

E-Complaint Box for Cell Phone Driving

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ABSTRACT

E-Complaint Box for cell phone driving is a web and mobile supported application which has been designed and developed to bring the public involvement to complain the drivers who are using cell phone while driving. The project facilitate the public to upload the live picture of the drivers who are simultaneously using cell phone while driving. By reviewing various articles about the road accidents, it has been noted that about 4 Lakhs 21 thousands of people were injured in crashes that have involved a driver who was distracted in some way. According to the existing study, more than 3 Lakhs 30 thousands accidents caused by texting while driving lead to severe injuries in a year averagely. This means that over 78% of all distracted drivers are distracted because they have been texting while driving. Anything that takes the driver attention away from driving can be a distraction. Sending a text message, talking on a cell phone and using a navigation system while driving are a few examples of distracted driving. Any of these distractions can endanger the driver and others.

Keywords: Cell Phone Driving, Mobile Accidents, Road Accidents, Global Solutions, Global Solutions Coimbatore, Anand global solutions

1. INTRODUCTION

E-complaint box for cell phone driving has been designed with four major roles such as Public, Police station, RTO (Regional Transport Office) and the Administrator. The public are the main lead of the concept who are going to capture the driver through their mobile phone camera and upload the picture to the server. The server connects the uploaded picture to the nearby station. Then the complaint will be track by the police authority as per the vehicle number plate displaying in the vehicle. The tracking section consists of three stages such as waiting list, action against complaints and request RTO.

The stages are described below,

- Waiting list - If the vehicle number plate has not been clear, then the complaint is in waiting list.
- Action against complaints - If the record of the vehicle number plate has already exists in the police station, then the decision making will be taken about first offense fine or subsequent offense fine or to for license cancellation.
- Request RTO – If there is no record available to the complaint's vehicle number, then the complaint has been transferred to RTO. The RTO will help the police station to fetch the address of the vehicle number.



Fig 1: Home Page for Administrator, Public, Police Station and RTO.

The Public and Police registration are the main gateway to access the application. The Police from each station can register their details and get into the main menu of the E-complaint box. In the other side, the public can register the details and get into the post complaint form. In the post complaint form, the public can post the live picture of the drivers who using mobile phone while driving. The Administrator will approve the complaints before proceeding to the police station to avoid unrelated complaints. This picture will be uploaded in the post complaint form with the location details. Based on the location details, the concern picture will be filtered and displayed to the particular station. The police will get the driver details address by seeing the number plate

of the vehicle. Once the driver has been charged by the police, the public who uploaded the picture will get some credit points.

In order to motivate the public to take interest in finding the drivers using a cell phone while driving, the credit points have set with some stages. For example, if the credit point of one public reached 500 means, then some reward will be given by the department. These process will continue with stages and the drivers will be punished by the police department. Sure this system will bring fear to the public that not to use a cell phone while driving.

The screenshot shows a web application interface for 'E-Complaint Box for Cell Phone Driving'. At the top, there is a banner with a photo of a driver on a cell phone, a 'NO CELL PHONE USE WHILE DRIVING' sign, and an illustration of a motorcyclist. Below the banner is a navigation menu with 'Home', 'Administrator', 'Public', 'Police Station', and 'RTO'. The main content area is titled 'PUBLIC REGISTRATION' and contains the following form fields:

Public ID	<input type="text" value="1526"/>
Name	<input type="text" value="Anand"/>
Gender	<input type="text" value="Male"/>
Address	<input type="text" value="No.206-3,2nd Floor,7th Street, 100 feet road, Gandhipuram, Coimbatore."/>
Mobile Number	<input type="text" value="9843462104"/>
Email ID	<input type="text" value="mailto:anandcbe@gmail.com"/>
Create Password	<input type="password" value="*****"/>
<input type="button" value="Register"/>	

Fig 2: Public Registration Form

1.1 PROJECT OBJECTIVE

- To develop a web application to the society which involves the public, police, and RTO to come forward to reduce the vehicle road accidents due to using a mobile phone while driving.
- To allow the public to register into the proposed web application and post the complaints who are using a mobile phone while driving.
- To protect the personal information of the public from the police station and RTO in order to welcome all the public to post complaints without any fear.
- To help the police station to track the complaints easily with the connected RTO System.

Fig 3: Public Login Form

Fig 4: Public – Post Complaints Form

PUBLIC

1. Public Registration and Login

The public can register the details with their primary details including the name, gender, address, mobile number, email id, username and password to post the complaints. Once get register with the details, the entered username and password have been validated with the database. Once registration completed, the public will be allowed to get login to

the system. The registration details and the communication details of the public will be kept confidential.

2. Public – Post Cell Phone Driving Complaints

Once the user gets login to the system, the user navigates to the main menu to post the complaints capturing the person who uses cell phone while driving the vehicle with the location details where the photo has been taken. The user is advised to take the photo of the vehicle including the number plate so that it will be easy to take action against the person immediately by the police officials with the help of Regional Transport Office (RTO).

3. Complaints History

The public can view the complaints posted by themselves. In addition, the public can track the complaints month wise and the details about the complaints such as action taken or not, license canceled or not.

4. View Reward Points

The police officials will reward the public with reward points for each complaint posted by the public. The reward points are set with various stages like bronze category, silver category, Gold Category and Diamond Category. These publics will be motivated in any of the government functions with medals by the higher officials.

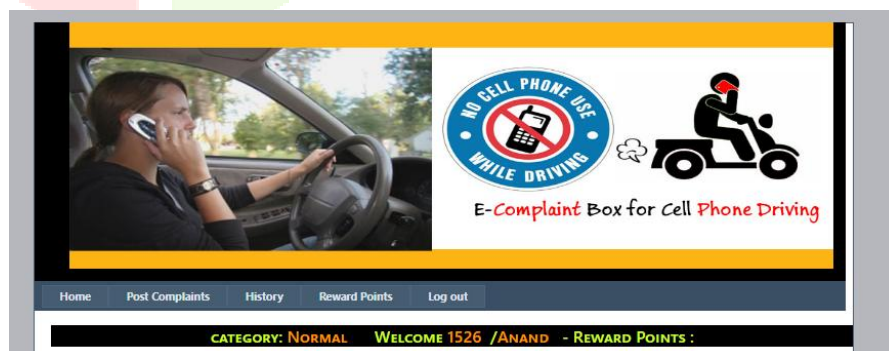


Fig 5 : Public – View Reward Points in their Menu

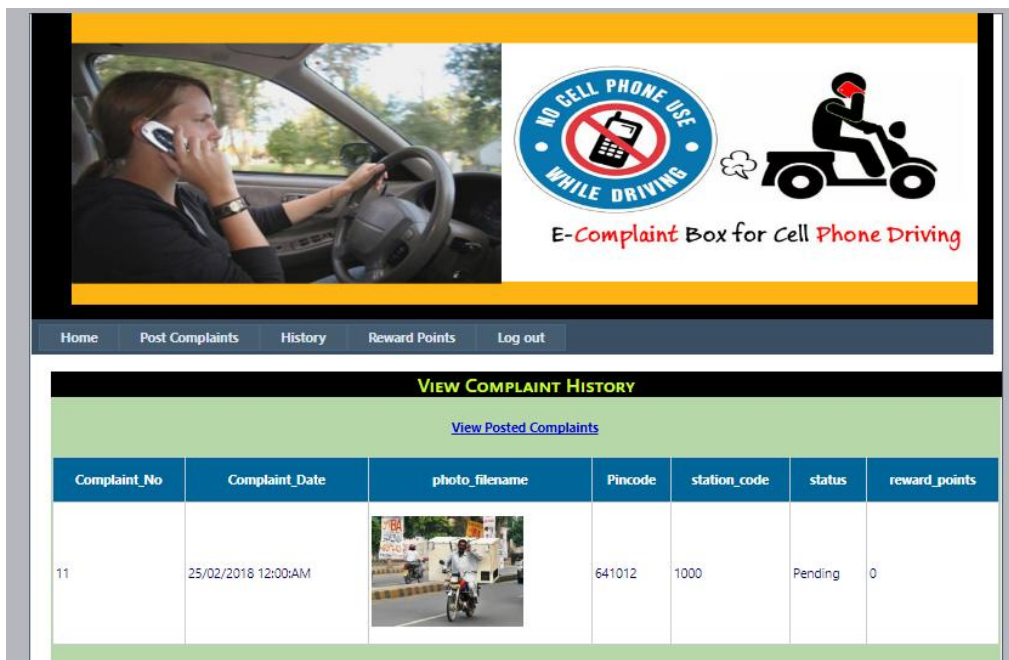


Fig 6: View Complaints History Form

POLICE STATION

1. Police station Registration and Login

The police station is allowed to register the details including the inspector details of the station, sub-inspector details and other communication details of the station followed by username and password. The station incharge can login to the system by entering the username and password with valid authentication rights.

2. Track Complaints

The police officials track the complaints according to station wise. Based on the station wise, the complaints will be displayed to the officials. They will search the vehicle number records in the centralized database. If the records are available, then the police officials proceed to take action against the person. If the records are not available, then the request has been made to the Regional Transport Office (RTO) in order to get the accused communication address details.

3. Action against Complaints

The action against complaints are listed as the first Offence are charged with some amount and the subsequent Offence are charged with some amount. These details are allowed to store in the centralized database and these will be helpful to the officials to track the accused next time for subsequent offense.

4. License Cancelled

Based on the seriousness of the complaints, the police officials can also have an option to cancel the license of the accused. These details are also allowed to store in the centralized database.

5. Complaint closing and Reward Point

Once the complaint has been fixed, it will be notified in this form and the reward point will be allocated to the public who post the complaint.

The screenshot displays a web application interface for 'STATION REGISTRATION'. At the top, there is a banner with a photograph of a driver on a mobile phone and a circular sign that reads 'NO CELL PHONE USE WHILE DRIVING'. To the right of the sign is an illustration of a motorcyclist. Below the banner is a navigation bar with links for 'Home', 'Administrator', 'Public', 'Police Station', and 'RTO'. The registration form itself has a green background and includes the following fields: 'Station Code' (pre-filled with 1689), 'Station Name' (with a 'Field is Empty!' warning), 'Email ID', 'Address' (a large text area), 'District' and 'State' (dropdown menus), 'Station Pincode', 'Incharge Name', 'Mobile Number', and 'Password'. A 'Register' button is located at the bottom of the form.

Fig 7: Police Station Registration Form

Home Administrator Public Police Station RTO

STATION LOGIN

Station code:

Password:

[New Station User - Click Here](#)

Fig 7: Police Station Login Form

Home Post Complaints History Reward Points Log out

WELCOME - 1000 / T1-STATION : PINCODE - 641012

Select the complaints





 10/02/2018 06:10:PM Complaint No: 3 Description: Careless Status: Pending	 10/02/2018 06:13:PM Complaint No: 6 Description: Cell Driving Status: Pending	 10/02/2018 06:10:PM Complaint No: 9 Description: Careless Status: Pending	 20/02/2018 03:01:PM Complaint No: 10 Description: rash driving Status: Tracking
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Fig 8 : Track Complaints Form - #1

	
	
10/02/2018 06:12:PM	10/02/2018 06:13:PM
Complaint No: 4	Complaint No: 7
Description: Rash Drive	Description: Cell Driving
Status: Pending	Status: Pending

Fig 9 : Track Complaints Form - #2

Regional Transport Office (RTO)

1. RTO Registration and Login

The RTO incharge has been allowed to register the details with username and password to access the entire system. The username and password have been validated with the database and allowed for further access.

2. Track Requested complaints

The complaints requested by the Police officials have been tracked by the RTO incharge and the accused communication details will be entered in the accused communication form. These details will be updated to the police officials and the Administrator in order to help them to take action against the accused.

Home Post Complaints History Reward Points Log out

RTO REGISTRATION

RTO ID

RTO Incharge Name

RTO Section

Address

State <-- Select -->

District <-- Select -->

Mobile Number

Email ID

Password Field is Empty !

Register

Fig 10 :RTO Registration Form

Home Administrator Public Police Station RTO

RTO LOGIN

RTO ID Field is Empty !

Password Field is Empty !

Login

Fig 11 : RTO Login Form

ADMINISTRATOR

1. View Registered Public

The Administrator can view the registered public details under area wise and also reward pointwise such as bronze category, silver category, Gold Category, and Diamond Category.

2. View Registered Police Station

The administrator can also view the registered police station details. Additionally, they can track the actions and complaints taken by station wise.

3. View Registered Complaints

The administrator can also view the registered complaints with categories such as completed complaints, pending complaints and suspense complaints and also RTO review complaints.

4. View License Cancelled Details

The administrator can also view the license canceled details and also track which public posted and which station took action against this license cancellation. These details are kept confidential inside Administrator side itself.

EXISTING SYSTEM

There is no connected database application system designed for complaining about the drivers using a mobile phone while driving. Most of the time, the drivers can know the basic judgement of police checking stop in their usual way. So, the drivers tactically use mobile phone in their usual way to work or home without getting caught at police. In another scenario, less common sense drivers who always use mobile phone which is in danger of extinction to the public who comes in opposite direction without noticing the road rules. The main drawback of these drivers is mostly not yet caught by the police because of judgement driving without getting noted from the traffic inspector's eyesight. But they usually fall in the public's eye view while they are using a mobile phone in driving. This is the main loophole for the proposed system to develop into a new projection.

DRAWBACKS OF THE EXISTING SYSTEM

1. There is no application designed to connect the public to report the cell phone driving complaints to the police station.
2. The public does not show any interest to complain because of privacy and safety consideration.
3. Majority of the accidents are happening still due to carelessness of the entire public.

4. Only a few percent of the drivers are caught to police due to cell phone driving, but most of the cell phone using drivers while driving are caught to public but the public is not interested to take any action.
5. The cell phone driving complaints are maintained manually or in a low level system such as Excel sheet in the police station.

ADVANTAGES OF THE E-COMPLAINT BOX FOR CELL PHONE DRIVING

1. A new innovative application has been designed to connect the public and the police to catch the cell phone driving people in an effective and secure manner.
2. The public is allowed to report the cell phone driving people easily by just uploading the photos taken while the people using mobile in driving. The registered number plate can enable the police officials to track the accused easily.
3. The public details are maintained in a secure way and they are motivated by reward points in category wise such as Diamond Category, Gold Category, Silver Category and Bronze category.
4. The accidents ratio will get down due to the impact of proposed system.
5. People are more cautious to use mobile phone in driving in front of public itself.
6. The cell phone driving complaints are maintained in a single database.
7. Tracking of cell phone driving complaints or offense details are very easy.
8. The Public who tagged with various categories such as Bronze, Silver, Gold and Diamond are welcomed by the administrator automatically through email alert to receive the medals in their local authorized government schools during the national celebration days.

CONCLUSION

E-complaint box for has been designed in an efficient way to welcome the public to report the mobile phone using persons while driving. The reports are submitted in the form of photo click with the area pin code taken. With the help of area pincode, the concern complaint has been navigate to the concern station code who belongs to the particular pincode. In the station module also, the police can have the privileges such as to track the address of the complaints with vehicle number plate. The tracked address can be a move to action against complaints or license cancellation. Non-trackable vehicle number plate are moved to RTO for requesting address. Several point allocation system has been introduced for public to motivate them to continue the

post complaining services. The proposed system are highly integrated together with public, station and the RTO to reduce the vehicle road accidents in the forthcoming year.

It has been most expected that if all the public start using this web application like a viral and start posting the complaints, then the drivers will get afraid of using mobile phone in front of public also. This will lead to reduce the number of accidents globally and safeguard all the families. *“Every new idea is a joke, until one achieves it”* is a good motivational quote which exactly suitable to this E-Complaint box for Cell Phone Driving.

