	Login.php (Password)
Expected result	Display incorrect Username or password or Usertype
Screen shot output	<p>localhost:8080 says</p> <p>Username or Password or User Type is incorrect</p> 
Actual result	Display incorrect password
Conclusion	Expected result and actual result are matched

Test Case 4

Testcase id	5
Scenario/ objective	Login with empty fields
Test data	Login.php (Username, Password)
Expected result	Display fields can't be empty.
Screen shot output	 <p>The screenshot shows a login form with the following elements:</p> <ul style="list-style-type: none"> WELCOME TO LOGIN: The title at the top. Username: An input field containing a placeholder character. Password: An input field with a red border and a validation message: "Please fill out this field." A small red icon is next to the message. Post: A dropdown menu set to "Admin". Remember Me: A checkbox. Login: A large blue button at the bottom.
Actual result	Display fields can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 5

Testcase id	6
Scenario/ objective	Login with correct username, password and incorrect post
Test data	Login.php (Username, Password, Post)
Expected result	Display incorrect username or password
Screen shot output	<p>localhost:8080 says</p> <p>Username or Password or User Type is incorrect</p> 
Actual result	Display incorrect username or password
Conclusion	Expected result and actual result are matched

Test Case 6

Testcase id	7
Scenario / objective	Login as an admin with correct username, password.
Test data	Login.php (Admin Username, password)
Expected result	Display admins add new fine page.
Screen shot output	 <p>The screenshot shows a web application interface for the Sri Lanka Traffic Police. At the top, there is a blue header bar with the text "SRI LANKA TRAFFIC POLICE" on the left and "Add Fine", "Search & update Fine", and "Register Officers" on the right. Below the header, the main content area has a light blue background. In the center, there is a white rectangular form titled "ADD NEW FINES". The form contains two input fields: "Fine Name" and "Fine Amount", both represented by simple text input boxes. Below these fields is a large blue button with the word "Add" in white. The overall design is clean and functional, typical of a government website.</p>
Actual result	Display admins add new fine page.
Conclusion	Expected result and actual result are matched

Test Case 7

Testcase id	8
Scenario / objective	Login as an OIC with correct username, password.
Test data	Login.php (OIC Username, Password)
Expected result	Display OIC about us page.
Screen shot output	 <p>The screenshot shows the 'ABOUT US' section of the Sri Lanka Traffic Police website. At the top, there is a navigation bar with links for 'Add Offenders', 'Search', 'About Us', 'Officers', 'Manage Licenses', and 'Report Generation'. Below the navigation bar, there is a large blue header with the text 'SRI LANKA TRAFFIC POLICE' and a sub-section titled 'Ceylon E-Traffic Fine Payment System'. The main content area features a collage of several photographs showing police officers in various uniforms (including green uniforms and brown uniforms) interacting with vehicles (motorcycles and cars) on a road. To the right of the images, there is a brief description of the Traffic Police's responsibilities and its leadership. A 'Read More' button is located at the bottom right of the section.</p>
Actual result	Display OIC about us page.
Conclusion	Expected result and actual result are matched

Test Case 8

Testcase id	9
Scenario / objective	Login as a T-officer with correct username, password.
Test data	Login.php (T-Officer Username, Password)
Expected result	Display T-officer about us page.
Screen shot output	
Actual result	Display T-officer about us page.
Conclusion	Expected result and actual result are matched

Test Case 9

Testcase id	10
Scenario/ objective	Click on header add fine
Test data	addFine.php
Expected result	Display admins add fine page
Screen shot output	 <p>The screenshot shows a web application interface for the Sri Lanka Traffic Police. At the top, there is a blue header bar with the text 'SRI LANKA TRAFFIC POLICE' on the left and three menu items: 'Add Fine', 'Search & Update Fine', and 'Register Officers' on the right. Below the header, the main content area has a light blue background. In the center, there is a white rectangular form titled 'ADD NEW FINES'. The form contains two input fields: 'Fine Name' and 'Fine Amount', both with placeholder text ('Fine Name:' and 'Fine Amount:'). Below these fields is a large blue button with the text 'SUBMIT' in white. The overall design is clean and modern.</p>
Actual result	Display admins add fine page
Conclusion	Expected result and actual result are matched

Test Case 10

Testcase id	11																												
Scenario / objective	Click on header search and update fine																												
Test data	searchFine.php																												
Expected result	Display admins search and update fine page																												
Screen shot output	 <table border="1"> <thead> <tr> <th>Fine ID</th> <th>Fine Name</th> <th>Amount</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Identification Plates</td> <td>1000</td> <td>Open</td> </tr> <tr> <td>2</td> <td>Not Carrying RL</td> <td>1000</td> <td>Open</td> </tr> <tr> <td>3</td> <td>Carrying RL, Prohibited</td> <td>1000</td> <td>Open</td> </tr> <tr> <td>4</td> <td>Driving Public Vehicles without DL</td> <td>1000</td> <td>Open</td> </tr> <tr> <td>5</td> <td>Not Carrying DL</td> <td>1000</td> <td>Open</td> </tr> <tr> <td>6</td> <td>Not Displaying Vehicle Number</td> <td>1000</td> <td>Open</td> </tr> </tbody> </table>	Fine ID	Fine Name	Amount	Status	1	Identification Plates	1000	Open	2	Not Carrying RL	1000	Open	3	Carrying RL, Prohibited	1000	Open	4	Driving Public Vehicles without DL	1000	Open	5	Not Carrying DL	1000	Open	6	Not Displaying Vehicle Number	1000	Open
Fine ID	Fine Name	Amount	Status																										
1	Identification Plates	1000	Open																										
2	Not Carrying RL	1000	Open																										
3	Carrying RL, Prohibited	1000	Open																										
4	Driving Public Vehicles without DL	1000	Open																										
5	Not Carrying DL	1000	Open																										
6	Not Displaying Vehicle Number	1000	Open																										
Actual result	Display admins search and update fine page																												
Conclusion	Expected result and actual result are matched																												

Test Case 11

Testcase id	12
Scenario / objective	Click on header register Officers
Test data	adminOfficersRegistration.php
Expected result	Display register Officers page
Screen shot output	
Actual result	Display register Officers page
Conclusion	Expected result and actual result are matched

Test Case 12

Testcase id	13
Scenario/ objective	Click on header hamburger menu
Test data	Javascript link
Expected result	Display hamburger menu
Screen shot output	 A screenshot of a web application for 'SRI LANKA TRAFFIC POLICE'. The main title is 'TRAFFIC POLICE OFFICER REGISTRATION'. On the left, there is a vertical blue sidebar containing a 'HAMBURGER MENU' with options like 'Add Fine', 'Search & update', 'Fine', 'Password', 'Time Off', 'Hide All', 'Email', and 'Register Officers'. The main form area contains fields for 'Officer's Police ID', 'First Name', 'Last Name', 'Username', 'Confirm Password', 'Telephone', 'Gender', 'Title', 'Post', and 'Traffic Offic'. The entire interface is in blue and white.
Actual result	Display hamburger menu
Conclusion	Expected result and actual result are matched

Test Case 13

Testcase id	14
Scenario / objective	Click on footer add fine
Test data	addFine.php
Expected result	Display admins add fine page
Screen shot output	 <p>The screenshot shows a blue-themed web application for Sri Lanka Traffic Police. At the top, there's a navigation bar with links for 'Add Fine', 'Search & update Fine', and 'Register Officers'. Below the header, a large blue rectangular area contains a white 'ADD NEW FINES' form. The form has two input fields: 'Fine Name' and 'Fine Amount', both with placeholder text 'Enter Name' and 'Enter Amount'. A blue 'Add' button is at the bottom of the form.</p>
Actual result	Display admins add fine page
Conclusion	Expected result and actual result are matched

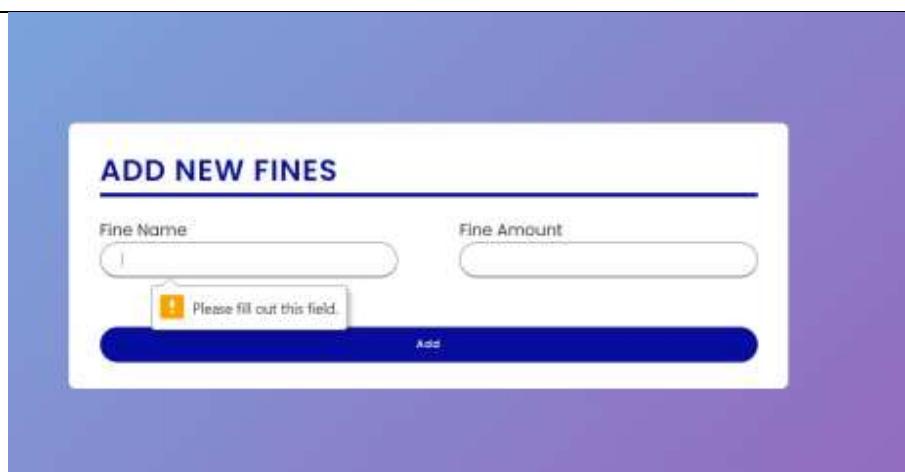
Test Case 14

Testcase id	15																												
Scenario/objective	Click on footer search and update fine																												
Test data	searchFine.php																												
Expected result	Display admins search and update fine page																												
Screen shot output	 <table border="1"> <thead> <tr> <th>Fine ID</th> <th>Fine Name</th> <th>Amount</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Identification Plate</td> <td>100</td> <td>Pending</td> </tr> <tr> <td>2</td> <td>Non Carrying ID</td> <td>100</td> <td>Pending</td> </tr> <tr> <td>3</td> <td>Oversteering No. Premium</td> <td>100</td> <td>Pending</td> </tr> <tr> <td>4</td> <td>Driving Public Vehicle without ID</td> <td>100</td> <td>Pending</td> </tr> <tr> <td>5</td> <td>Non Carrying ID</td> <td>100</td> <td>Pending</td> </tr> <tr> <td>6</td> <td>Not Wearing a Safety Belt or Gloves</td> <td>100</td> <td>Pending</td> </tr> </tbody> </table>	Fine ID	Fine Name	Amount	Status	1	Identification Plate	100	Pending	2	Non Carrying ID	100	Pending	3	Oversteering No. Premium	100	Pending	4	Driving Public Vehicle without ID	100	Pending	5	Non Carrying ID	100	Pending	6	Not Wearing a Safety Belt or Gloves	100	Pending
Fine ID	Fine Name	Amount	Status																										
1	Identification Plate	100	Pending																										
2	Non Carrying ID	100	Pending																										
3	Oversteering No. Premium	100	Pending																										
4	Driving Public Vehicle without ID	100	Pending																										
5	Non Carrying ID	100	Pending																										
6	Not Wearing a Safety Belt or Gloves	100	Pending																										
Actual result	Display admins search and update fine page																												
Conclusion	Expected result and actual result are matched																												

Test Case 15

Testcase id	16
Scenario/ objective	Click on footer register Officers
Test data	adminOfficersRegistration.php
Expected result	Display admins register Officers page
Screen shot output	
Actual result	Display admins register Officers page
Conclusion	Expected result and actual result are matched

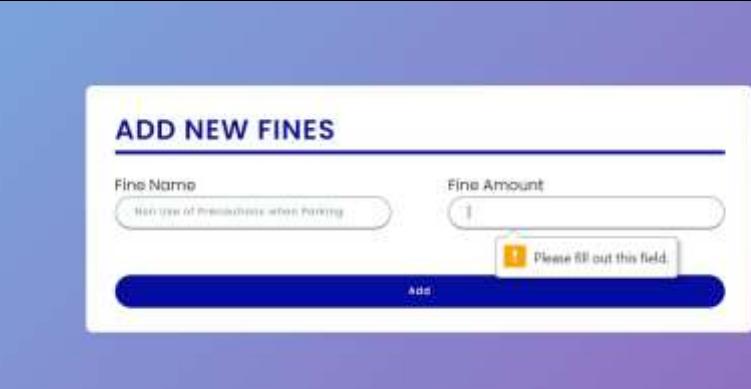
Test Case 16

Testcase id	17
Scenario/ objective	Click add with empty fields
Test data	addFine.php
Expected result	Display fields can't be empty.
Screen shot output	 A screenshot of a web application titled "ADD NEW FINES". It features two input fields: "Fine Name" and "Fine Amount", both of which are currently empty. A validation message "Please fill out this field." is displayed below the "Fine Name" field. A blue "Add" button is located at the bottom right of the form.
Actual result	Display fields can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 17

Testcase id	18
Scenario/ objective	Click add with empty fine name
Test data	addFine.php (Fine Name)
Expected result	Display fine name can't be empty
Screen shot output	 <p>The screenshot shows a 'ADD NEW FINES' form. It has two input fields: 'Fine Name' and 'Fine Amount'. Below the 'Fine Name' field is an error message: 'Please fill out this field.' A blue 'Add' button is at the bottom.</p>
Actual result	Display fine name can't be empty
Conclusion	Expected result and actual result are matched

Test Case 18

Testcase id	19
Scenario/ objective	Click add with empty fine amount
Test data	addFine.php (Fine Amount)
Expected result	Display fine amount can't be empty
Screen shot output	
Actual result	Display fine amount can't be empty
Conclusion	Expected result and actual result are matched

Test Case 19

Testcase id	20
Scenario/ objective	Click add with fine name and fine amount
Test data	addFine.php
Expected result	Display fine added successfully
Screen shot output	 <p>localhost:8080 says</p> <p>Fine Added Successfully</p> <p>OK</p>
Actual result	Display fine added successfully
Conclusion	Expected result and actual result are matched

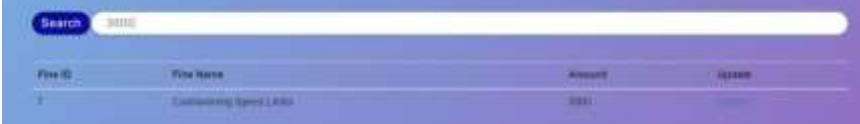
Test Case 20

Testcase id	21																																				
Scenario/ objective	Click search with empty fine details																																				
Test data	SearchFine.php (search_text)																																				
Expected result	Display all fines																																				
Screen shot output	 <table border="1"> <thead> <tr> <th>Fine ID</th> <th>Fine Name</th> <th>Amount</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Unauthorised Plates</td> <td>1000</td> <td>ISSUED</td> </tr> <tr> <td>2</td> <td>No Carrying TC</td> <td>1000</td> <td>ISSUED</td> </tr> <tr> <td>3</td> <td>Oversewing NL Plates</td> <td>1000</td> <td>ISSUED</td> </tr> <tr> <td>4</td> <td>Driving Public Vehicle without DL</td> <td>1000</td> <td>ISSUED</td> </tr> <tr> <td>5</td> <td>No Carrying GL</td> <td>1000</td> <td>ISSUED</td> </tr> <tr> <td>6</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td>7</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td>8</td> <td>...</td> <td>...</td> <td>...</td> </tr> </tbody> </table>	Fine ID	Fine Name	Amount	Status	1	Unauthorised Plates	1000	ISSUED	2	No Carrying TC	1000	ISSUED	3	Oversewing NL Plates	1000	ISSUED	4	Driving Public Vehicle without DL	1000	ISSUED	5	No Carrying GL	1000	ISSUED	6	7	8
Fine ID	Fine Name	Amount	Status																																		
1	Unauthorised Plates	1000	ISSUED																																		
2	No Carrying TC	1000	ISSUED																																		
3	Oversewing NL Plates	1000	ISSUED																																		
4	Driving Public Vehicle without DL	1000	ISSUED																																		
5	No Carrying GL	1000	ISSUED																																		
6																																		
7																																		
8																																		
Actual result	The entire table displayed																																				
Conclusion	Expected result and actual result are matched																																				

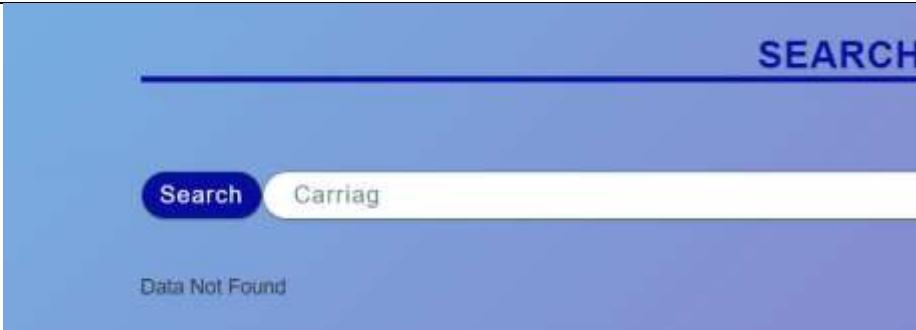
Test Case 21

Testcase id	22
Scenario/ objective	Click search with fine name
Test data	SearchFine.php (search_text)
Expected result	Display fine details
Screen shot output	 A screenshot of a web-based application interface. At the top, there is a search bar with the placeholder text "Search" and the input "Net Carrying D". Below the search bar is a table with four columns: "Fine ID", "Fine Name", "Amount", and "Units". There is one row in the table containing the data: "1", "Net Carrying D.", "100", and "INR".
Actual result	Display fine details
Conclusion	Expected result and actual result are matched

Test Case 22

Testcase id	23
Scenario/ objective	Click search with fine amount
Test data	SearchFine.php (search_text)
Expected result	Display fine details
Screen shot output	
Actual result	Display fine details
Conclusion	Expected result and actual result are matched

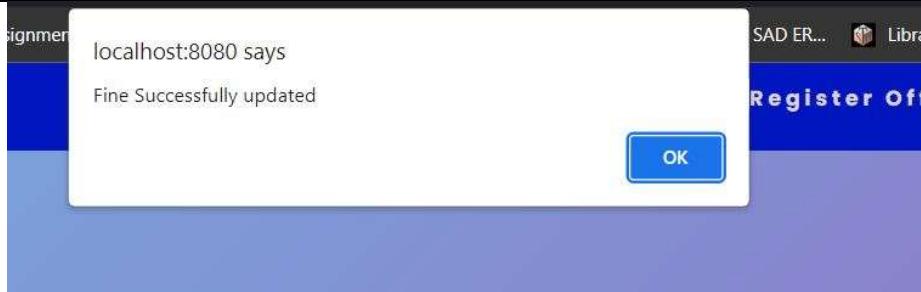
Test Case 23

Testcase id	24
Scenario/ objective	Click search with non-existing fine detail
Test data	SearchFine.php (search_text)
Expected result	Display no fine details to show
Screen shot output	
Actual result	Display no fine details to show
Conclusio n	Expected result and actual result are matched

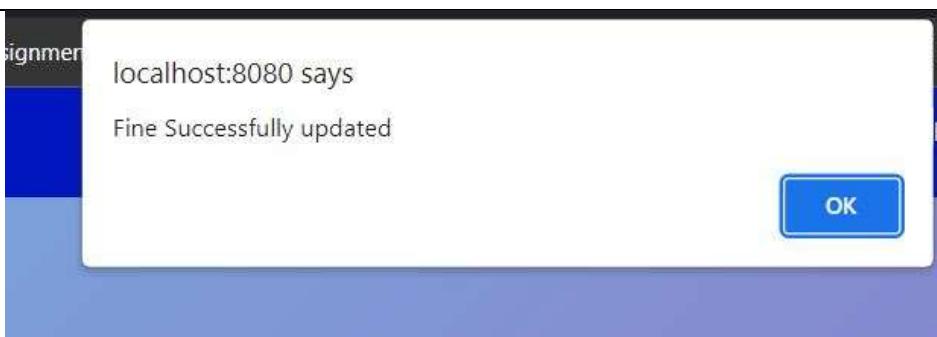
Test Case 24

Testcase id	25
Scenario/ objective	Click update in fine details
Test data	searchFine.php (Update Button)
Expected result	Display update fine page
Screen shot output	
Actual result	Display update fine page
Conclusion	Expected result and actual result are matched

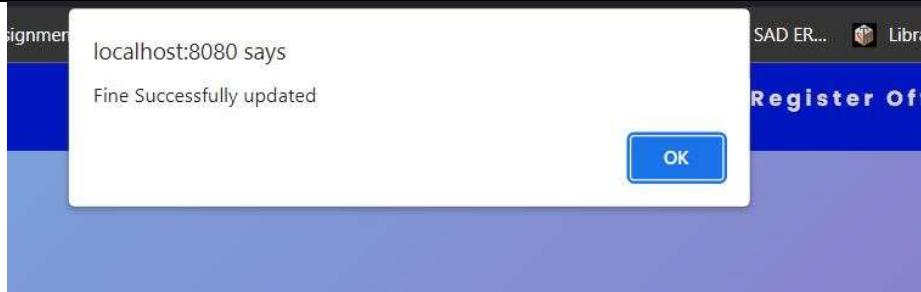
Test Case 25

Testcase id	26
Scenario/ objective	Click update with empty fields
Test data	updateFine.php (Fine Name, Fine Amount)
Expected result	Display fields can't be empty.
Screen shot output	 <p>The screenshot shows a mobile application interface. At the top, there's a navigation bar with icons for 'SAD ER...', 'Libra', and 'Register Off'. Below the navigation bar, a modal dialog box is displayed with the text 'localhost:8080 says' and 'Fine Successfully updated' in bold. There is a blue 'OK' button at the bottom right of the dialog. The background of the app shows a section titled 'UPDATE SRI LANKAN TRAFFIC FINE DETAILS' with three input fields: 'Fine Name' containing 'Not Carrying RL', 'Amount' (empty), and a red 'Update' button.</p>
Actual result	Display fields can't be empty.
Conclusion	Expected result and actual result are not matched

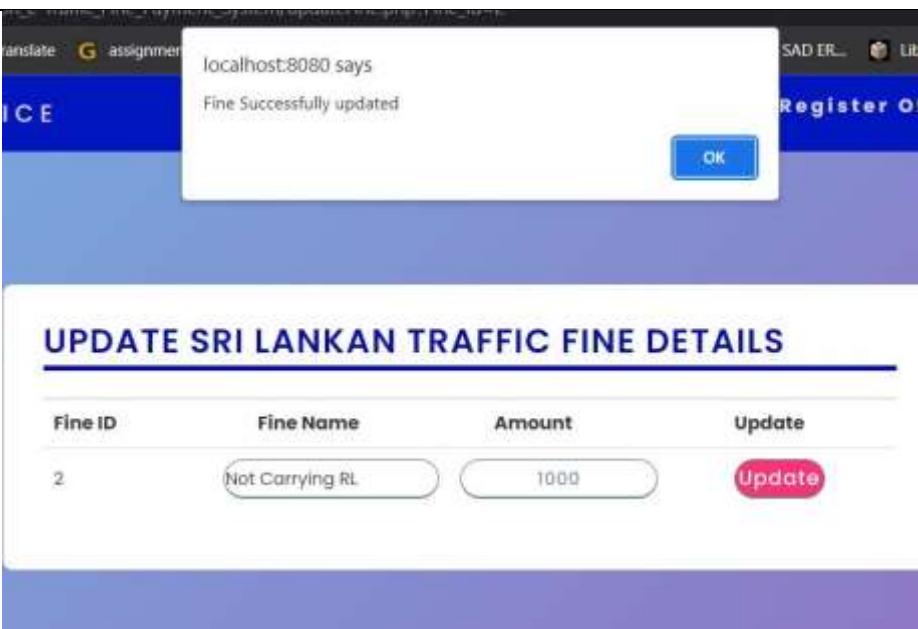
Test Case 26

Testcase id	27
Scenario / objective	Click update with empty fine name
Test data	updateFine.php (Fine Name)
Expected result	Display fine name can't be empty
Screen shot output	 <p>The screenshot shows a mobile application interface. A white toast notification box is centered on the screen, displaying the text "localhost:8080 says" on top and "Fine Successfully updated" below it. There is an "OK" button at the bottom right of the toast. The background of the app shows a header bar with the text "UPDATE SRI LANKAN TRAFFIC FINE DETAILS" and a table with columns "Fine Name", "Amount", and "Update". The "Fine Name" column contains the text "Not Carrying RL". The "Update" button is highlighted with a red circle.</p>
Actual result	Display fine name can't be empty
Conclusion	Expected result and actual result are matched

Test Case 27

Testcase id	28						
Scenario/ objective	Click update with empty fine amount						
Test data	updateFine.php (Fine Amount)						
Expected result	Display fine amount can't be empty						
Screen shot output	 <p>localhost:8080 says Fine Successfully updated</p> <p>OK</p> <p>UPDATE SRI LANKAN TRAFFIC FINE DETAILS</p> <table border="1"> <thead> <tr> <th>Fine Name</th> <th>Amount</th> <th>Update</th> </tr> </thead> <tbody> <tr> <td>Not Carrying RL</td> <td></td> <td>Update</td> </tr> </tbody> </table>	Fine Name	Amount	Update	Not Carrying RL		Update
Fine Name	Amount	Update					
Not Carrying RL		Update					
Actual result	Display fine amount can't be empty						
Conclusion	Expected result and actual result are matched						

Test Case 28

Testcase id	29								
Scenario/ objective	Click update with fine name and fine amount								
Test data	updateFine.php (Fine Name, Fine Amount)								
Expected result	Display fine updated successfully								
Screen shot output	 <p>The screenshot shows a modal dialog box with the text "localhost:8080 says" and "Fine Successfully updated" followed by an "OK" button. Below the modal is a table with the following data:</p> <table border="1"> <thead> <tr> <th>Fine ID</th> <th>Fine Name</th> <th>Amount</th> <th>Update</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Not Carrying RL</td> <td>1000</td> <td>Update</td> </tr> </tbody> </table>	Fine ID	Fine Name	Amount	Update	2	Not Carrying RL	1000	Update
Fine ID	Fine Name	Amount	Update						
2	Not Carrying RL	1000	Update						
Actual result	Display fine updated successfully								
Conclusion	Expected result and actual result are matched								

Test Case 29

Testcase id	30
Scenario/ objective	Click register with empty fields
Test data	officerRegistration.php
Expected result	Display fields can't be empty
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form contains the following fields:</p> <ul style="list-style-type: none"> Officer's Police ID: An input field containing a placeholder "00000000". First Nr: An input field with a red asterisk (*) and the error message "Please fill out this field." Police Station: An empty input field. Last Name: An empty input field. Username: An empty input field. Password: An empty input field. Confirm Password: An empty input field. Time Of Work: A dropdown menu showing "00:00:00 - 23:59:59". Telephone: An empty input field. Email: An empty input field. Gender: A dropdown menu showing "Male". Post: A dropdown menu showing "Traffic Officer". Traffic Off: A dropdown menu showing "Traffic Officer". <p>A large blue vertical bar is on the left, and a purple vertical bar is on the right. A blue horizontal bar spans the bottom of the form area.</p>
Actual result	Display fields can't be empty
Conclusion	Expected result and actual result are matched

Test Case 30

Testcase id	31
Scenario/ objective	Click register with empty police ID
Test data	officerRegistration.php (Police ID)
Expected result	Display police ID can't be empty.
Screen shot output	<p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The "Officer's Police ID" field is empty and has a red border, indicating it is a required field. An error message "Please fill out this field." is displayed next to it. Other fields like "First Name", "Last Name", "Username", "Password", "Confirm Password", "Telephone", "Time Of Work", "Gender", "Post", and "Email" are visible but not filled. A "Register" button is at the bottom.</p>
Actual result	Display police ID can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 31

Testcase id	32
Scenario/objective	Click register with empty police station
Test data	officersRegistration.php (Officer Station)
Expected result	Display police station can't be empty.
Screen shot output	
Actual result	Display police station can't be empty.
Conclusion	Expected result and actual result are matched

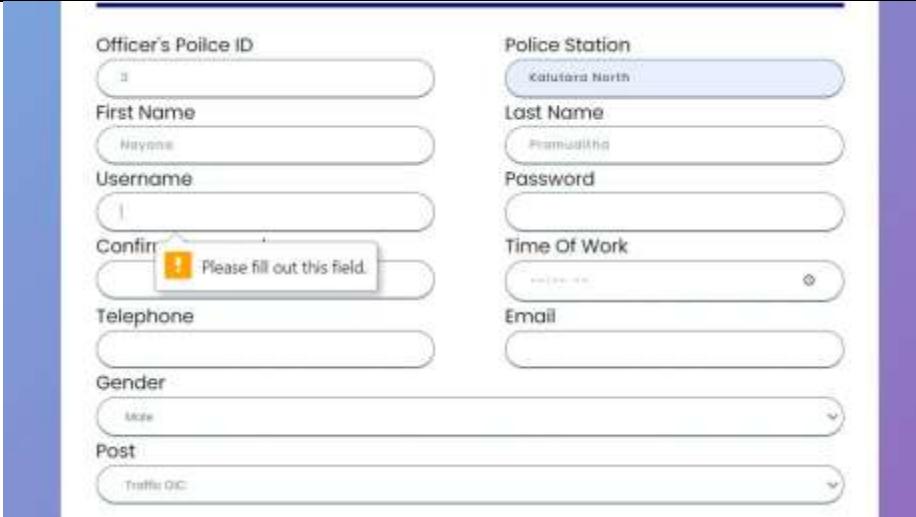
Test Case 32

Testcase id	33
Scenario/ objective	Click register with empty first name
Test data	officersRegistration.php (First Name)
Expected result	Display first name can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form includes fields for Officer's Police ID, First Name, Last Name, Password, Time Of Work, Email, Telephone, Gender, Post, and a "Register" button. The "First Name" field is highlighted with a red border and contains a red validation message: "Please fill out this field." Other fields like Police Station, Username, Confirm Password, and others are present but not filled.</p>
Actual result	Display first name can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 33

Testcase id	34
Scenario/ objective	Click register with empty last name
Test data	officersRegistration.php (Last Name)
Expected result	Display last name can't be empty.
Screen shot output	 A screenshot of a web-based registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form contains various input fields: Officer's Police ID, First Name (containing 'Mayank'), Username, Confirm Password, Telephone, Police Station (containing 'Coltura North'), Last Name (empty), Password (highlighted with a red border and the error message "Please fill out this field."), Time Of Work, Email, Gender (containing 'Male'), and Post (containing 'Traffic CIC').
Actual result	Display last name can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 34

Testcase id	35
Scenario/ objective	Click register with empty username
Test data	officersRegistration (Username)
Expected result	Display username can't be empty.
Screen shot output	 A screenshot of a web-based registration form for officers. The form includes fields for Officer's Police ID, First Name, Last Name, Password, Time Of Work, Email, Telephone, Gender (Male or Female), and Post (Traffic OIC). The 'Username' field is highlighted in red, indicating it is required. A validation message 'Please fill out this field.' is displayed above the field. The background of the page has vertical blue and purple bars on the left and right sides.
Actual result	Display username can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 35

Testcase id	36
Scenario/ objective	Click register with empty password
Test data	officersRegistration (Password)
Expected result	Display password can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form fields include: Officer's Police ID (empty), Police Station (Kolkata North), First Name (Surjana), Last Name (Pramudita), Username (empty), Password (empty), Confirm Password (empty), Telephone (empty), Email (empty), Gender (Male), and Post (Traffic DIC). A validation error message "Please fill out this field." is displayed next to the empty Password field.</p>
Actual result	Display password can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 36

Testcase id	37
Scenario / objective	Click register with empty confirm password
Test data	officersRegistration.php (confirm Password)
Expected result	Display confirm password can't be empty.
Screen shot output	 <p>The screenshot shows the 'TRAFFIC POLICE OFFICERS REGISTRATION' form. The 'Confirm Password' field contains a red error message: 'Password Not Match' and 'Please fill out this field.' The 'Telephone' field also has a similar error message: 'Please fill out this field.'</p>
Actual result	Display confirm password can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 37

Testcase id	38
Scenario / objective	Click register with not matching password and confirm password
Test data	officersRegistration.php (confirm Password)
Expected result	Display password and confirm password should match.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form fields include: Officer's Police ID (empty), Police Station (Kolutura North), First Name (Mayana), Last Name (Pramuditha), Username (mayana), Password (*****), Confirm Password (*****), Time Of Work (dropdown menu), Telephone (empty), Email (empty), Gender (Male), Post (Traffic OIC). A red error message "Password Not Match" is displayed above the password field.</p>
Actual result	Display password and confirm password should match.
Conclusion	Expected result and actual result are matched

Test Case 38

Testcase id	39
Scenario/ objective	Click register with empty time of work
Test data	officersRegistration.php (Time of Work)
Expected result	Display time of work can't be empty.
Screen shot output	<p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form includes fields for personal information like First Name, Username, Password, and Email, as well as professional details like Police Station and Time Of Work. The "Time Of Work" field is empty and has a red border, indicating it is a required field. An error message "Please fill out this field." is displayed next to the field.</p>
Actual result	Display time of work can't be empty.
Conclusion	Expected result and actual result are matched

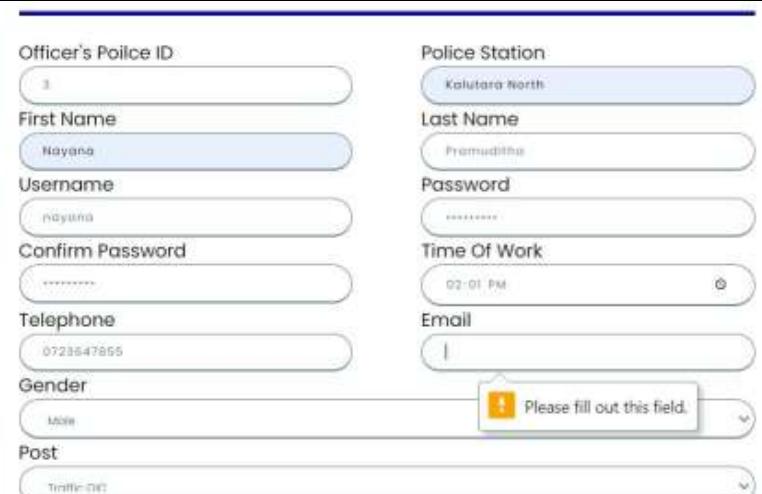
Test Case 39

Testcase id	40
Scenario/ objective	Click register with empty telephone
Test data	officersRegistration.php (Telephone)
Expected result	Display telephone can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form fields include: Officer's Police ID (empty), Police Station (Kolutara North), First Name (Nayana), Last Name (#ramuditha), Username (nayana), Password (*****), Confirm Password (*****), Time Of Work (01:56 PM), Telephone (empty), Email (empty), Gender (Male dropdown open, showing an error message: "Please fill out this field."), Post (Traffic Officer dropdown). A large blue "Register" button is at the bottom.</p>
Actual result	Display telephone can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 40

Testcase id	41
Scenario/ objective	Click register with incorrect format of telephone
Test data	officersRegistration.php (Telephone)
Expected result	Display incorrect format of telephone.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form fields include:</p> <ul style="list-style-type: none"> Officer's Police ID: 3 Police Station: Kalutara North First Name: Noyano Last Name: Pramiditha Username: noyano Password: (redacted) Confirm Password: (redacted) Time Of Work: 02:01 PM Telephone: 07236478 (incorrect format) Email: (redacted) A note below the telephone field says: "lengthen this text to 10 characters or more (you are currently using 8 characters)." Post: Traffic Officer <p>A large blue "Register" button is at the bottom.</p>
Actual result	Display incorrect format of telephone.
Conclusion	Expected result and actual result are matched

Test Case 41

Testcase id	42
Scenario/ objective	Click register with empty email
Test data	offendersRegistration.php (Email)
Expected result	Display email can't be empty.
Screen shot output	 <p>The screenshot shows a registration form with various input fields. The 'Email' field is highlighted with a red border and contains a yellow warning icon with the text 'Please fill out this field.' Other visible fields include 'Officer's Police ID', 'First Name', 'Username', 'Confirm Password', 'Telephone', 'Gender', 'Post', 'Police Station', 'Last Name', 'Password', 'Time Of Work', and 'Email'. The 'Email' field is the only one that has not been filled.</p>
Actual result	Display email can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 42

Testcase id	43
Scenario/ objective	Click register with incorrect format of email
Test data	offendersRegistration.php (Email)
Expected result	Display incorrect format of telephone.
Screen shot output	 A screenshot of a web application interface. At the top, there is a light blue header bar. Below it, a white input field contains the text '@gmail.com'. A red error message box is overlaid on the page, containing a yellow exclamation mark icon and the text 'Please enter a part followed by '@', '@gmail.com' is incomplete.'
Actual result	Display incorrect format of telephone.
Conclusion	Expected result and actual result are matched

Test Case 43

Testcase id	44
Scenario/objective	Click register with all fields entered
Test data	offendersRegistration.php
Expected result	Display officer added successfully
Screen shot output	 <p>A screenshot of a success dialog box. The text inside the box reads "localhost:8080 says" followed by "Officer Added Successfully". There is a blue "OK" button at the bottom right of the dialog.</p>
Actual result	Display officer added successfully
Conclusion	Expected result and actual result are matched

Test Case 44

Testcase id	45
Scenario/ objective	Click on header add offender
Test data	offenderRegistration.php
Expected result	Display add offender page
Screen shot output	
Actual result	Display add offender page
Conclusion	Expected result and actual result are matched

Test Case 45

Testcase id	46																																
Scenario / objective	Click on header search offender																																
Test data	officersSearchOffenders.php																																
Expected result	Display search offender page																																
Screen shot output	 <p>The screenshot shows a search results page titled "SEARCH OFFENDERS DETAILS". The table has columns for Offender ID, Offender NIC, First Name, Last Name, Street Number, Street Name, City, and Email. Three rows of data are listed:</p> <table border="1"> <thead> <tr> <th>Offender ID</th> <th>Offender NIC</th> <th>First Name</th> <th>Last Name</th> <th>Street Number</th> <th>Street Name</th> <th>City</th> <th>Email</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>200011456395</td> <td>Hussanga</td> <td>Fernando</td> <td>12</td> <td>Church road</td> <td>Negombo</td> <td>hussangafernando@gmail.com</td> </tr> <tr> <td>8</td> <td>198812366684</td> <td>Upul</td> <td>Nandasena</td> <td>30</td> <td>Malegoda Road</td> <td>Katunayake</td> <td>upulnandasena555@gmail.com</td> </tr> <tr> <td>10</td> <td>200410500088</td> <td>Rajew</td> <td>Uyindu</td> <td>218</td> <td>Suboothi Marawatha Kuria</td> <td>Katunayake</td> <td>rajewmasesoyamusu@ouazzaikm@gmail.com</td> </tr> </tbody> </table>	Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email	4	200011456395	Hussanga	Fernando	12	Church road	Negombo	hussangafernando@gmail.com	8	198812366684	Upul	Nandasena	30	Malegoda Road	Katunayake	upulnandasena555@gmail.com	10	200410500088	Rajew	Uyindu	218	Suboothi Marawatha Kuria	Katunayake	rajewmasesoyamusu@ouazzaikm@gmail.com
Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email																										
4	200011456395	Hussanga	Fernando	12	Church road	Negombo	hussangafernando@gmail.com																										
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Actual result	Display search offender page																																
Conclusion	Expected result and actual result are matched																																

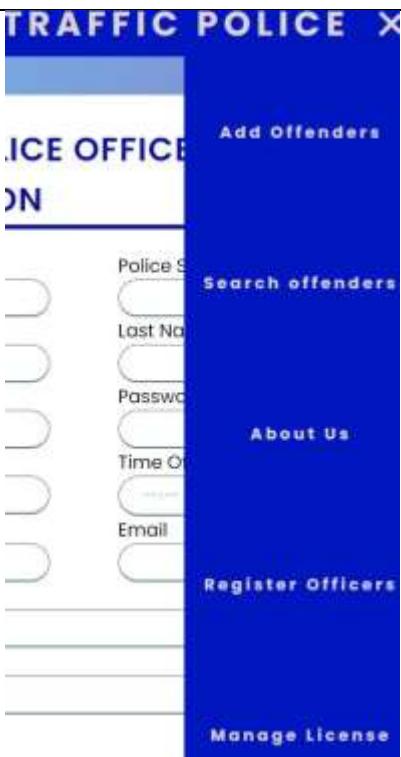
Test Case 46

Testcase id	47
Scenario/objective	Click on header about us
Test data	aboutUsOIC.php
Expected result	Display search OIC about us
Screen shot output	 <p>The screenshot shows the 'ABOUT US' page of the Sri Lanka Traffic Police website. At the top, there is a navigation bar with links for Offenders, Offenders, Us, Officers, Licenses, and Generations. Below the navigation bar, there is a large image collage featuring various scenes of traffic police activity, such as officers on motorcycles, at checkpoints, and in uniform. To the right of the collage, the title 'ABOUT US' is displayed in large blue capital letters. Underneath the title, the heading 'Ceylon E-Traffic Fine Payment System' is shown in bold. A detailed paragraph describes the Traffic Police as a specialized unit responsible for traffic safety compliance on roads and highways, headed by the Director of Traffic, a senior gazetted officer of the rank of Deputy Inspector General of Police. A 'Read More' button is located at the bottom right of the text area.</p>
Actual result	Display search OIC about us
Conclusion	Expected result and actual result are matched

Test Case 47

Testcase id	48
Scenario/ objective	Click on header register Officers
Test data	officersRegistration.php
Expected result	Display OIC register Officers page
Screen shot output	<p>The screenshot shows the 'TRAFFIC POLICE OFFICERS REGISTRATION' page. At the top, there is a navigation bar with links for 'Offenders offenders', 'Us', 'Officers', and 'License'. The main form has the following fields:</p> <ul style="list-style-type: none"> Officer's Police ID First Name Last Name Username Password Confirm Password Telephone Time Of Work Email Gender Post <p>Below the form is a large blue 'Register' button.</p>
Actual result	Display OIC register Officers page
Conclusion	Expected result and actual result are matched

Test Case 48

Testcase id	49
Scenario/ objective	Click on header hamburger menu
Test data	Javascript link
Expected result	Display hamburger menu
Screen shot output	 A screenshot of a web application titled "TRAFFIC POLICE". The page has a dark blue header with the title. Below it is a sidebar with a light blue background containing several input fields and labels: "Police S", "Last Na", "Passwo", "Time O", and "Email". To the right of the sidebar is a main content area with a dark blue background. It features several menu items: "Add Offenders", "Search offenders", "About Us", "Register Officers", and "Manage License".
Actual result	Display hamburger menu
Conclusion	Expected result and actual result are matched

Test Case 49

Testcase id	50
Scenario/ objective	Click on footer add offender
Test data	offendersRegistration
Expected result	Display admins add offender page
Screen shot output	
Actual result	Display admins add offender page
Conclusion	Expected result and actual result are matched

Test Case 50

Testcase id	51																																
Scenario / objective	Click on footer search offender																																
Test data	officersSearchOffenders.php																																
Expected result	Display search offender page																																
Screen shot output	 <table border="1"> <thead> <tr> <th>Offender ID</th> <th>Offender NIC</th> <th>First Name</th> <th>Last Name</th> <th>Street Number</th> <th>Street Name</th> <th>City</th> <th>Email</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>200011456395</td> <td>Hussangs</td> <td>Fernando</td> <td>12</td> <td>Church road</td> <td>Negombo</td> <td>hussangfernando@gmail.com</td> </tr> <tr> <td>8</td> <td>19801234565V</td> <td>Upul</td> <td>Handara</td> <td>30</td> <td>Malegoda Road</td> <td>Katubera</td> <td>upulhandara555@gmail.com</td> </tr> <tr> <td>10</td> <td>200410500889</td> <td>Rajeev</td> <td>Uyindu</td> <td>318</td> <td>Suboofu Mawatha Kotte</td> <td>Katubera</td> <td>rajeevumeyyamukoduwakotte@gmail.com</td> </tr> </tbody> </table>	Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email	4	200011456395	Hussangs	Fernando	12	Church road	Negombo	hussangfernando@gmail.com	8	19801234565V	Upul	Handara	30	Malegoda Road	Katubera	upulhandara555@gmail.com	10	200410500889	Rajeev	Uyindu	318	Suboofu Mawatha Kotte	Katubera	rajeevumeyyamukoduwakotte@gmail.com
Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email																										
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Actual result	Display search offender page																																
Conclusion	Expected result and actual result are matched																																

Test Case 51

Testcase id	52
Scenario/ objective	Click on footer about us
Test data	aboutUsOIC.php
Expected result	Display OIC about us page
Screen shot output	 <p>The screenshot shows the 'ABOUT US' section of the Sri Lanka Traffic Police website. At the top, there's a navigation bar with links for 'Home', 'Offenders', 'Officers', 'Manage', 'Reports', 'Us', and 'Generics'. Below the navigation, there's a large collage of four images: two officers on motorcycles, an officer interacting with a person on foot, and two officers standing near a vehicle. To the right of the collage, the title 'ABOUT US' is displayed in a large blue font. Underneath, the text 'Ceylon E-Traffic Fine Payment System' is written in bold. A detailed paragraph describes the Traffic Police as a specialized unit responsible for traffic safety compliance on roads and highways, headed by the Director of Traffic, a senior gazetted officer of the rank of Deputy Inspector General of Police. A 'Read More' button is located at the bottom right of this section.</p>
Actual result	Display OIC about us page
Conclusion	Expected result and actual result are matched

Test Case 52

Testcase id	53
Scenario/ objective	Click on footer register Officers
Test data	officerRegistration.php
Expected result	Display OIC register Officers page
Screen shot output	<p>The screenshot shows the 'TRAFFIC POLICE OFFICERS REGISTRATION' form. The form fields include:</p> <ul style="list-style-type: none"> Officer's Police ID First Name Last Name Username Password Confirm Password Telephone Email Time Of Work Gender Post <p>A large blue 'Register' button is at the bottom.</p>
Actual result	Display OIC register Officers page
Conclusion	Expected result and actual result are matched

Test Case 53

Testcase id	54
Scenario/ objective	Click read more button
Test data	Police.lk
Expected result	Redirect police.lk
Screen shot output	 <p>The screenshot shows the homepage of the Sri Lanka Police website. At the top, there is a navigation bar with links for Home, Vision & Mission, Police History, and Library. Below the navigation bar is a banner featuring a band of musicians performing on stage. The banner includes the text "SRI LANKA POLICE" and "POLICE BAND". On the left side of the page, there is a sidebar with a list of links: 1-1-9 Emergency, CCTV Division, Child & Women Bureau, Communication Division, Community Policing, Crime Division, Examinations, and Human Rights. At the bottom right of the page, there is a banner with the text "COVID-19".</p>
Actual result	Redirect police.lk
Conclusion	Expected result and actual result are matched

Test Case 54

Testcase id	55
Scenario/ objective	Click register with empty fields
Test data	officersRegistration.php
Expected result	Display fields can't be empty
Screen shot output	 A screenshot of a web-based registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form contains several input fields: Officer's Police ID, First Name, Last Name, Username, Password, Confirm Password, Time Of Work, Telephone, Email, Gender, Post, and Traffic Off. The "First Name" field is highlighted with a red border and contains the error message "Please fill out this field." The "Register" button at the bottom is blue.
Actual result	Display fields can't be empty
Conclusion	Expected result and actual result are matched

Test Case 55

Testcase id	56
Scenario/ objective	Click register with empty police ID
Test data	officersRegistration.php (Police ID)
Expected result	Display police ID can't be empty.
Screen shot output	
Actual result	Display police ID can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 56

Testcase id	57
Scenario / objective	Click register with empty police station
Test data	officersRegistration.php (Police Station)
Expected result	Display police station can't be empty.
Screen shot output	<p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form includes fields for Officer's Police ID, First Name, Username, Confirm Password, Telephone, Gender, Post, and Email. The "Police Station" field is empty and has a red border, indicating it is a required field. An error message "Please fill out this field." is displayed next to the field. The "Post" dropdown menu is open, showing "Traffic CIC" as the selected option. A large blue "Register" button is at the bottom of the form.</p>
Actual result	Display police station can't be empty.
Conclusion	Expected result and actual result are matched

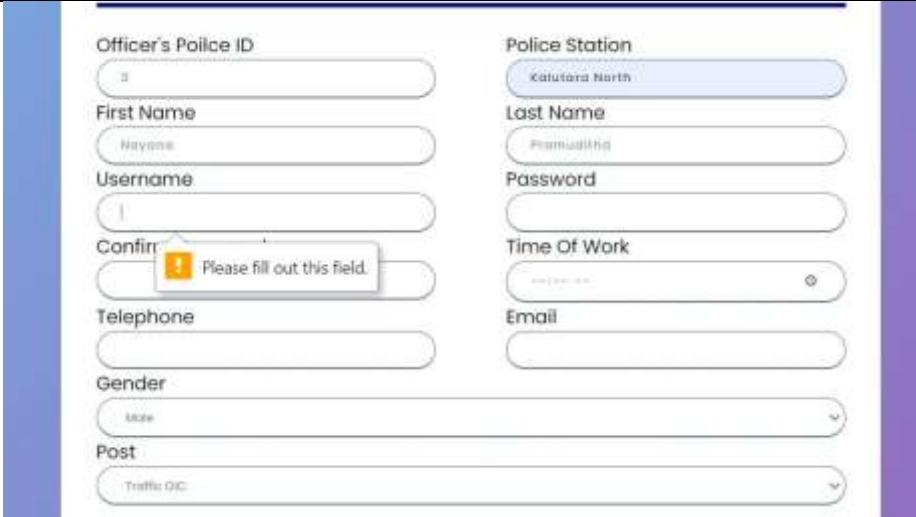
Test Case 57

Testcase id	58
Scenario/ objective	Click register with empty first name
Test data	officersRegistration.php (First Name)
Expected result	Display first name can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form includes fields for Officer's Police ID, First Name, Username, Confirm Password, Telephone, Gender, Post, Police Station, Last Name, Password, Time Of Work, and Email. The "First Name" field is highlighted with a red border and contains a red error message: "Please fill out this field." The "Username" field also has a red border and displays the same error message. The "Post" dropdown menu is set to "Traffic OffC". A large blue "Register" button is at the bottom.</p>
Actual result	Display first name can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 58

Testcase id	59
Scenario/ objective	Click register with empty last name
Test data	officersRegistration.php (Last Name)
Expected result	Display last name can't be empty.
Screen shot output	 A screenshot of a web-based registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form contains several input fields: "Officer's Police ID" (containing "2"), "First Name" (containing "Mayank"), "Username", "Confirm Password", "Telephone", "Gender" (set to "Male"), and "Post" (set to "Traffic Cops"). On the right side of the form, there are two more columns: "Police Station" (containing "Kolutura North") and "Last Name" (containing "I"). The "Last Name" field has a red border and a yellow error icon. A tooltip message "Please fill out this field." is displayed next to the error icon. Below these fields are "Password" (disabled, showing "*****") and "Time Of Work" (set to "0"). An "Email" field is also present. The entire registration interface is set against a blue background.
Actual result	Display last name can't be empty.
Conclusion	Expected result and actual result are matched

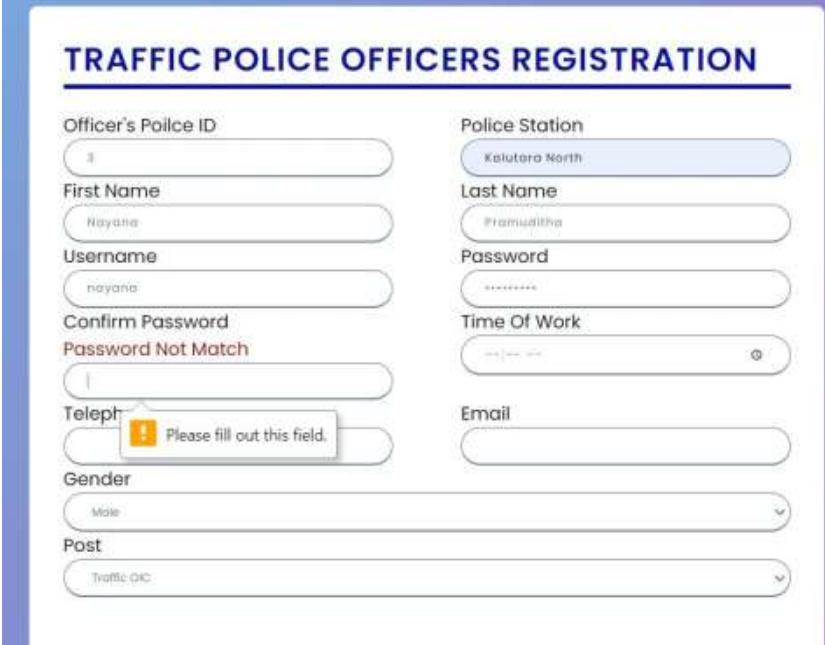
Test Case 59

Testcase id	60
Scenario/ objective	Click register with empty username
Test data	officersRegistration.php (Username)
Expected result	Display username can't be empty.
Screen shot output	 A screenshot of a web form titled "Officers Registration". The form fields include: Officer's Police ID (input field), First Name (input field, value: Rayana), Last Name (input field, value: Pramuditha), Police Station (input field, value: Colombo North), Username (input field, empty), Password (input field), Confirm Password (input field, empty, with a validation message: "Please fill out this field."), Time Of Work (dropdown menu, value: 08:00 - 12:00), Telephone (input field), Email (input field), Gender (dropdown menu, value: Male), Post (dropdown menu, value: Traffic OIC). A vertical blue bar is on the left and a vertical purple bar is on the right.
Actual result	Display username can't be empty.
Conclusion	Expected result and actual result are matched

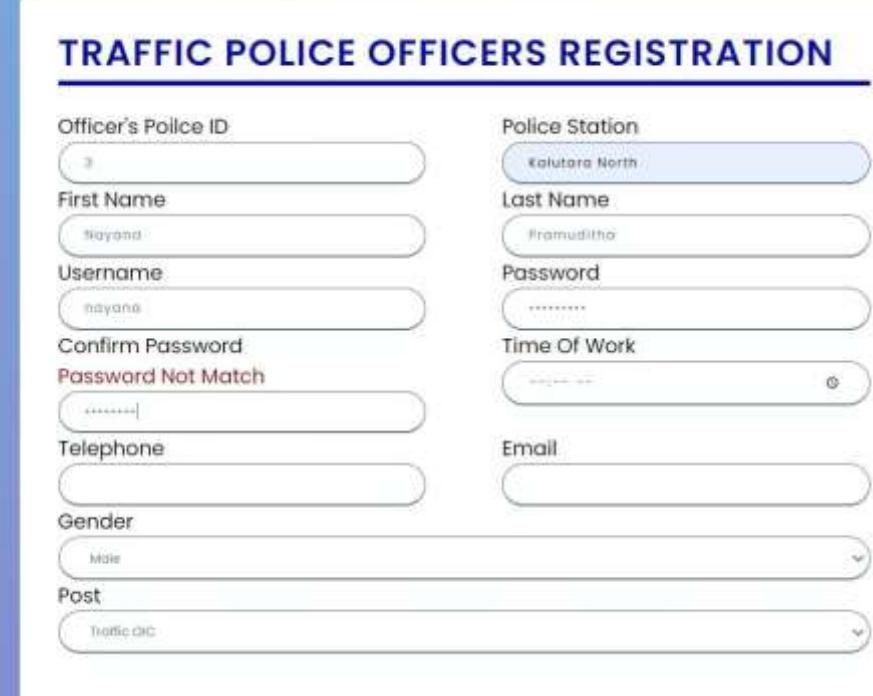
Test Case 60

Testcase id	61
Scenario/ objective	Click register with empty password
Test data	officersRegistration.php (Password)
Expected result	Display password can't be empty.
Screen shot output	 A screenshot of a web-based registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form contains several input fields: Officer's Police ID, First Name, Username, Confirm Password, Telephone, Gender, Post, Police Station, Last Name, Password, Time, and Email. The "Password" field is empty, and a validation error message "Please fill out this field." is displayed next to it. The "Police Station" field has the value "Kolkata North" entered. The "Last Name" field has the value "Pratimita" entered. The "Email" field is empty.
Actual result	Display password can't be empty.
Conclusio n	Expected result and actual result are matched

Test Case 61

Testcase id	62
Scenario/ objective	Click register with empty confirm password
Test data	officersRegistration.php (Confirm Password)
Expected result	Display confirm password can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form includes fields for Officer's Police ID, First Name, Username, Confirm Password, Police Station, Last Name, Password, Time Of Work, Telephone, Email, Gender, and Post. The "Confirm Password" field contains a placeholder "Password Not Match". Below this field, a red validation message box displays the error: "Please fill out this field." The "Telephone" field also has a red validation message box with the same error message.</p>
Actual result	Display confirm password can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 62

Testcase id	63
Scenario / objective	Click register with not matching password and confirm password
Test data	officersRegistration.php (Password, Confirm Password)
Expected result	Display password and confirm password should match.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form fields include: Officer's Police ID (empty), Police Station (Kolutura North), First Name (Mayana), Last Name (Pramuditha), Username (mayana), Password (redacted), Confirm Password (redacted), Time Of Work (dropdown menu), Telephone (empty), Email (empty), Gender (Male), Post (Traffic OIC). A red error message "Password Not Match" is displayed above the password field.</p>
Actual result	Display password and confirm password should match.
Conclusion	Expected result and actual result are matched

Test Case 63

Testcase id	64
Scenario / objective	Click register with empty time of work
Test data	officersRegistration.php (Time of Work)
Expected result	Display time of work can't be empty.
Screen shot output	<p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form consists of two columns of input fields. The left column includes fields for Officer's Police ID, First Name, Username, Confirm Password, Telephone, and Gender. The right column includes fields for Police Station, Last Name, Password, Time Of Work, and Email. The "Time Of Work" field is empty and highlighted with a red box, accompanied by an error message: "Please fill out this field".</p>
Actual result	Display time of work can't be empty.
Conclusion	Expected result and actual result are matched

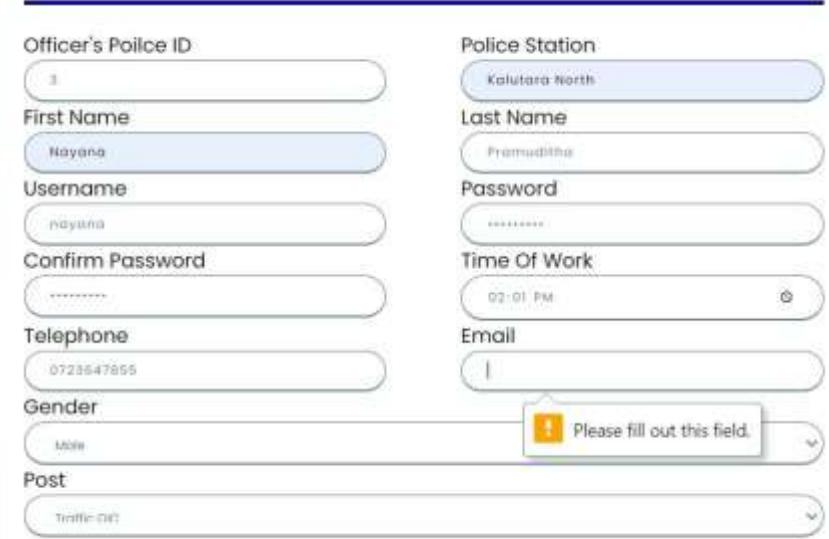
Test Case 64

Testcase id	65
Scenario/ objective	Click register with empty telephone
Test data	officersRegistration.php (Telephone)
Expected result	Display telephone can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "TRAFFIC POLICE OFFICERS REGISTRATION". The form fields include: Officer's Police ID (empty), Police Station (Kalutara North), First Name (Nayana), Last Name (Hamuditha), Username (nayana), Password (*****), Confirm Password (*****), Time Of Work (01:56 PM), Telephone (empty), Email (empty), Gender (Male - highlighted in orange with an error message: "Please fill out this field."), Post (Traffic CIC), and a Register button at the bottom.</p>
Actual result	Display telephone can't be empty.
Conclusion	Expected result and actual result are matched

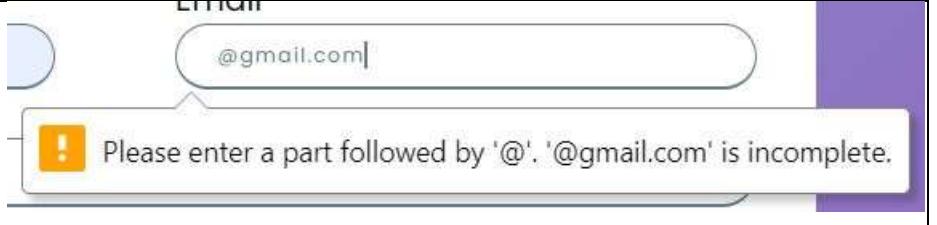
Test Case 65

Testcase id	66
Scenario/ objective	Click register with incorrect format of telephone
Test data	officersRegistration.php (Telephone)
Expected result	Display incorrect format of telephone.
Screen shot output	 <p>The screenshot shows the 'TRAFFIC POLICE OFFICERS REGISTRATION' page. The form fields include: Officer's Police ID (3), Police Station (Kakutara North), First Name (Nayana), Last Name (Pramuditha), Username (nayana), Password (*****), Confirm Password (*****), Time Of Work (02:01 PM), Telephone (07236478), Email (empty), and Post (Traffic Off). A red error message at the bottom states: 'lengthen this text to 10 characters or more (you are currently using 8 characters)'. A large blue 'Register' button is at the bottom.</p>
Actual result	Display incorrect format of telephone.
Conclusion	Expected result and actual result are matched

Test Case 66

Testcase id	67
Scenario/objective	Click register with empty email
Test data	officersRegistration.php (Email)
Expected result	Display email can't be empty.
Screen shot output	 <p>The screenshot shows a registration form with various fields filled with placeholder text (e.g., 'Nayana' for First Name, '0723547855' for Telephone). The 'Email' field is empty. A validation error message 'Please fill out this field.' is displayed above the 'Email' field, indicating that the email field is required.</p>
Actual result	Display email can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 67

Testcase id	68
Scenario/ objective	Click register with incorrect format of email
Test data	officersRegistration.php (Email)
Expected result	Display incorrect format of email.
Screen shot output	 A screenshot of a web application interface. At the top, there is a light blue header bar. Below it, a white input field contains the text '@gmail.com'. A red error message box is overlaid on the page, containing a yellow exclamation mark icon and the text 'Please enter a part followed by '@', '@gmail.com' is incomplete.'
Actual result	Display incorrect format of email.
Conclusion	Expected result and actual result are matched

Test Case 68

Testcase id	69
Scenario/objective	Click register with all fields entered
Test data	officersRegistration.php
Expected result	Display officer added successfully.
Screen shot output	 <p>localhost:8080 says Officer Added Successfully</p> <p>OK</p>
Actual result	Display officer added successfully.
Conclusion	Expected result and actual result are matched

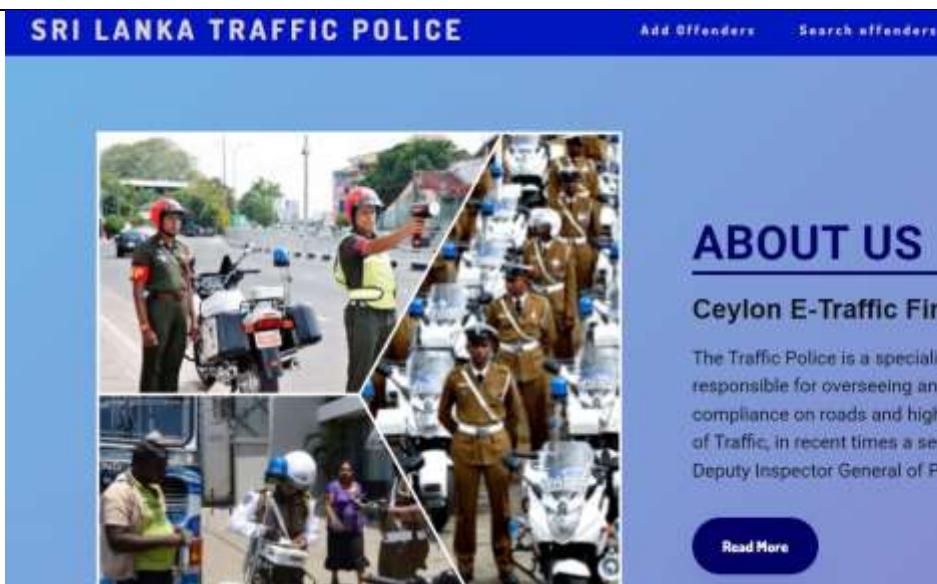
Test Case 69

Testcase id	70
Scenario/objective	Click on header add offender
Test data	offendersRegistration.php
Expected result	Display add offender page
Screen shot output	
Actual result	Display admins add offender page
Conclusion	Expected result and actual result are matched

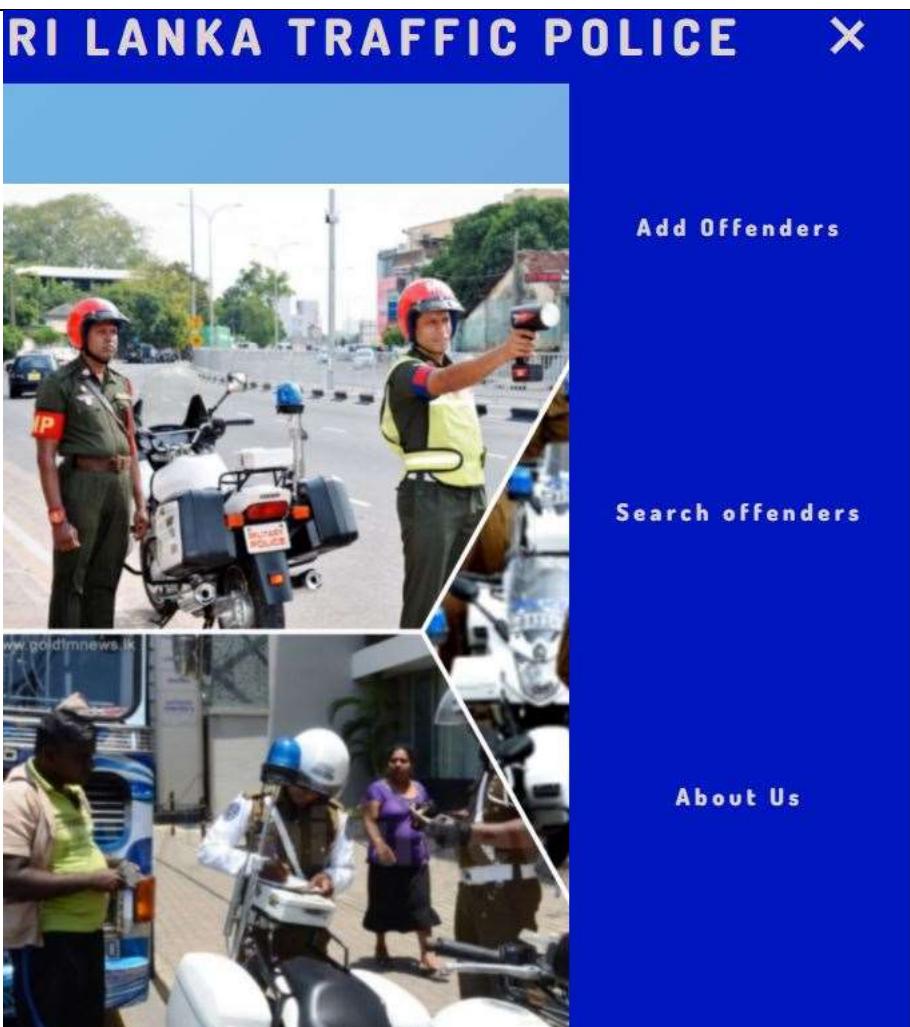
Test Case 70

Testcase id	71																																
Scenario / objective	Click on header search offender fine																																
Test data	officersSearchOffenders.php																																
Expected result	Display search offender page																																
Screen shot output	 <p>The screenshot shows a search results page titled "SEARCH OFFENDERS DETAILS". The table has columns for Offender ID, Offender NIC, First Name, Last Name, Street Number, Street Name, City, and Email. Three rows of data are listed:</p> <table border="1"> <thead> <tr> <th>Offender ID</th> <th>Offender NIC</th> <th>First Name</th> <th>Last Name</th> <th>Street Number</th> <th>Street Name</th> <th>City</th> <th>Email</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>200011456395</td> <td>Hussanga</td> <td>Fernando</td> <td>12</td> <td>Church road</td> <td>Negombo</td> <td>hussangafernando@gmail.com</td> </tr> <tr> <td>8</td> <td>198812366684</td> <td>Upul</td> <td>Nandasena</td> <td>30</td> <td>Malegoda Road</td> <td>Katunayake</td> <td>upulnandasena555@gmail.com</td> </tr> <tr> <td>10</td> <td>200410500088</td> <td>Rajew</td> <td>Uyindu</td> <td>218</td> <td>Suboothi Marawatha Kuria</td> <td>Katunayake</td> <td>rajewmasesoyamusu@ouazzaikm@gmail.com</td> </tr> </tbody> </table>	Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email	4	200011456395	Hussanga	Fernando	12	Church road	Negombo	hussangafernando@gmail.com	8	198812366684	Upul	Nandasena	30	Malegoda Road	Katunayake	upulnandasena555@gmail.com	10	200410500088	Rajew	Uyindu	218	Suboothi Marawatha Kuria	Katunayake	rajewmasesoyamusu@ouazzaikm@gmail.com
Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email																										
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10	200410500088	Rajew	Uyindu	218	Suboothi Marawatha Kuria	Katunayake	rajewmasesoyamusu@ouazzaikm@gmail.com																										
Actual result	Display search offender page																																
Conclusion	Expected result and actual result are matched																																

Test Case 71

Testcase id	72
Scenario / objective	Click on header about us
Test data	aboutUs.php
Expected result	Display T-officer about us page
Screen shot output	 <p>The screenshot shows the 'ABOUT US' section of the Sri Lanka Traffic Police website. At the top, there are two buttons: 'Add Offenders' and 'Search offenders'. Below the title 'ABOUT US', there is a large image collage featuring several police officers in different uniforms and situations. To the right of the collage, there is descriptive text about the Traffic Police's responsibilities and a 'Read More' button.</p>
Actual result	Display T-officer about us page
Conclusion	Expected result and actual result are matched

Test Case 72

Testcase id	73
Scenario/ objective	Click on header hamburger menu
Test data	Javascript menu
Expected result	Display hamburger menu
Screen shot output	
Actual result	Display hamburger menu
Conclusion	Expected result and actual result are matched

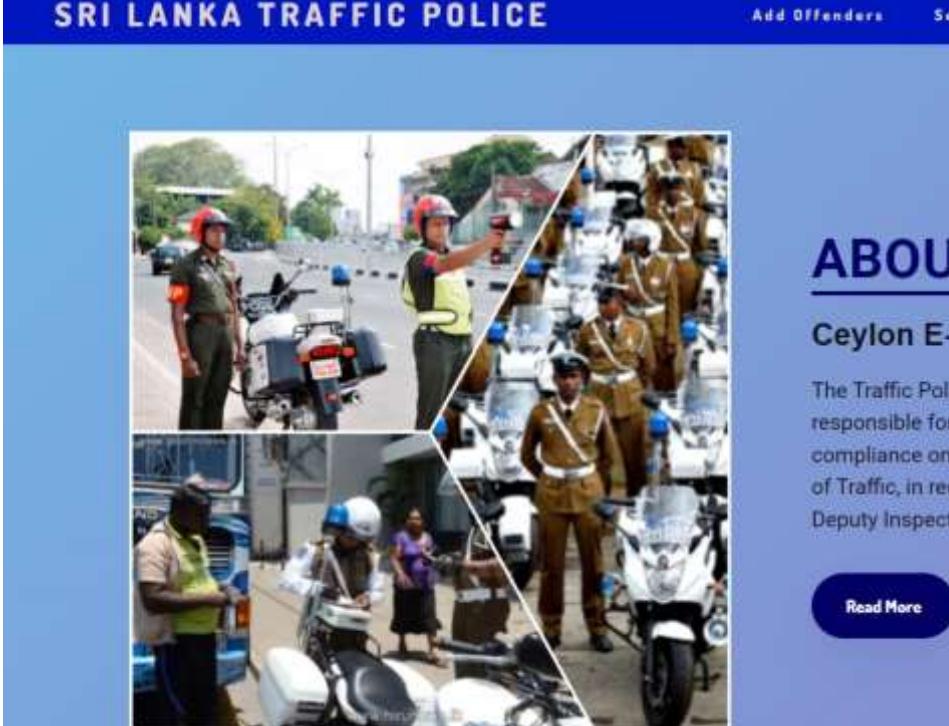
Test Case 73

Testcase id	74
Scenario/ objective	Click on footer add offender
Test data	offendersRegistration.php
Expected result	Display add offender page
Screen shot output	
Actual result	Display add offender page
Conclusion	Expected result and actual result are matched

Test Case 74

Testcase id	75																																
Scenario / objective	Click on footer search offender																																
Test data	officersearchOffenders.php																																
Expected result	Display search offender page																																
Screen shot output	 <p>The screenshot shows a search results page titled "SEARCH OFFENDERS DETAILS". The table has columns for Offender ID, Offender NIC, First Name, Last Name, Street Number, Street Name, City, and Email. Three rows of data are listed:</p> <table border="1"> <thead> <tr> <th>Offender ID</th> <th>Offender NIC</th> <th>First Name</th> <th>Last Name</th> <th>Street Number</th> <th>Street Name</th> <th>City</th> <th>Email</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>200011456395</td> <td>Hussanga</td> <td>Fernando</td> <td>12</td> <td>Church road</td> <td>Negombo</td> <td>hussangafernando@gmail.com</td> </tr> <tr> <td>8</td> <td>198812366684</td> <td>Upul</td> <td>Nandasena</td> <td>30</td> <td>Malegoda Road</td> <td>Katunayake</td> <td>upulnandasena555@gmail.com</td> </tr> <tr> <td>10</td> <td>200410500088</td> <td>Rajew</td> <td>Uyindu</td> <td>218</td> <td>Suboothi Marawatha Kuria</td> <td>Katunayake</td> <td>rajewmasesoyamusu@ouazzaikm@gmail.com</td> </tr> </tbody> </table>	Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email	4	200011456395	Hussanga	Fernando	12	Church road	Negombo	hussangafernando@gmail.com	8	198812366684	Upul	Nandasena	30	Malegoda Road	Katunayake	upulnandasena555@gmail.com	10	200410500088	Rajew	Uyindu	218	Suboothi Marawatha Kuria	Katunayake	rajewmasesoyamusu@ouazzaikm@gmail.com
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Actual result	Display search offender page																																
Conclusion	Expected result and actual result are matched																																

Test Case 75

Testcase id	76
Scenario / objective	Click on footer about us
Test data	aboutUs.php
Expected result	Display T-Officer about us page
Screen shot output	
Actual result	Display T-Officer about us page
Conclusion	Expected result and actual result are matched

Test Case 76

Testcase id	77
Scenario/ objective	Click read more button
Test data	Police.lk
Expected result	Redirect police.lk
Screen shot output	 <p>The screenshot shows the official website of the Sri Lanka Police. The header includes the police crest and the text "SRI LANKA POLICE". Below the header is a photograph of a band performing on stage. On the left, there's a sidebar with links to "Home", "Vision & Mission", "Police History", and "Lib". The main content area features a photograph of a band performing on stage. At the bottom right, there's a banner with the text "COVID - 19" and some related graphics.</p> <ul style="list-style-type: none"> • 1-1-9 Emergency • CCTV Division • Child & Women Bureau • Communication Division • Community Policing • Crime Division • Examinations • Human Rights
Actual result	Redirect police.lk
Conclusion	Expected result and actual result are matched

Test Case 77

Testcase id	78
Scenario/objective	Add offender with empty fields.
Test data	offenderRegistration.php
Expected result	Display fields cant be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "OFFENDERS REGISTRATION". The form contains several input fields:</p> <ul style="list-style-type: none"> Offender NIC: An input field with a red border and a yellow warning icon containing an exclamation mark, indicating it is required. A tooltip message "Please fill out this field." is displayed below the field. Police ID: An empty input field. First Name: An empty input field. Street Number: An empty input field. Street Name: An empty input field. Email: An empty input field. Telephone: An empty input field. Licenses Number: An empty input field. Vehicle Number: An empty input field. Date Of Offense: An empty input field with a date picker icon.
Actual result	Display fields cant be empty.
Conclusion	Expected result and actual result are matched

Test Case 78

Testcase id	79
Scenario / objective	Add offender with empty offender NIC.
Test data	offenderRegistration.php (Offender NIC)
Expected result	Display offender NIC can't be empty.
Screen shot output	 A screenshot of a web form titled "OFFENDERS REGISTRATION". The form has several input fields: "Offender NIC" (containing an empty value), "Police ID" (containing an empty value), "First Name" (containing an empty value), "Street Number" (containing an empty value), "Street Name" (containing an empty value), "Telephone" (containing an empty value), "Date Of Offense" (containing an empty value), "Email" (containing an empty value), "Vehicle Number" (containing an empty value), "City" (containing an empty value), and "Licensse Number" (containing an empty value). A validation error message "Please fill out this field." is displayed above the "Offender NIC" field, accompanied by a yellow exclamation mark icon.
Actual result	Display offender NIC can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 79

Testcase id	80
Scenario / objective	Add offender with empty police ID.
Test data	offenderRegistration.php (Police ID)
Expected result	Display offender police ID can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "OFFENDERS REGISTRATION". The "Police ID" field is highlighted with a red border and contains a red exclamation mark icon. A tooltip message "Please fill out this field." is displayed above the field. Other fields visible include "Offender NIC" (containing "199654123565"), "Last Name", "City", "Email", "First Name", "Street_Name", and "Telephone".</p>
Actual result	Display offender police ID can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 80

Testcase id	81
Scenario/objective	Add offender with empty first name.
Test data	offenderRegistration.php (First Name)
Expected result	Display offender first name.
Screen shot output	 <p>The screenshot shows a registration form titled "OFFENDERS REGISTRATION". The form has several input fields: "Offender NIC" (containing "113364123565"), "Last Name" (empty), "City" (empty), "Police ID" (empty), "Street Number" (empty), "Email" (empty), and "First Name" (empty). A validation message "Please fill out this field." is displayed next to the empty "First Name" field.</p>
Actual result	Display offender first name can't be empty.
Conclusion	Expected result and actual result are matched

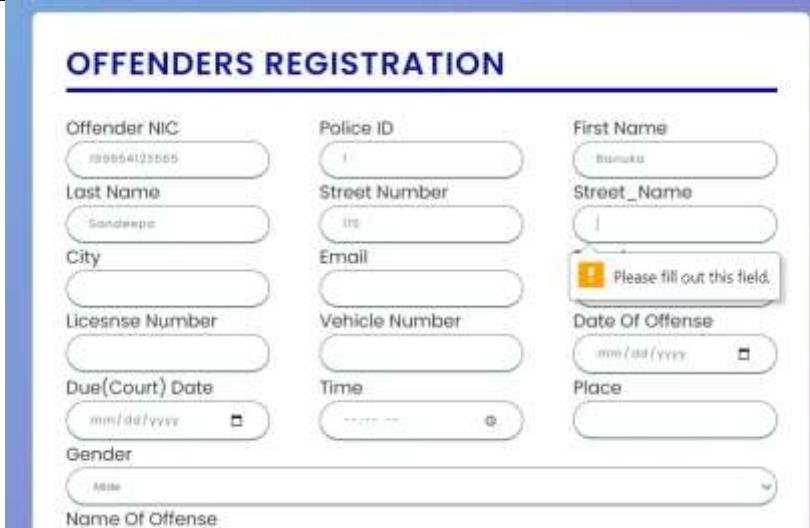
Test Case 81

Testcase id	82
Scenario / objective	Add offender with empty last name.
Test data	offenderRegistration.php (Last Name)
Expected result	Display offender last name can't be empty
Screen shot output	 <p>The screenshot shows a registration form titled "OFFENDERS REGISTRATION". The form fields include: Offender NIC (filled with 1111111111111), Police ID (empty), First Name (Bhanuka), Last Name (empty), Street Number (empty), Street Name (empty), Email (empty), Telephone (empty), License Number (empty), Vehicle Number (empty), and Date Of Offense (empty). A validation error message "Please fill out this field." is displayed above the Last Name input field.</p>
Actual result	Display offender last name can't be empty.
Conclusion	Expected result and actual result are matched

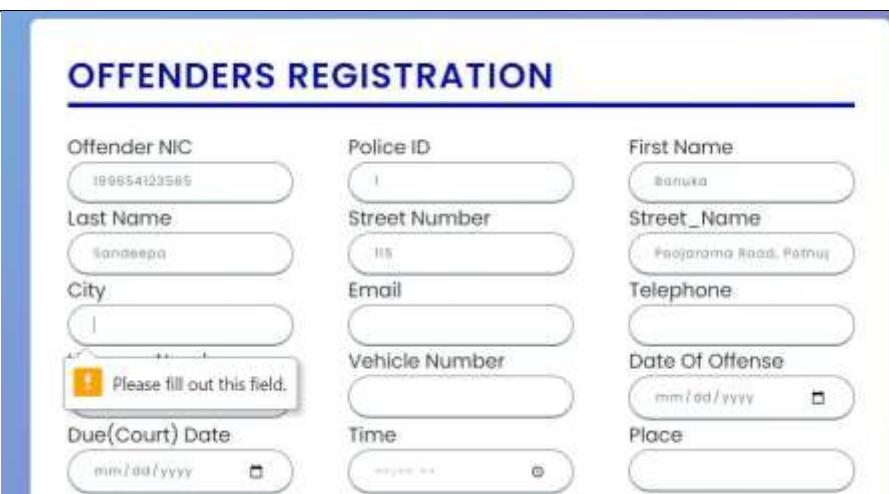
Test Case 82

Testcase id	83
Scenario / objective	Add offender with empty street number.
Test data	offenderRegistration.php (Street Number)
Expected result	Display offender street number can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "OFFENDERS REGISTRATION". The form fields include: Offender NIC (119654123565), Police ID (empty), First Name (Banuka), Last Name (Sandeepa), Street Number (empty, highlighted with a red border and an error message "Please fill out this field."), City (empty), Licensse Number (empty), Vehicle Number (empty), Date Of Offense (mm/dd/yyyy, empty), Due(Court) Date (mm/dd/yyyy, empty), Time (empty), Street_Name (empty), Telephone (empty), and Place (empty). The error message "Please fill out this field." is displayed in a yellow box above the empty Street Number input field.</p>
Actual result	Display offender street number can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 83

Testcase id	84
Scenario/objective	Add offender with empty street name.
Test data	offenderRegistration.php (Street Name)
Expected result	Display offender street name.
Screen shot output	 <p>The screenshot shows a registration form titled "OFFENDERS REGISTRATION". The form fields include: Offender NIC (99854123565), Police ID (empty), First Name (Bunuku), Last Name (Sandeep), Street Number (empty), Street Name (empty, highlighted with a red border and error message "Please fill out this field."), Email (empty), Licensse Number (empty), Vehicle Number (empty), Date Of Offense (empty), Time (empty), Place (empty), Due(Court) Date (empty), Gender (Male), and Name Of Offense (empty). The "Street Name" field is the focus of the error message.</p>
Actual result	Display offender street name can't be empty.
Conclusion	Expected result and actual result are matched

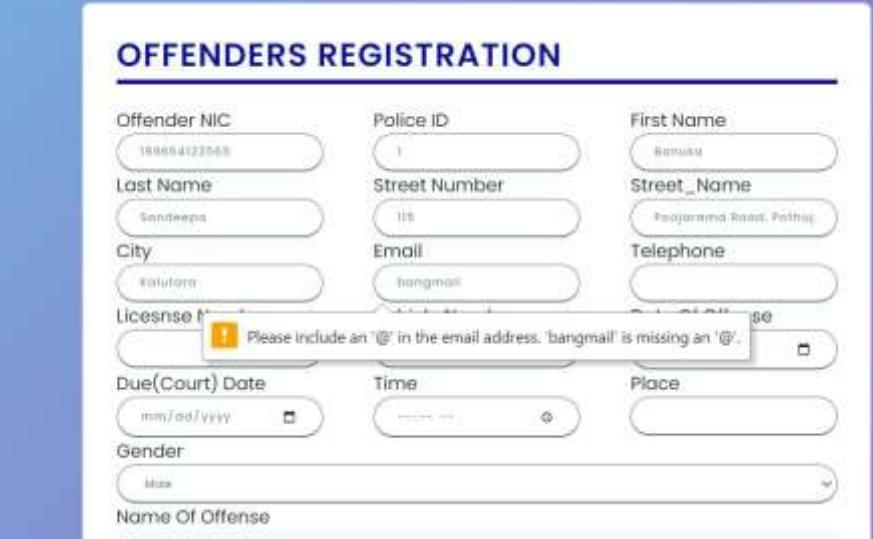
Test Case 84

Testcase id	85
Scenario/objective	Add offender with empty city.
Test data	offenderRegistration.php (City)
Expected result	Display offender city.
Screen shot output	 <p>The screenshot shows the 'OFFENDERS REGISTRATION' form. The 'City' field is empty and highlighted with a red border. An error message 'Please fill out this field.' is displayed above it. Other fields like 'Offender NIC', 'Last Name', 'First Name', etc., are populated with sample data.</p>
Actual result	Display offender city can't be empty.
Conclusion	Expected result and actual result are matched

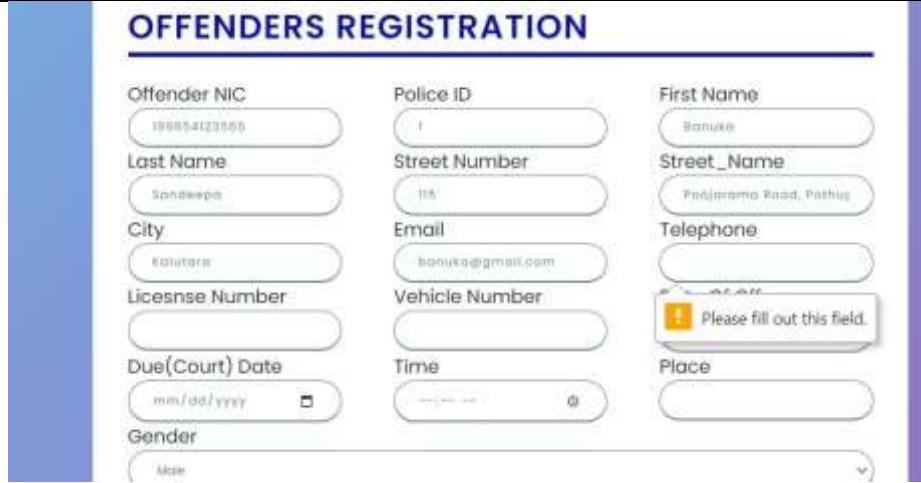
Test Case 85

Testcase id	86
Scenario/objective	Click register with empty email
Test data	offenderRegistration.php (Email)
Expected result	Display email can't be empty.
Screen shot output	 <p>The screenshot shows the 'OFFENDERS REGISTRATION' form. The 'Email' field is highlighted with a red border and contains a yellow error message: 'Please fill out this field.' Other fields visible include 'Offender NIC', 'Police ID', 'First Name', 'Last Name', 'Street Number', 'Street Name', 'City', 'Liceshse Number', 'Email', 'Telephone', 'Due(Court) Date', 'Time', 'Date Of Offense', 'Place', 'Gender', and 'Name Of Offense'. Most fields have placeholder text or specific formats.</p>
Actual result	Display email can't be empty.
Conclusion	Expected result and actual result are matched

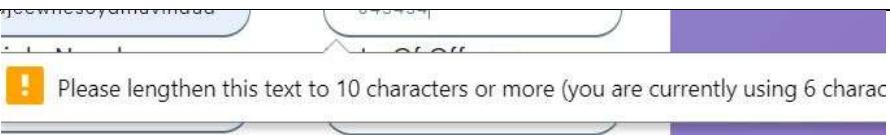
Test Case 86

Testcase id	87
Scenario / objective	Click register with incorrect format of email
Test data	offenderRegistration.php (Email)
Expected result	Display incorrect format of email.
Screen shot output	 <p>The screenshot shows the 'OFFENDERS REGISTRATION' form. The 'Email' field contains 'bangmall'. A yellow warning icon with an exclamation mark appears next to the field, and a tooltip message reads: 'Please include an '@' in the email address. 'bangmall' is missing an '@'.' Other fields visible include 'Offender NIC' (189854123543), 'Police ID' (1), 'First Name' (Ritwika), 'Last Name' (Sonideepa), 'Street Number' (115), 'Street Name' (Reshma Road, Polhip), 'City' (Kalutara), 'Email' (bangmall), 'Telephone' (011-23456789), 'Licenses No' (empty), 'Due(Court) Date' (mm/dd/yyyy dropdown), 'Time' (dropdown), 'Place' (dropdown), 'Gender' (dropdown), and 'Name Of Offense' (dropdown).</p>
Actual result	Display incorrect format of email.
Conclusion	Expected result and actual result are matched

Test Case 87

Testcase id	88
Scenario/ objective	Click register with empty telephone
Test data	offenderRegistration.php (Telephone)
Expected result	Display telephone can't be empty.
Screen shot output	 A screenshot of a web-based offender registration form titled "OFFENDERS REGISTRATION". The form contains various input fields for personal and identification information. In the bottom right corner of the registration section, there is a red rectangular validation message box containing the text "Please fill out this field." with an exclamation mark icon. The rest of the form fields appear to have valid data entered, such as "189854123456" for Offender NIC, "Sondeep" for Last Name, "Kolathur" for City, "bonuka@gmail.com" for Email, and "bonuka" for First Name.
Actual result	Display telephone can't be empty.
Conclusion	Expected result and actual result are matched

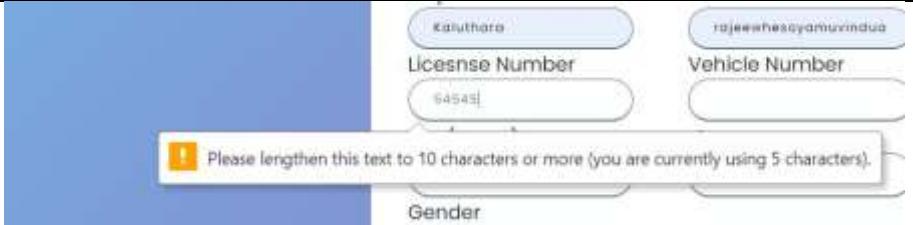
Test Case 88

Testcase id	89
Scenario/ objective	Click register with incorrect format of telephone
Test data	offenderRegistration.php (Telephone)
Expected result	Display incorrect format of telephone.
Screen shot output	 A screenshot of a web page showing a registration form. There are two input fields for telephone numbers. The top field contains "0123456789" and has a red border, indicating it is invalid. Below it, a message says "Please lengthen this text to 10 characters or more (you are currently using 6 characters)".
Actual result	Display incorrect format of telephone.
Conclusion	Expected result and actual result are matched

Test Case 89

Testcase id	90
Scenario/ objective	Click register with empty license number
Test data	offenderRegistration.php (License Number)
Expected result	Display license Number can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "OFFENDERS REGISTRATION". The "License Number" field is empty and highlighted with a red border. An error message "Please fill out this field." is displayed above the field. Other fields are populated with sample data: Offender NIC (123456789), Last Name (Sandeep), City (Kathmandu), Email (testmail@gmail.com), Street Number (10), Street Name (Padam Road, Puthu), Telephone (9842588871), Date Of Offense (mm/dd/yyyy), Place (Kathmandu), Gender (Male), and Competent To Drive (Yes). The "Name Of Offense" dropdown is empty, and the "Time" dropdown shows a placeholder "Select Time".</p>
Actual result	Display license number can't be empty.
Conclusion	Expected result and actual result are matched

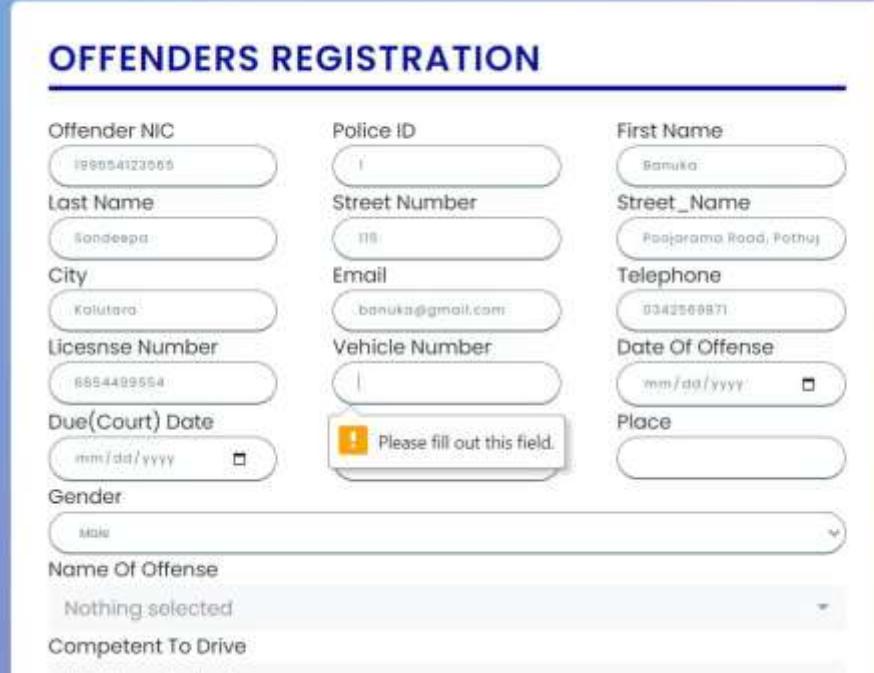
Test Case 90

Testcase id	91
Scenario/ objective	Click register with incorrect format of license number
Test data	offenderRegistration.php (License Number)
Expected result	Display incorrect format of license number.
Screen shot output	 <p>The screenshot shows a registration form with fields for 'Name' (Kathiravan), 'License Number' (64545), and 'Vehicle Number' (rajeevhesoyamuvindua). A validation error message is displayed below the license number field: "Please lengthen this text to 10 characters or more (you are currently using 5 characters)." The 'Gender' field is also visible at the bottom.</p>
Actual result	Display incorrect format of license number.
Conclusion	Expected result and actual result are matched

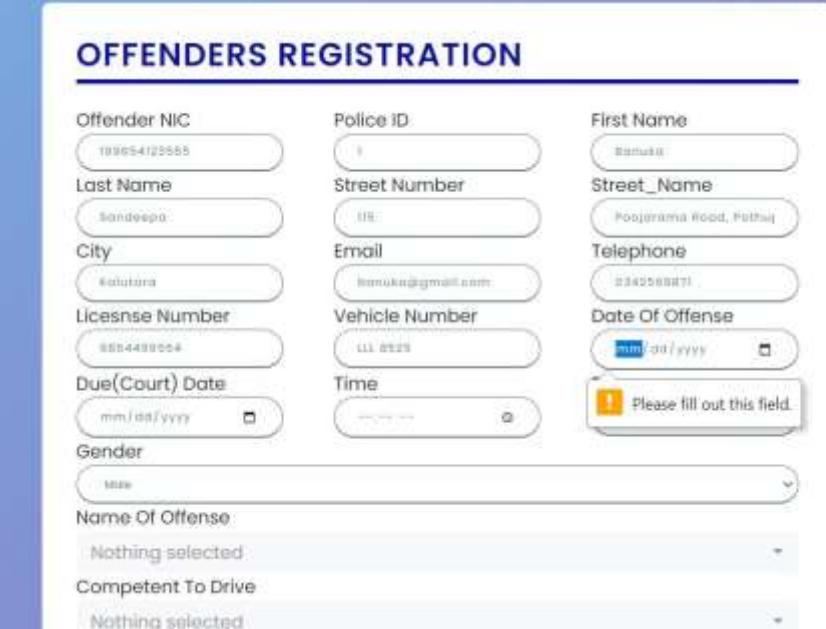
Test Case 91

Testcase id	92
Scenario/ objective	Click register with incorrect format of Offender NIC
Test data	offenderRegistration.php (Offender NIC)
Expected result	Display incorrect format of Offender NIC.
Screen shot output	 <p>The screenshot shows a registration form for offenders. At the top, the title "OFFENDERS RE" is visible. Below it, there is a field labeled "Offender NIC" containing the value "200410500069". Underneath this field, there is another field labeled "Last Name". A vertical blue bar is positioned to the left of the screenshot.</p>
Actual result	Display incorrect format of Offender NIC.
Conclusion	Expected result and actual result are not matched

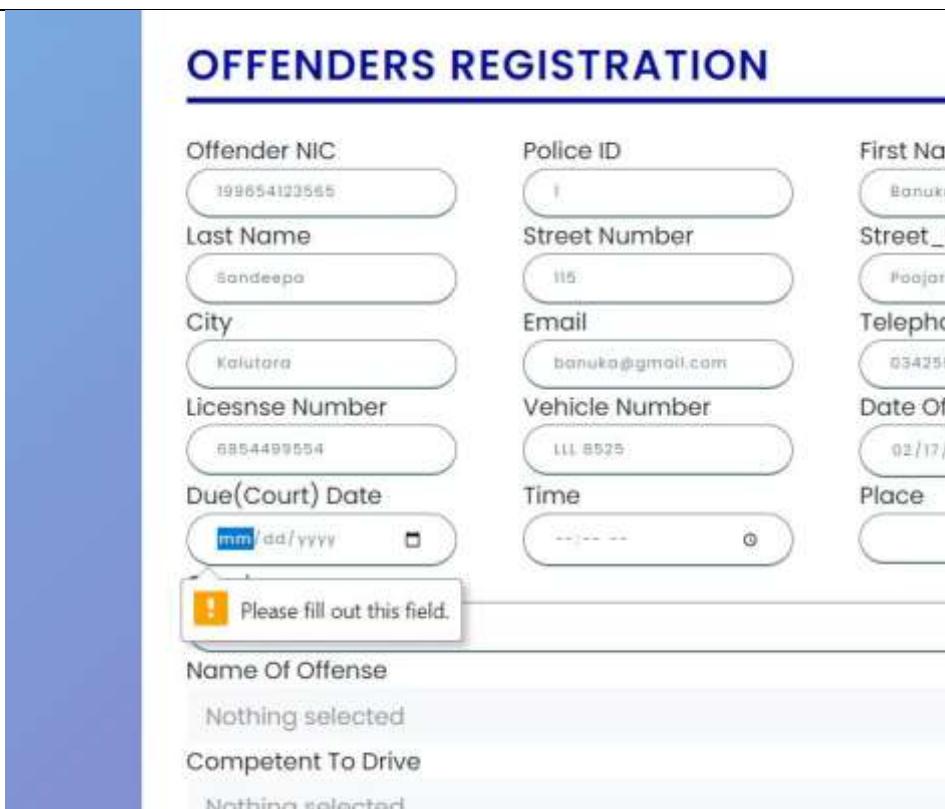
Test Case 92

Testcase id	93
Scenario / objective	Click register with empty Vehicle number
Test data	offenderRegistration.php (Vehicle number)
Expected result	Display Vehicle number can't be empty.
Screen shot output	 <p>The screenshot shows the 'OFFENDERS REGISTRATION' form. The 'Vehicle Number' field is empty, and a validation message 'Please fill out this field.' is displayed below it.</p>
Actual result	Display Vehicle number can't be empty.
Conclusion	Expected result and actual result are matched

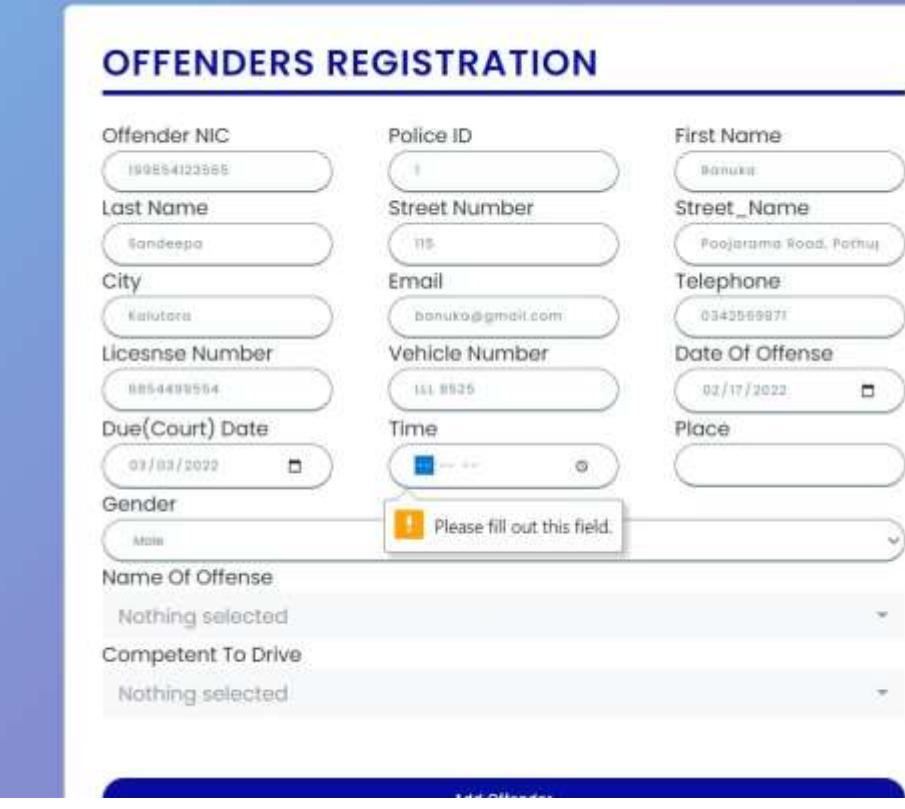
Test Case 93

Testcase id	94
Scenario / objective	Click register with empty Date of Offense
Test data	offenderRegistration.php (Date of Offense)
Expected result	Display Date of Offense can't be empty.
Screen shot output	 <p>The screenshot shows a registration form titled "OFFENDERS REGISTRATION". The "Date Of Offense" field is highlighted with a red border and contains the placeholder "mm/dd/yyyy". To the right of the field is an orange error message box with the text "Please fill out this field." and an exclamation mark icon.</p>
Actual result	Display Date of Offense can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 94

Testcase id	95
Scenario / objective	Click register with empty Due(court) Date
Test data	offenderRegistration.php (Court Due date)
Expected result	Display Due(court) Date can't be empty.
Screen shot output	 A screenshot of a mobile application titled "OFFENDERS REGISTRATION". The screen displays various input fields: Offender NIC (199654123565), Police ID (empty), First Name (Banuka), Last Name (Sandeepa), Street Number (115), Street_1 (Poajara), City (Kalutara), Email (banuka@gmail.com), Telephone (034255), Licensse Number (6854499554), Vehicle Number (LLL 5525), Date Of Birth (02/17/1985), Due(Court) Date (mm/dd/yyyy, empty), Time (empty), Place (empty), and two dropdowns for Name Of Offense and Competent To Drive, both showing "Nothing selected". A prominent orange error message at the bottom left of the form states "Please fill out this field." The background of the entire screenshot is blue.
Actual result	Display Due(court) Date can't be empty.
Conclusion	Expected result and actual result are matched

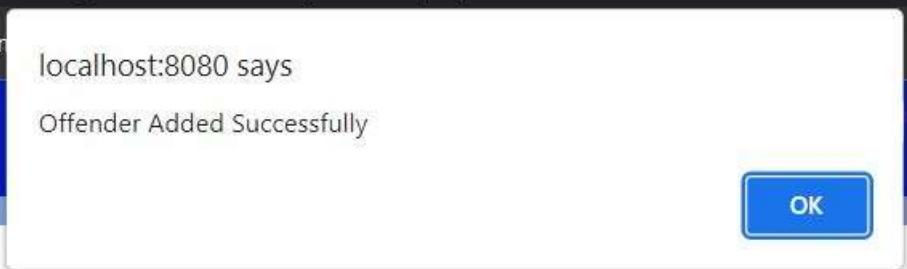
Test Case 95

Testcase id	96
Scenario/objective	Click register with empty time
Test data	offenderRegistration.php (Time)
Expected result	Display time can't be empty.
Screen shot output	 <p>The screenshot shows the 'OFFENDERS REGISTRATION' form. The 'Time' field is highlighted with a red border and contains the placeholder 'Select time'. A yellow error message box with an exclamation mark is overlaid on the field, stating 'Please fill out this field.' Other fields visible include Offender NIC, Police ID, First Name, Last Name, Street Number, Street Name, Telephone, City, Email, Licensse Number, Vehicle Number, Date Of Offense, Due(Court) Date, Place, Gender, Name Of Offense, Competent To Drive, and an 'Add Offender' button at the bottom.</p>
Actual result	Display time can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 96

Testcase id	97																								
Scenario/ objective	Click register with empty place																								
Test data	offenderRegistration.php (Place)																								
Expected result	Display place can't be empty.																								
Screen shot output	 <p>The screenshot shows the 'OFFENDERS REGISTRATION' form. The 'Place' field is empty and has a red border. A validation message 'Please fill out this field.' with an exclamation mark icon is displayed next to it. Other fields are populated with sample data.</p> <table border="1"> <tr> <td>Offender NIC 1090547222665</td> <td>Police ID 1</td> <td>First Name Bonuka</td> </tr> <tr> <td>Last Name Tonadeepa</td> <td>Street Number 118</td> <td>Street Name Poojarama Road, Pothuji</td> </tr> <tr> <td>City Kolukkara</td> <td>Email bonuka@gmail.com</td> <td>Telephone 0342569871</td> </tr> <tr> <td>Licenses Number 8854488884</td> <td>Vehicle Number LLL 8888</td> <td>Date Of Offense 02/17/2022</td> </tr> <tr> <td>Due(Court) Date 03/03/2023</td> <td>Time 07:09 PM</td> <td>Place /</td> </tr> <tr> <td>Gender Male</td> <td colspan="2">!</td> </tr> <tr> <td>Name Of Offense Nothing selected</td> <td colspan="2">Please fill out this field.</td> </tr> <tr> <td>Competent To Drive Nothing selected</td> <td colspan="2"></td> </tr> </table>	Offender NIC 1090547222665	Police ID 1	First Name Bonuka	Last Name Tonadeepa	Street Number 118	Street Name Poojarama Road, Pothuji	City Kolukkara	Email bonuka@gmail.com	Telephone 0342569871	Licenses Number 8854488884	Vehicle Number LLL 8888	Date Of Offense 02/17/2022	Due(Court) Date 03/03/2023	Time 07:09 PM	Place /	Gender Male	!		Name Of Offense Nothing selected	Please fill out this field.		Competent To Drive Nothing selected		
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Gender Male	!																								
Name Of Offense Nothing selected	Please fill out this field.																								
Competent To Drive Nothing selected																									
Actual result	Display place can't be empty.																								
Conclusion	Expected result and actual result are matched																								

Test Case 97

Testcase id	98
Scenario/ objective	Click register with all fields
Test data	offenderRegistration.php
Expected result	Display offender added successfully.
Screen shot output	
Actual result	Display offender added successfully.
Conclusion	Expected result and actual result are matched

Test Case 98

Testcase id	99																																
Scenario / objective	Click search with empty field																																
Test data	officersSearchOffenders (search_text)																																
Expected result	Display fields can't be empty.																																
Screen shot output	 <p>The screenshot shows a web-based application titled "SRI LANKA TRAFFIC POLICE". The main heading is "SEARCH OFFENDERS DETAILS". Below it is a search bar with the placeholder "Search by Offender Details". A "Search" button is located to the left of the search bar. The main content area displays a table with three rows of offender data. The columns are labeled: Offender ID, Offender NIC, First Name, Last Name, Street Number, Street Name, City, and Email. The data in the table is as follows:</p> <table border="1"> <thead> <tr> <th>Offender ID</th> <th>Offender NIC</th> <th>First Name</th> <th>Last Name</th> <th>Street Number</th> <th>Street Name</th> <th>City</th> <th>Email</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>200011456395</td> <td>Hussanga</td> <td>Fernando</td> <td>12</td> <td>Church road</td> <td>Negombo</td> <td>hussangafernando@gmail.com</td> </tr> <tr> <td>8</td> <td>198812366684</td> <td>Upul</td> <td>Nandasena</td> <td>30</td> <td>Malegoda Road</td> <td>Katunayake</td> <td>upulnandasena555@gmail.com</td> </tr> <tr> <td>10</td> <td>200410500088</td> <td>Rajoew</td> <td>Uyindu</td> <td>218</td> <td>Suboothi Marawatha Kuria</td> <td>Katunayake</td> <td>rajoewmessooyamusu@ouazzaikm@gmail.com</td> </tr> </tbody> </table>	Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email	4	200011456395	Hussanga	Fernando	12	Church road	Negombo	hussangafernando@gmail.com	8	198812366684	Upul	Nandasena	30	Malegoda Road	Katunayake	upulnandasena555@gmail.com	10	200410500088	Rajoew	Uyindu	218	Suboothi Marawatha Kuria	Katunayake	rajoewmessooyamusu@ouazzaikm@gmail.com
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Actual result	Display fields can't be empty.																																
Conclusion	Expected result and actual result are not matched																																

Test Case 99

Testcase id	100																																
Scenario / objective	Click search with filled field																																
Test data	officersSearchOffenders (search_text)																																
Expected result	Display offender details.																																
Screen shot output	 <p>The screenshot shows a search results page titled "SEARCH OFFENDERS DETAILS". The table has columns for Offender ID, Offender NIC, First Name, Last Name, Street Number, Street Name, City, and Email. The results are:</p> <table border="1"> <thead> <tr> <th>Offender ID</th> <th>Offender NIC</th> <th>First Name</th> <th>Last Name</th> <th>Street Number</th> <th>Street Name</th> <th>City</th> <th>Email</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>200011456395</td> <td>Hussanga</td> <td>Fernando</td> <td>12</td> <td>Church road</td> <td>Negombo</td> <td>hussangafernando@gmail.com</td> </tr> <tr> <td>8</td> <td>198812366684</td> <td>Upul</td> <td>Nandasena</td> <td>30</td> <td>Malegoda Road</td> <td>Katunayake</td> <td>upulnandasena555@gmail.com</td> </tr> <tr> <td>10</td> <td>200410500088</td> <td>Rajew</td> <td>Uyendo</td> <td>218</td> <td>Suboothi Marawatha Kuria</td> <td>Katunayake</td> <td>rajewmasesoyamusu@ouazakim@gmail.com</td> </tr> </tbody> </table>	Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email	4	200011456395	Hussanga	Fernando	12	Church road	Negombo	hussangafernando@gmail.com	8	198812366684	Upul	Nandasena	30	Malegoda Road	Katunayake	upulnandasena555@gmail.com	10	200410500088	Rajew	Uyendo	218	Suboothi Marawatha Kuria	Katunayake	rajewmasesoyamusu@ouazakim@gmail.com
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Actual result	Display offender details.																																
Conclusion	Expected result and actual result are matched																																

Test Case 100

Testcase id	101
Scenario/ objective	Click download on offender details
Test data	officersSearchOffenders (search_text)
Expected result	View/download pdf offender details.
Screen shot output	
Actual result	View/download pdf offender details.
Conclusion	Expected result and actual result are not matched Test case Skipped

Test Case 101

Testcase id	102
Scenario/ objective	Click pay on offender details
Test data	
Expected result	Display payment page.
Screen shot output	
Actual result	Display payment page.
Conclusion	Expected result and actual result are not matched Test case Skipped

Test Case 102

Testcase id	103
Scenario/ objective	Click print on offender details
Test data	
Expected result	print payment receipt.
Screen shot output	
Actual result	print payment receipt.
Conclusion	Expected result and actual result are not matched Test case Skipped

Test Case 103

Testcase id	104
Scenario/ objective	Click on header Search offender
Test data	searchOffenders.php
Expected result	Display offender Search offender page
Screen shot output	 A screenshot of a web browser displaying the 'SRI LANKA TRAFFIC POLICE' website. The page title is 'SEARCH OFFENDERS DETAILS'. At the top right, there are links for 'Search Offenses', 'About Us', and 'Contact Us'. Below the title, there is a search bar with the placeholder text 'Search by Offender Details' and a 'Search' button.
Actual result	Display offender Search offender page
Conclusion	Expected result and actual result are matched

Test Case 104

Testcase id	105
Scenario/ objective	Click on header contact us
Test data	contactUs.php
Expected result	Display offenders contact us page
Screen shot output	 <p>The screenshot shows the Sri Lankan Traffic Police website with a blue header bar containing the text 'SRI LANKA TRAFFIC POLICE' and navigation links for 'OFFENDER OFFENSES', 'ABOUT US', and 'CONTACT US'. Below the header is a white contact form titled 'CONTACT SRI LANKAN TRAFFIC POLICE'. The form includes fields for 'First Name' (with placeholder 'John'), 'Last Name' (placeholder 'Doe'), 'Email Address' (placeholder 'john.doe@example.com'), 'Phone Number' (placeholder '(011) 234-5678'), and a large 'Your Message' text area with placeholder text 'Write something...'. At the bottom of the form is a blue 'Send' button.</p>
Actual result	Display offenders contact us page
Conclusion	Expected result and actual result are matched

Test Case 105

Testcase id	106
Scenario/objective	Click on header about us
Test data	aboutUs2.php
Expected result	Display offenders about us page
Screen shot output	
Actual result	Display offenders about us page
Conclusion	Expected result and actual result are matched

Test Case 106

Testcase id	107
Scenario/ objective	Click on header hamburger menu
Test data	aboutUs.php
Expected result	Display hamburger menu
Screen shot output	<p style="text-align: center;">SRI LANKA TRAFFIC POLICE</p>
Actual result	Display hamburger menu
Conclusion	Expected result and actual result are not matched

Test Case 107

Testcase id	108
Scenario/ objective	Click on footer Search offenses
Test data	searchOffenders.php
Expected result	Display offender Search offender page
Screen shot output	 A screenshot of a web browser displaying the 'SRI LANKA TRAFFIC POLICE' website. The page title is 'SEARCH OFFENDERS DETAILS'. At the top right, there are links for 'Search Offenses', 'About Us', and 'Contact Us'. Below the title, there is a search bar with the placeholder text 'Search by Offender Details' and a blue 'Search' button to its left.
Actual result	Display offender Search offender page
Conclusion	Expected result and actual result are matched

Test Case 108

Testcase id	109
Scenario / objective	Click on footer contact us
Test data	contactUs.php
Expected result	Display offenders contact us page
Screen shot output	 <p>The screenshot shows a blue-themed web page for the Sri Lankan Traffic Police. At the top, there's a navigation bar with links for 'OFFENDER OFFENCES', 'ABOUT US', and 'LOG OUT'. Below the navigation, a large blue header area contains the text 'CONTACT SRI LANKAN TRAFFIC POLICE'. Underneath this, there are four input fields: 'First Name' and 'Last Name' (both empty), 'Email Address' (empty), and 'Phone Number' (empty). Below these is a larger text area labeled 'Your Message' with the placeholder 'Write something...'. At the bottom of the form is a blue 'Send' button.</p>
Actual result	Display offenders contact us page
Conclusion	Expected result and actual result are matched

Test Case 109

Testcase id	110
Scenario / objective	Click on footer about us
Test data	aboutUs2.php
Expected result	Display offenders about us page
Screen shot output	
Actual result	Display offenders about us page
Conclusion	Expected result and actual result are matched

Test Case 110

Testcase id	111
Scenario/ objective	Click search with empty field
Test data	searchOffenders.php (search_text)
Expected result	Display fields can't be empty.
Screen shot output	
Actual result	Display fields can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 111

Testcase id	112																																	
Scenario / objective	Click search with filled field																																	
Test data	searchOffenders.php (search_text)																																	
Expected result	Display offender details.																																	
Screen shot output	<p style="text-align: center;">SEARCH OFFENDERS DETAILS</p>  <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Offender_NIC</th> <th>First Name</th> <th>Last Name</th> <th>Street Number</th> <th>Street Name</th> <th>City</th> <th>License Number</th> <th>Vehicle Number</th> <th>Date Of Offense</th> <th>Due Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>200410500089</td> <td>Rajeew</td> <td>Uvindu</td> <td>316</td> <td>Subothi Mawatha Kuda Waskaduwa</td> <td>Kaluthara</td> <td>1234567890</td> <td>ABC 7440</td> <td>2022-02-17</td> <td>2022-03-03</td> <td>01:22:00</td> </tr> <tr> <td>200410500089</td> <td>Rajeew</td> <td>Uvindu</td> <td>316</td> <td>Kuda Waskaduwa, Waskaduwa</td> <td>Kaluthara</td> <td>1234567890</td> <td>ABC 7440</td> <td>2022-02-17</td> <td>2022-03-03</td> <td>03:50:00</td> </tr> </tbody> </table>	Offender_NIC	First Name	Last Name	Street Number	Street Name	City	License Number	Vehicle Number	Date Of Offense	Due Date	Time	200410500089	Rajeew	Uvindu	316	Subothi Mawatha Kuda Waskaduwa	Kaluthara	1234567890	ABC 7440	2022-02-17	2022-03-03	01:22:00	200410500089	Rajeew	Uvindu	316	Kuda Waskaduwa, Waskaduwa	Kaluthara	1234567890	ABC 7440	2022-02-17	2022-03-03	03:50:00
Offender_NIC	First Name	Last Name	Street Number	Street Name	City	License Number	Vehicle Number	Date Of Offense	Due Date	Time																								
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Actual result	Display offender details.																																	
Conclusion	Expected result and actual result are matched																																	

Test Case 112

Testcase id	113																																
Scenario / objective	Click download on offender details																																
Test data	searchOffenders.php (download)																																
Expected result	View/download pdf offender details.																																
Screen shot output	 <p style="text-align: center;">CEYLON TRAFFIC PAYMENT SYSTEM</p> <table border="1"> <tbody> <tr> <td>License No</td> <td>: 1234567899</td> <td>Name of Offender</td> <td>: Rajeev Uvindu</td> </tr> <tr> <td>Offender Address</td> <td colspan="3">: 318 Suboothi Mawatha Kuda Waskaduwa Kalutara</td> </tr> <tr> <td>Offender NIC</td> <td colspan="3">: 200410500069</td> </tr> <tr> <td>Vehicle Number</td> <td>: ABC 7440</td> <td>Place the Offence</td> <td>: Nagashandiya</td> </tr> <tr> <td>Name of the Offence</td> <td>: Contravening Speed Limits</td> <td>Amount</td> <td>: 3000</td> </tr> <tr> <td>Date of Offense</td> <td>: 2022-02-17</td> <td>Time of Offense</td> <td>: 01:32:00</td> </tr> <tr> <td>Court due Date</td> <td>: 2022-03-03</td> <td>Competent to Drive</td> <td>: A</td> </tr> <tr> <td>Officer Name</td> <td colspan="3">: Indika Maduwantha</td> </tr> </tbody> </table>	License No	: 1234567899	Name of Offender	: Rajeev Uvindu	Offender Address	: 318 Suboothi Mawatha Kuda Waskaduwa Kalutara			Offender NIC	: 200410500069			Vehicle Number	: ABC 7440	Place the Offence	: Nagashandiya	Name of the Offence	: Contravening Speed Limits	Amount	: 3000	Date of Offense	: 2022-02-17	Time of Offense	: 01:32:00	Court due Date	: 2022-03-03	Competent to Drive	: A	Officer Name	: Indika Maduwantha		
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Officer Name	: Indika Maduwantha																																
Actual result	View/download pdf offender details.																																
Conclusion	Expected result and actual result are matched																																

Test Case 113

Testcase id	114
Scenario/ objective	Click pay on offender details
Test data	searchOffenders.php (pay)
Expected result	Display payment page.
Screen shot output	
Actual result	Display payment page.
Conclusion	Expected result and actual result are not matched Test case Skipped

Test Case 114

Testcase id	115								
Scenario / objective	Click print on offender details								
Test data	searchOffenders.php (print)								
Expected result	print payment receipt.								
Screen shot output	<p style="text-align: center;">CEYLON TRAFFIC PAYMENT SYSTEM 172 PAYMENT RECEIPT</p> <hr/> <table> <tbody> <tr> <td>Payment ID : 5</td> <td>Offender NIC : 200410500069</td> </tr> <tr> <td>Offender Name : Rajeev Uvindu</td> <td>Offender license No : 1234567899</td> </tr> <tr> <td>Vehicle Number : ABC 7440</td> <td>Name of the Offence : Contravening S</td> </tr> <tr> <td>Amount : 3000</td> <td></td> </tr> </tbody> </table>	Payment ID : 5	Offender NIC : 200410500069	Offender Name : Rajeev Uvindu	Offender license No : 1234567899	Vehicle Number : ABC 7440	Name of the Offence : Contravening S	Amount : 3000	
Payment ID : 5	Offender NIC : 200410500069								
Offender Name : Rajeev Uvindu	Offender license No : 1234567899								
Vehicle Number : ABC 7440	Name of the Offence : Contravening S								
Amount : 3000									
Actual result	print payment receipt.								
Conclusion	Expected result and actual result are matched								

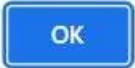
Test Case 115

Testcase id	116
Scenario/ objective	Click read more button
Test data	Police.lk
Expected result	Redirect police.lk
Screen shot output	 <p>The screenshot shows the homepage of the Sri Lanka Police website. At the top, there is a navigation bar with links for Home, Vision & Mission, Police History, and Library. Below the navigation bar, there is a banner featuring a band performing on stage. The banner includes the text "SRI LANKA POLICE" and "SRI LANKA POLICE BAND". On the left side of the page, there is a sidebar with a list of links: 1-1-9 Emergency, CCTV Division, Child & Women Bureau, Communication Division, Community Policing, Crime Division, Examinations, and Human Rights. On the right side, there is a banner for COVID-19.</p>
Actual result	Redirect police.lk
Conclusion	Expected result and actual result are matched

Test Case 116

Testcase id	117
Scenario/ objective	Click send with empty fields
Test data	contactUs.php
Expected result	Display fields cant be empty.
Screen shot output	 A screenshot of a web form titled "CONTACT SRI LANKAN TRAFFIC POLICE". The form has four input fields: "First Name", "Last Name", "Email", and "Phone Number". The "Email" field is highlighted with a red border and contains the error message "Please fill out this field." Below the form is a large blue "Send" button.
Actual result	Display fields cant be empty.
Conclusion	Expected result and actual result are matched

Test Case 117

Testcase id	118
Scenario/ objective	Click send with filled fields
Test data	contactUs.php
Expected result	Display acknowledgement message
Screen shot output	<p>localhost:8080 says</p> <p>Email successfully sent...</p> 
Actual result	Display acknowledgement message
Conclusion	Expected result and actual result are matched

Test Case 118

Testcase id	119
Scenario/ objective	Set hand out date with empty field.
Test data	ManageLicense.php (handoutDate)
Expected result	Display fields cant be empty.
Screen shot output	<p>localhost:8080 says</p> <p>Handout Date Added</p> 
Actual result	Display fields cant be empty.
Conclusion	Expected result and actual result are not matched

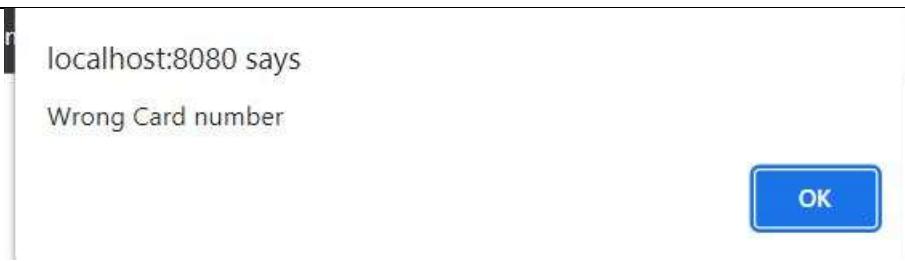
Test Case 119

Testcase id	120
Scenario/ objective	Set hand out date with filled field.
Test data	manageLicense.php (handoutDate)
Expected result	Display acknowledgement message
Screen shot output	<p>localhost:8080 says</p> <p>Handout Date Added</p> 
Actual result	Display acknowledgement message
Conclusion	Expected result and actual result are matched

Test Case 120

Testcase id	121
Scenario/ objective	Pay now with empty fields
Test data	paymentMenu.php
Expected result	Display fields can't be empty.
Screen shot output	
Actual result	Display fields can't be empty.
Conclusion	Expected result and actual result are matched

Test Case 121

Testcase id	122
Scenario/ objective	Pay now with incorrect card no
Test data	paymentMenu.php(card num)
Expected result	Display error msg
Screen shot output	 <p>The screenshot shows a browser window with the URL 'localhost:8080'. The main content area displays the text 'localhost:8080 says' followed by 'Wrong Card number' in a red box. In the bottom right corner, there is a blue 'OK' button.</p>
Actual result	Display error msg
Conclusion	Expected result and actual result are matched

Test Case 122

Testcase id	123
Scenario/ objective	Pay now with incorrect cvv
Test data	paymentMenu.php(cvv)
Expected result	Display error msg
Screen shot output	<p>localhost:8080 says</p> <p>Wrong CVV entered</p> 
Actual result	Display error msg
Conclusion	Expected result and actual result are matched

Test Case 123

Testcase id	124
Scenario/ objective	Pay now with incorrect exp date
Test data	paymentMenu.php(exp date)
Expected result	Display error msg
Screen shot output	 localhost:8080 says Card Expired OK
Actual result	Display error msg
Conclusion	Expected result and actual result are matched

Test Case 124

Testcase id	125
Scenario/ objective	Pay now with incorrect card type
Test data	paymentMenu.php(card Type)
Expected result	Display error msg
Screen shot output	
Actual result	Display error msg
Conclusion	Expected result and actual result are not matched

Test Case 125

Testcase id	126
Scenario/ objective	Pay now with correctly filled fields
Test data	paymentMenu.php(btnProceed)
Expected result	Display Payment successful
Screen shot output	<p>localhost:8080 says</p> <p>Payment Done Successfully</p> 
Actual result	Display Payment successful
Conclusion	Expected result and actual result are matched

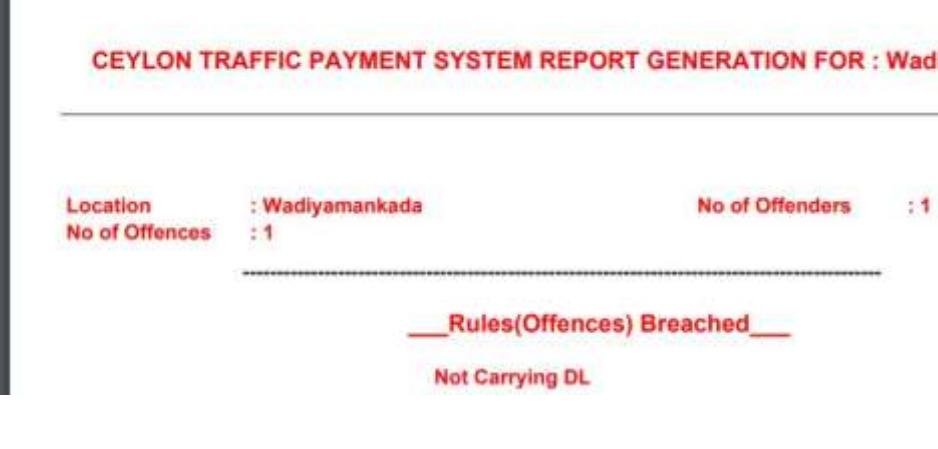
Test Case 126

Testcase id	127
Scenario / objective	Generate report with non-filled from date to date
Test data	searchReport.php(date1, date2)
Expected result	Display error Message
Screen shot output	
Actual result	Display error Message
Conclusion	Expected result and actual result are matched

Test Case 127

Testcase id	128
Scenario / objective	Generate report with filled from date to date
Test data	reportGeneration.php (Report using fpdf)
Expected result	Display within date range report data
Screen shot output	<p style="text-align: center;">CEYLON TRAFFIC PAYMENT SYSTEM REPORT GENERATOR</p> <hr/> <p>No of Offenders : 2 No of Offences : 2</p> <hr/> <p style="text-align: center;">Rules Breached</p> <p style="text-align: center;">Not Carrying DL Identification Plates</p> <hr/> <p style="text-align: center;">Locations Where Offences were happened</p> <p style="text-align: center;">Nagashandiya Payagala</p> <hr/> <p style="text-align: center;">Total Cost of Fines : 2000</p>
Actual result	Display within date range report data
Conclusion	Expected result and actual result are matched

Test Case 128

Testcase id	129						
Scenario / objective	Generate report with location						
Test data	searchByLocationsReport.php (Location)						
Expected result	Display filtered by location report data						
Screen shot output	 <p>CEYLON TRAFFIC PAYMENT SYSTEM REPORT GENERATION FOR : Wadiyamankada</p> <table> <tr> <td>Location : Wadiyamankada</td> <td>No of Offenders : 1</td> </tr> <tr> <td colspan="2"><u>Rules(Offences) Breached</u></td> </tr> <tr> <td colspan="2">Not Carrying DL</td> </tr> </table>	Location : Wadiyamankada	No of Offenders : 1	<u>Rules(Offences) Breached</u>		Not Carrying DL	
Location : Wadiyamankada	No of Offenders : 1						
<u>Rules(Offences) Breached</u>							
Not Carrying DL							
Actual result	Display filtered by location report data						
Conclusion	Expected result and actual result are matched						

Test Case 129

Testcase id	130				
Scenario / objective	Generate report with offence				
Test data	searchByFines.php (Fines)				
Expected result	Display filtered offence report data				
Screen shot output	<p style="text-align: center;">CEYLON TRAFFIC PAYMENT SYSTEM REPORT GENERATION FOR : Identification Plates</p> <hr/> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: left; padding-bottom: 5px;">Offence Name : Identification Plates</td> <td style="width: 33%; text-align: right; padding-bottom: 5px;">No of Offenders : 1</td> </tr> <tr> <td colspan="2" style="text-align: center; border-top: 1px dotted black;">-----</td> </tr> </table>	Offence Name : Identification Plates	No of Offenders : 1	-----	
Offence Name : Identification Plates	No of Offenders : 1				

Actual result	Display filtered offence report data				
Conclusion	Expected result and actual result are matched				

Test Case 130

15.4. Test conclusion

Our actual result matched the predicted outcome, however we skipped several test cases in the test plan since they were unnecessary and there would be no unexpected outputs.

16.User Manual

LOGIN

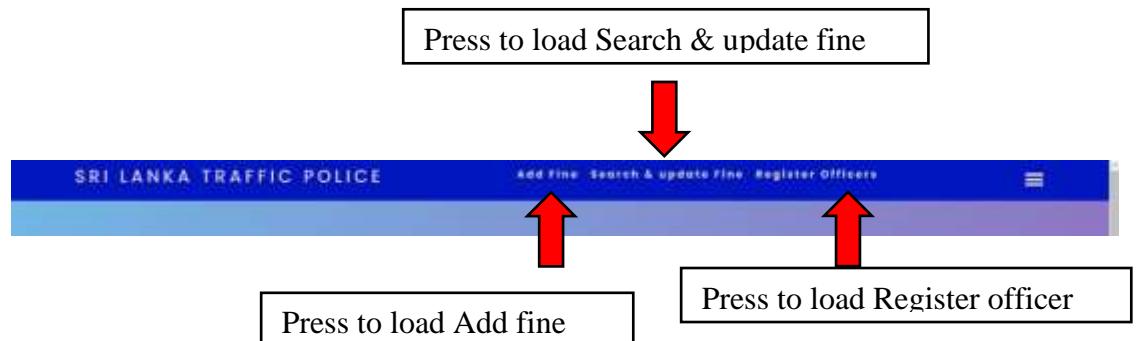


STEPS :-

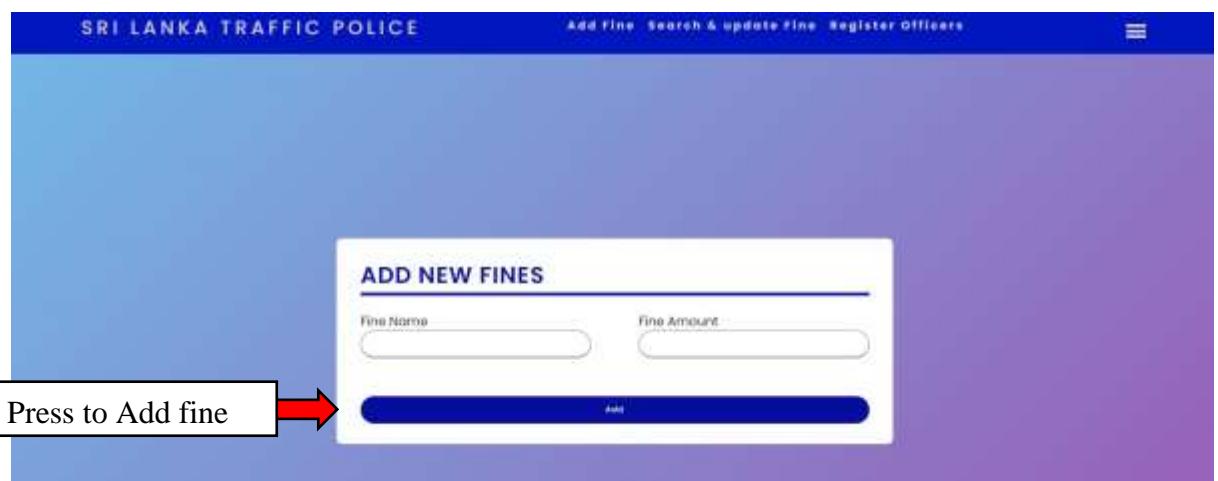
1. Insert Username
2. Insert Password
3. Select User Type Admin, OIC, or Traffic officer
4. Press Login button

Admin

Admin Header



Add Fine



Steps: -

1. Input fine name and fine amount in text fields
2. Press add fine to add a fine

Search Fine

SRI LANKA TRAFFIC POLICE Add Fine Search & update Fine Register Officers

SEARCH FINE DETAILS

Search

Fine ID	Fine Name	Amount	Update
1	Identification Plates	1000	Update
2	Not Displaying RL	1000	Update
3	Obstructing RL Plates	1000	Update

Steps: -

1. Search fine by id, name or amount in the text field
2. Press the update link to update any detail of a fine

Update Fine

SRI LANKA TRAFFIC POLICE Add Fine Search & update Fine Register Officers

UPDATE SRI LANKAN TRAFFIC FINE DETAILS

Fine ID Fine Name Amount Update

Enter updated fine ID Enter updated button

Enter updated fine Enter updated fine

Steps: -

1. Insert the field you want to update Fine name or Amount
2. Press update button

Register Officer

Enter text fie

Select Post

Select Gender

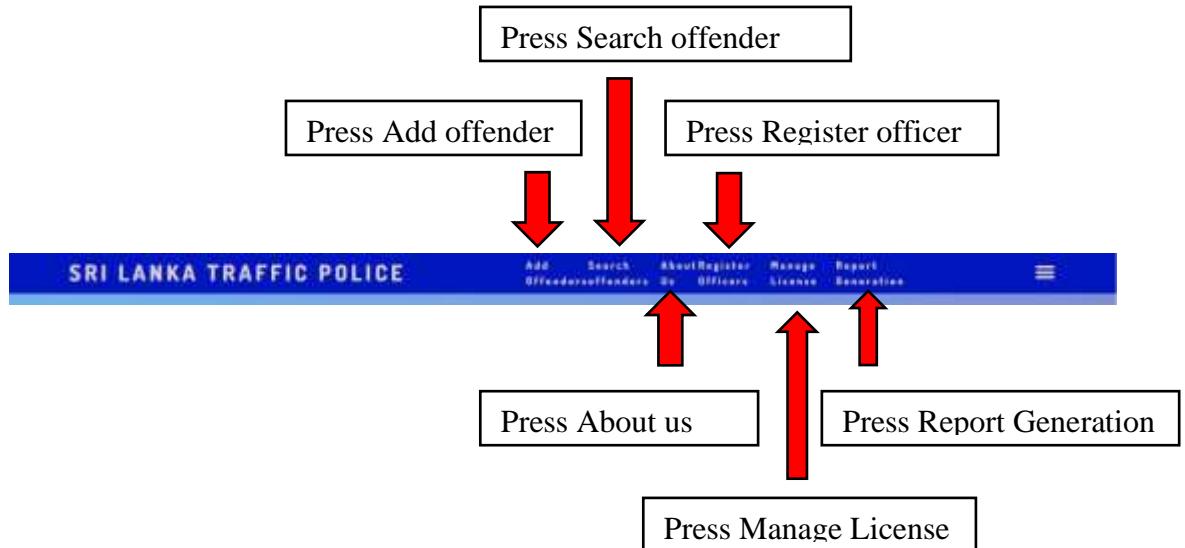
Click Register

Steps: -

1. Insert data in every text field
2. Select time, gender, and post
3. Press register button to register officer

OIC

OIC header



OIC About us



This is the page loaded for the OIC once he is logged in. In the header you can select the functionality which you want to perform in the system.

Add Offenders

OFFENDERS REGISTRATION

Offender NIC
Last Name
First Name
Street Number
Street Name
Telephone
Date Of Offense
Place
Due(Court) Date
Time
Gender
Name Of Offense
Competent To Drive

Add offender

Enter text file

Select Name of offence

Select Gender

Select Component to drive

Click Add offender

Here the OIC is loaded to a functionality performed by Traffic police officer. Which has the same interface

STEPS: -

1. Insert offender details in text fields
2. Select the dates and times from date and time pickers
3. Select gender, name of the offence and competent to drive
4. Press add offender button

Register Officers

Enter text file

Select Post

Select Gender

Click Register

Officer's Police ID
First Name
Username
Confirm Password
Telephone
Gender
Post
Police Station
Last Name
Password
Time Of Work
Email

Register

STEPS: -

1. Insert offender details in text fields
2. Select the gender, time of work and post
3. Press add offender button

Search Offenders

The screenshot shows a web-based application for searching offenders. At the top, there are links for 'Add Offenders', 'Search offenders', and 'About Us'. Below this is a search bar with the placeholder text 'Enter offender search details'. A red arrow points downwards towards the search bar. The main section is titled 'SEARCH OFFENDERS DETAILS' and contains a table with columns: Offender ID, Offender NIC, First Name, Last Name, Street Number, Street Name, City, Email, License Number, and Vehicle Number. Five rows of data are listed:

Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email	License Number	Vehicle Num
4	200011456388	Hassanage	Fernando	12	Church road	Negombo	hassanagefernando@gmail.com	2000236488	LJN 2354
8	108612366879	Upali	Nandana	56	Mahagoda Road	Katubera	upali.nandana055@gmail.com	2147483647	AXX 7440
10	200410630069	Rajew	Umeshu	316	Subothi Maweththa Kuda Wakkawewa	Katubera	rajewmeshuyetuvidumzakmi@gmail.com	1234567899	ABC 7440
14	200410000069	Rajew	Umeshu	316	Kuda Wakkawewa, Wakkawewa	Katubera	rajewmeshuyetuvidumzakmi@gmail.com	1234567899	ABC 7440
15	108694123965	BunAe	Sandosa	116	Possawana Road.	Katubera	bunae@gmail.com	2147483647	LJJ 9540

Steps: -

1. Search the offender by entering any of offender id, offender nic, first name, last name, street number, city, email, license number, vehicle number etc.

Manage license

Enter handout

Press handout date button

MANAGE LICENSE								
Offender ID	License ID	License No.	Received Date	Handout Date	Competent to Drive	Offender First Name	Offender Last Name	Set Handout Date
4	3	2000235469	2022-02-10	(mm/dd/yyyy)	A	Rasoranga	Fernando	<button>Set hand out Date</button>
8	3	3167483647	2022-02-10	(mm/dd/yyyy)	C	Upul	Nandana	<button>Set hand out Date</button>
10	4	1234567890	2022-02-17	(mm/dd/yyyy)	A	Bajaww	Umidu	<button>Set hand out Date</button>
14	5	1234567899	2022-02-17	(mm/dd/yyyy)	A	Rapseew	Umidu	<button>Set hand out Date</button>
16	6	3167483647	2022-02-17	(mm/dd/yyyy)	A	Bonuko	Sandeepa	<button>Set hand out Date</button>

Steps: -

1. Set the handout date by selecting the date field
2. Press the button Set hand out date.

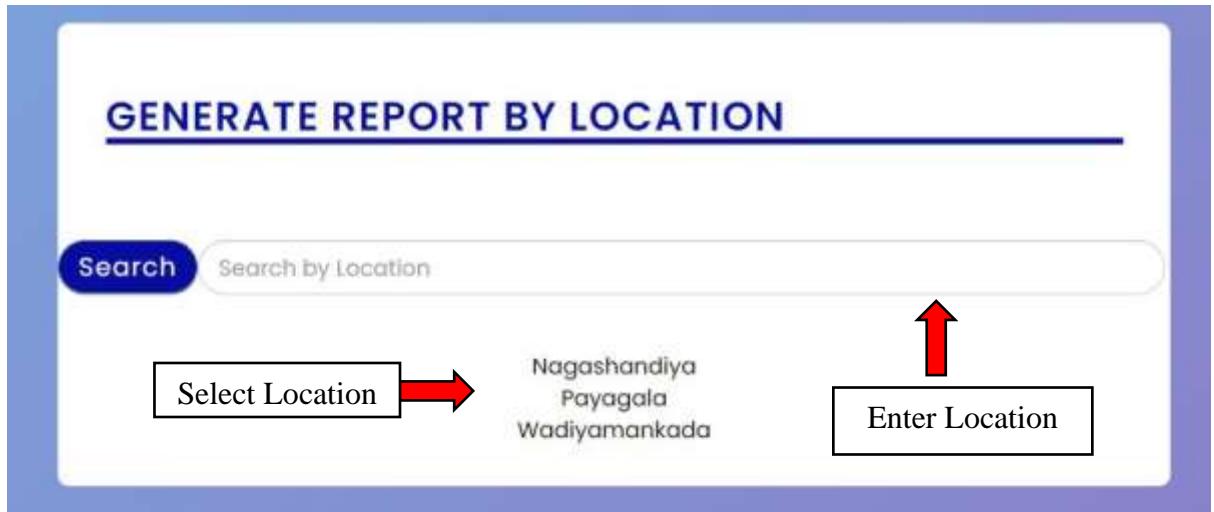
Report Generation (by date)



Steps: -

1. Select the from date and to date which you want to generate a report
2. Press the button generate report

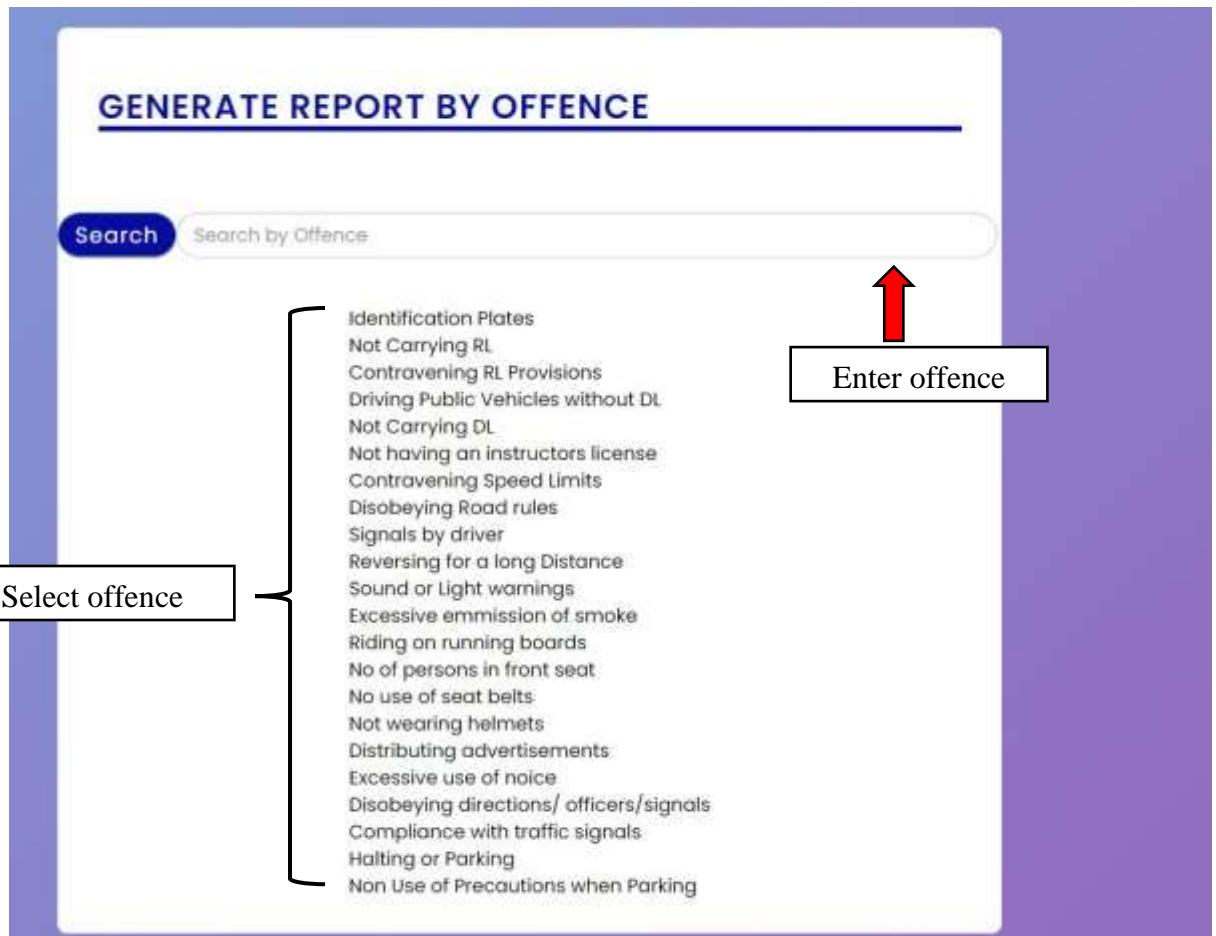
Report generation (location)



Steps: -

1. Search location which you want to generate reports in the text field
2. Select location to generate report

Report generation (by Fines)

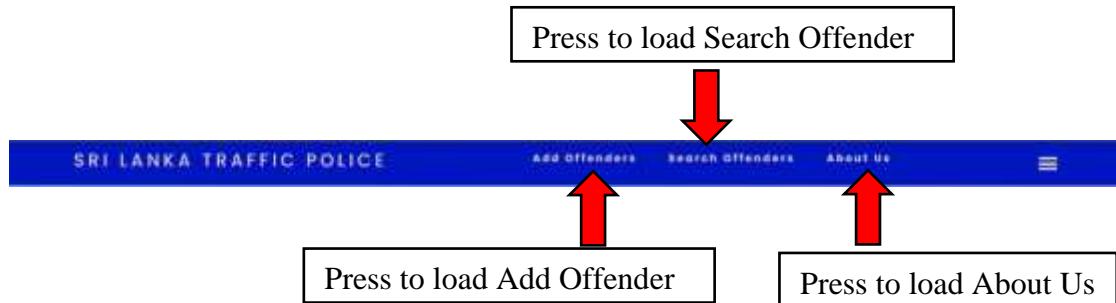


Steps: -

1. Search fine which you want to generate reports in the text field
2. Select fine to generate report

Traffic Police Officer

Traffic Police Officer header



Add Offenders

A screenshot of the "OFFENDERS REGISTRATION" form. The form is divided into several sections:

- Text Fields:** "Offender NIC", "Last Name", "Police ID", "First Name", "Street Number", "Street Name", "Email", "Telephone", "Date Of Offense", "Vehicle Number", "Time", and "Place".
- Date and Time Pickers:** "Due(Court) Date" (with a calendar icon), "Gender" (with a dropdown arrow), "Name Of Offense" (with a dropdown arrow), "Competent To Drive" (with a dropdown arrow), and "Place" (with a dropdown arrow).
- Buttons:** "Add Offender" (at the bottom of the form) and "Select Gender" (on the right side of the form).
- Text Boxes:** "Enter text file" (on the left side of the form) and "Select Name of offence" (with a red arrow pointing to the "Name Of Offense" dropdown).
- Callouts:** A large callout box on the right side contains the text "Select Gender" and "Select Component to drive". Another callout box at the bottom center contains the text "Click Add offender button".

STEPS: -

1. Insert offender details in text fields
2. Select the dates and times from date and time pickers
3. Select gender, name of the offence and competent to drive
4. Press add offender button

Search Offenders

The screenshot shows a web-based application for searching offenders. At the top, there are links for 'Add Offenders', 'Search offenders', and 'About Us'. Below this is a search bar containing the placeholder text 'Enter offender search details'. A red arrow points downwards from the right side of the search bar towards the search input field. The main section is titled 'SEARCH OFFENDERS DETAILS' and contains a table with columns for Offender ID, Offender NIC, First Name, Last Name, Street Number, Street Name, City, Email, License Number, and Vehicle Number. Five rows of data are listed:

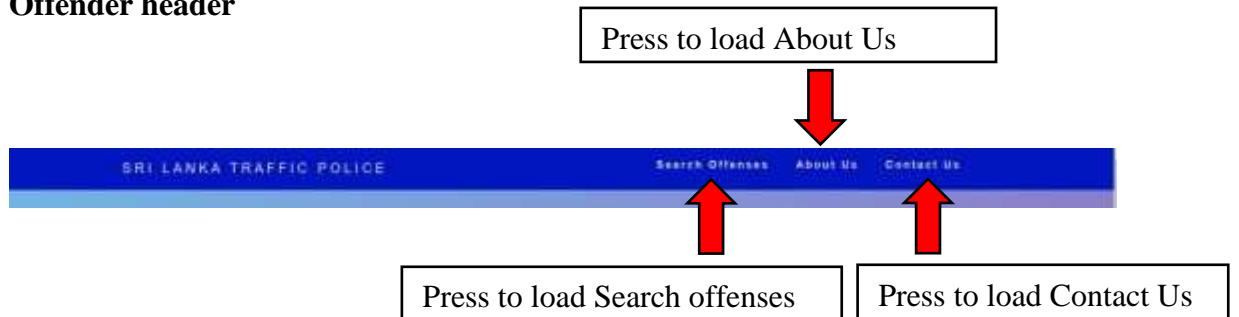
Offender ID	Offender NIC	First Name	Last Name	Street Number	Street Name	City	Email	License Number	Vehicle Number
4	200014254085	Hassim	Ramadas	12	Church road	Negombo	hassim@ramadas@gmail.com	2000235485	LK-2354
8	198012365805	Udu	Mandara	36	Maligoda Road	Katubata	udu.mandara555@gmail.com	2107A03647	AAK-7448
10	200410000008	Rajew	Uvindu	716	Subothi Mawame Kotta Wakkalwewa	Katubata	rajuheshuvindu.mawamekotta@gmail.com	1234567890	ABC-7449
14	200410000008	Rajew	Uvindu	716	Kudla Wakkalwewa Wakkalwewa	Katubata	rajuheshuvindu.mawamekotta@gmail.com	1234567890	ABC-7449
15	198004123688	Banuka	Sandape	115	Piparama	Katubata	banuka@gmail.com	2107A03647	LJ-7448

Steps: -

1. Search the offender by entering any of offender id, offender nic, first name, last name, street number, city, email, license number, vehicle number etc.

Offenders

Offender header



Search Offense by Offender NIC

A screenshot of a web page titled "SEARCH OFFENDERS DETAILS". At the top, there is a search bar containing the text "200410500009" and a "Search" button to its left. A red arrow points upwards from a callout box labeled "Enter offender search details" towards the search bar.

Steps: -

1. Insert offender NIC in the text field
2. Press the search button to search offender details

Download and Pay Offense

The screenshot shows a search results page for offenders. At the top, there are links for 'Search Offenses', 'About Us', and 'Contact Us'. Below that, the title 'SEARCH OFFENDERS DETAILS' is displayed. A search bar contains the number '200410500009'. The results table has columns: City, License Number, Vehicle Number, Date Of Offense, Due Court Date, Time, Place, Name of the Offense, Offense Amount, Competent to Drive, Officer Name, and Status. Two rows of data are shown:

City	License Number	Vehicle Number	Date Of Offense	Due Court Date	Time	Place	Name of the Offense	Offense Amount	Competent to Drive	Officer Name	Status
Kalutara	1234567899	ABC 7440	2022-02-17	2022-03-03	01:32:00	Nagashandya	Exceeding Speed Limit	3000	A	Indra	Paid
Kaluthuw	1234567899	ABC 7440	2022-02-17	2022-03-03	03:50:00	Punggol	Not Carrying DL	1000	A	Indra	Paid

Two callout boxes with red arrows point to specific links in the results table:

- A box with a downward-pointing red arrow contains the text: 'Press print to download payment receipt'.
- A box with an upward-pointing red arrow contains the text: 'Press download to download fine'.

Steps: -

1. After searching press download link to download the fine
2. Press pay link to do the payment for the fine
3. If paid the print is displayed, press print to download the payment receipt

Do the payment

PAY FINES

Accepted Cards

VISA

Name On Card

Card Number

1111-2222-3333-4444

Expire Date

mm / dd / yyyy

CVV

352

Payment Method

Visa

Pay Now

Enter card details

Press Pay Now button

Steps: -

1. Enter the correct details in text fields
2. Select expire date and payment method
3. Press pay now button to do the payment

Contact us

The screenshot shows the 'CONTACT SRI LANKAN TRAFFIC POLICE' form. It includes fields for First Name, Last Name, Email Address, Phone Number, and a large message area labeled 'Your Message'. A red bracket on the left points to the first four fields, and a red arrow points to the 'Send' button at the bottom.

SRI LANKA TRAFFIC POLICE

Search Offenses About Us Contact Us

CONTACT SRI LANKAN TRAFFIC POLICE

First Name _____ Last Name _____

Email Address _____ Phone Number _____

Your Message
Write something...

Send

Steps: -

Press Send button

1. Insert data in all text fields
2. Enter your message in the message text area
3. Press the send button to send the email

About Us



The screenshot shows the homepage of the Sri Lanka Traffic Police website. At the top, there's a blue header bar with the text "SRI LANKA TRAFFIC POLICE" on the left and navigation links "Search Offenses", "About Us", and "Contact Us" on the right. Below the header is a large purple banner featuring several photographs of traffic police officers in uniform, some on motorcycles, performing their duties. To the right of the banner, the text "About Us" is followed by a section titled "Ceylon E-Traffic Fine Payment System". A brief description of the Traffic Police's role is provided, mentioning it is a specialized unit of the Sri Lanka Police responsible for overseeing and enforcing traffic safety compliance on roads and highways. It is headed by the Director of Traffic, a senior-level or senior-gazetted officer of the rank of Deputy Inspector General of Police. A "Read More" button is located at the bottom of this section.

Admin footer



This screenshot shows the "About Us" section of the Admin footer. It includes contact information for the Colombo office: "Sri Lanka TrafficPolice", "Colombo", "+94 342 237 226", and "colutoronnorth@police.lk". There are also social media icons for Facebook, Twitter, and YouTube. The main content area on the right contains the same "About Us" text and fine payment system information as the main page.

Press any to navigate

OIC footer



This screenshot shows the "About Us" section of the OIC footer. It includes contact information for the Colombo office: "Sri Lanka TrafficPolice", "Colombo", "+94 342 237 226", and "colutoronnorth@police.lk". There are also social media icons for Facebook, Twitter, and YouTube. The main content area on the right contains the same "About Us" text and fine payment system information as the main page.

Press any to navigate

Traffic officer footer



Press any to navigate

Offender footer



Press any to navigate

CHAPTER 06

17.Limitations for the project

technical limitation

- Internet Reliance - The internet's one drawback is that it is not yet available everywhere. Users won't be able to use the web app if internet goes down or if there's no area that hasn't been linked yet.
- Compressed pages – Many pages are compressed into an order that differs from how they would be seen on a desktop computer when they are converted to mobile format.
- Reduced performance - A web app is likely to be slower than an application housed on an organization's server. Must evaluate whether a minor decrease in speed is worth the global access.
- Message size - The number of characters that may be transmitted in an email message is limited on several devices.
- The performance of JavaScript -Despite years of effort, the interpreted nature of JavaScript causes it to be several times slower than native code. It will take much longer to process media. Browsers are working on gaining access to the GPU, but it isn't quite there yet. JavaScript will be the largest sticking point. Every major browser supports this language, which has sadly become the defacto standard for web logic. The clumsy JavaScript language is one of the key reasons web frameworks were created in the first place: to alleviate JavaScript's unpleasant behavior and enhance its interaction.
- Hardware limitations- To access the website, need of the portable devices with web browsers is essential for the officials(admin, police officers & traffic OIC)
- There is no actual payment gateway created and we are unable to host this website in a server because this is a pilot project with no actual client, but we defined card details for demonstration purposes and may pay with those data.

non-technical limitations

- Click and mortar businesses demand more extensive employee (police officers) training.
- People's opposition to change current system.
- People's opposition to transactions that aren't face-to-face, paperless, or non-physical.

18.Lesson Learned

This is the first phase, in which the need for lessons learned is determined, and the method and team that will collect the lessons is formed. It's critical to determine the exact need and goal for lessons, as well as the target audience for the product and who should be on the project team. All-important parties' initial commitment should be secured prior to the start of the project. Select personnel with project-specific experience or knowledge, as well as other necessary abilities such as communication. The team should next agree on a product format (duration, style, and presentation), data collecting and analysis procedures and processes (e.g., surveys, questionnaires, workshops), distribution plan, and other necessary activities until finishing the implementation.

To come up with best solution for the current system drawbacks

We learnt to examine the present system with the stated limitations after obtaining all of the needs from the necessary parties. Then, after consulting with all members of the project team, particularly the system analysts, we arrived at the optimum option. As a result of that, we learned how to talk about and come up with the best solutions for shifting requirements.

To manage project team with a huge workload(to manage time)

Despite the fact that this was a piolet project, our project team had a lot of work to complete. Additionally, because our project team consisted of four people, time management was difficult due to the heavy effort. Furthermore, some team members became ill, making the task more difficult to manage among the available personnel. However, with the best project management abilities, we learned how to properly manage the workload and time when working on a huge project like this.

To design website

Requirements were changed from time to time during supervisor sessions. As a result, the system analysts on our team had to redo many of the diagrams. The database engineer was unable to create the database since the diagrams were changing time to time. As a result, we had to wait. However, we could manage all of those tasks with effective time management. As a result, we discovered that structured oriented architecture is incompatible with these types of projects, where requirements change frequently.

To implement and debug the website

Expertise developers provided us some suggestions and guidance. Then we learnt to put those ideas into action by locating the appropriate resources. When errors occurred during development, we discovered that the time allocated was insufficient. As a result, we had to extend our working hours and could meet the expected outputs.

19.Future recommendations

- This project is being developed as a trial project for a single police station; however, we can develop/expand this website for the entire country.
- By using animations and meaningful indicators, we may improve the user experience.
- We can add GPS locations to get officer location in website.
- We can improve this system with the court system
- We can propose this system for Sri Lankan traffic police organization and host in a server with that we can develop the actual payment gateway
- Instead of traffic police officers identify people who breach traffic rules manually we can use CCTV and SMS systems to identify offenders
- Can improve to send an email to offenders along with the spot fine statement
- Can use QR Code for payment
- We can implement a separate section where citizens are eligible to add a media like picture, video to inform about breaching of law.

Conclusion

This web application is related to traffic fine payments system which deserved the name of CEYLON E-TRAFFIC FINE SYSTEM. This project is a pilot project which comes under government sector where the client is an imaginary client. However, we could get many advantages from the overall project such as how to conduct research, risk analysis, literature reviews, how to solve doubts and issues, how to gather requirements needed, how to do the analyzation properly, how to manage time effectively, how to overcome from errors which are arising when writing the code and so on. Further, we were able to create budget plans, WBS and Gantt charts as well. More importantly, the first task of getting the approval is completely a new, experience for our project team. Finally...with all above mentioned details and our proper time management, we could prepare a successful document as well as the completed web application “Ceylon E-traffic Fine Payment System”. Thus, we hope this final project of the Higher Diploma in Software Engineering been a great help for all of our project group members to get learnt about Web Designing and to prove that we have successfully completed the Higher Diploma in Software Engineering. Moreover, during this project, we learnt about more stuffs which are essential in designing and about coding. Developing of this web application as our final project gave us the chance to try our new skills in practice. Specially, this recalled our knowledge gained in all modules. So, we have built the web application in a user-friendly manner including (functions). While doing this project we also gained deep understanding on web designing as well as on coding and how it can be implemented in real life situations. Thus, we believe that this was a great chance for us to improve our web designing skills, computer programming skills, backend development skills, database designing skills, user interface designing skills, diagramming skills, management skills and so on. Finally, we have come up with various solutions in current problems in issuing and paying fines which we mentioned many things regarding that previously. Hope this project will be more advantageous for both traffic fine departments and also for citizens.

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