

Law And Order Automation

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Keywords: paperless, national platform, law and order.

Abstract: "Law and Order Automation" is an online comprehensive crime reporting system to engage citizens, police-officers, CID to be more quick pro-active and responsive to fight with crime and criminals. It is an online portal for citizens to communicate with administrative body. It provides safety & security and basic law & order of the city.

"Law and order" online interface is a powerful conservative theme. This online interface can be used to dissolve a liberal consensus about crime that involved federal court decisions and a pushback against illegal drugs and violent gang activity. This online system will maintain public order and security prevent. It can also investigate crime and forward investigated cases to a prosecutor for decision (consideration of charges).

It is a virtual portal to provide extensive information to a diverse public with varying interests and needs. It also serves as a platform to promote collaboration and continued communication.

1. INTRODUCTION

A. Necessity of this online interface: Urban life is getting complicated, fast paced livelihood, intense competition; struggle to maintain work-life balance and a coordinated balance between social and personal life is challenging the 21st urban dwellers every day. To add on to these complications, crimes are increasing day by day in the city. Starting from logging grievance or complain to follow-ups on the resolution, city dwellers had to beat around the bush most of the time to get their job done. We being citizens of one of the biggest metropolis of India can feel the problem day in and day out and it is very difficult to keep track of any developmental activities that they have to deal with urban authorities. Interaction with city authorities has become immensely painful and time consuming.

We have complete faith on our police department, but at the same time we realize

that it is difficult to manage and cater to the needs of each and every citizen in a timely fashion.

Thus, we decided to come up with a system that will not only help the urban population to work effectively with the city authorities but also save time and money for all the stakeholders involved.



B. Basic challenges:

- ➔ Our website will enhance community participation, which is essential to promote a philosophy of Prevention, Intervention and Enforcement as we work together to increase information sharing, combat crime, and reduce the fear of crime.
- ➔ We believe that automation of many of the regular, administrative and documentation activities will relieve the burden from the police department and allow them to focus more on value added activity.
- ➔ It provides at least a first pass of a bigger solution, which can help general public of the city and the society as a whole.
- ➔ This website creates awareness among all the citizens.

AWARENESS TO THE COMMON PEOPLE:

There are so many rules regarding eve teasing, road accidents etc., which is generally unknown to the common people.

For such reasons, when some these type of incidents take place, then the common people are reluctant and avoid rescuing them due to police harassments.

We are trying to enlighten the actual rules to the common peoples through this websites, so that these type situations do not take place in further future.

Through this website, we can aware the citizens regarding dowry, torture to the women, child labor, etc. or they can contact with different **NGOs/ Human Right Commission** functioning in the country through this website.

Necessity of spreading awareness among citizens:

Presently, it observes that the crimes like eve teasing, rape are increasing in the society.

The observation chart is given for easy accessible of common people:

City	Molestation (Sec.354 IPC)			Sexual Harassment (Eve-Teasing) (Sec.509 IPC)		
	I	R	P	I	R	P
(2)	(15)	(16)	(17)	(18)	(19)	(20)
BENGALURU	251	4.4	7.2	35	0.6	2.1
CHENNAI	42	0.7	1.2	10	0.2	0.6
DELHI (CITY)	491	3.8	14.1	113	0.9	6.8
HYDERABAD	295	5.3	8.5	63	1.1	3.8
KOLKATA	201	1.5	5.8	90	0.7	5.4
MUMBAI	400	2.4	11.5	101	0.6	6.1
TOTAL (CITIES)	3477	3.2	100.0	1657	1.5	100.0

CHART 1: REPRESENTING INCREASING RATE OF SEXUAL HARRASMENT IN THE CITIES

Sl.No.	City	Molestation (Sec.354 IPC)			Sexual Harassment (Eve-Teasing) (Sec.509 IPC)		
		I	R	P	I	R	P
42	BHOPAL	187	12.9	5.4	20	1.4	1.2
49	INDORE	256	15.6	7.4	50	3.1	3.0
50	JABALPUR	84	7.5	2.4	19	1.7	1.1
53	KANPUR	109	4.1	3.1	210	7.8	12.7
56	LUCKNOW	147	6.5	4.2	240	10.6	14.5
69	VIJAYAWADA	177	17.5	5.1	198	19.6	11.9
70	VISHAKHAPATNAM	95	7.1	2.7	54	4.1	3.3
TOTAL (CITIES)		3477	3.2	100.0	1657	1.5	100.0

I - Incidence R - Rate of Crime P - Percentage share

CHART 2: REPRESENTING INCREASING RATE OF SEXUAL HARRASMENT IN THE CITIES

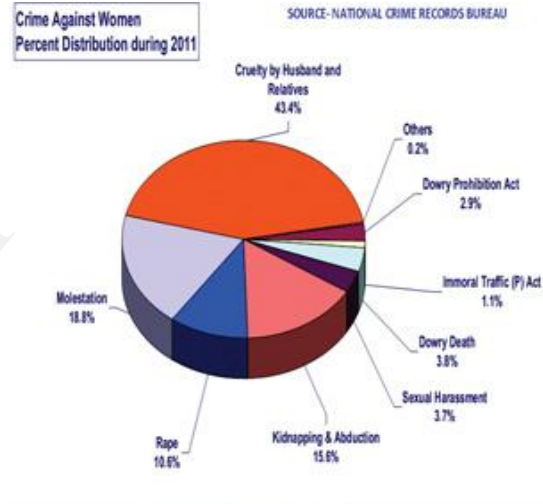


CHART 3: REPRESENTING INCREASING RATE OF CRIMES IN THE CITIES

Thus it has become a necessity to spread awareness among all the citizens, so that the people can live safely and happily in the society and such awareness can be spread through our website.

2. OTHER RELATED WORKS IN THIS FIELD

While doing the research, we came across several websites offering the maintenance of law and order in the city, but they had many weakness. 29 states(Mumbai^[1] Delhi^[5], Andhra Pradesh^[2], Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa^[4], Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka^[3], Kerala^[7], Madhya Pradesh, Maharashtra,

Manipur^[6], Meghalaya^[8], Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand (Uttaranchal), and West Bengal) has their own online interface which provide to.

But these websites does not provide:

1. Does not provide state to state and country to country communication with police-officers and citizens through online.
2. Does not provide online complaint status checking, getting application verification through email.
3. Does not provide sharing case diary with other police-stations.
4. Does not provide of checking complaint status and application status through online.
5. Does not provide any confirmation through sms services or email services.

We have tried to overcome the above mentioned problems of different websites and we have achieved to implement our website more effectively which are discussed below.

3. MAINTAINING LAW AND ORDER IN THE CITY

In our website, citizens can log complaints, and can apply for licenses.

Here, we have provided a facility where citizen can make emergency complaint and the corresponding police-officer gets an immediate SMS and responds to it. Also, the citizen can make a report missing persons, report missing valuables and can report about wanted criminals.

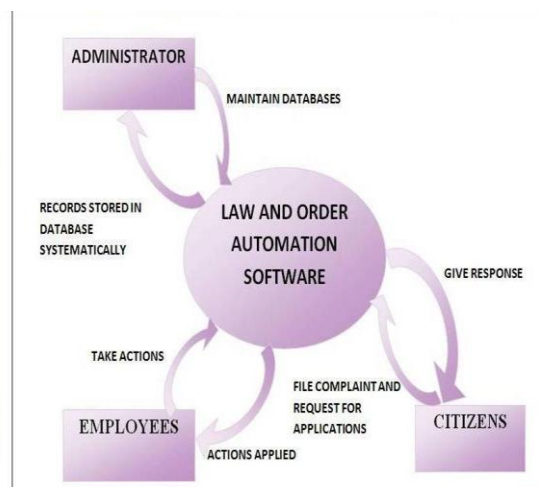


FIGURE 1: DATA FLOW DIAGRAM

In politics, **law and order** refers to demands for a strict criminal justice system, especially in relation to violent and property crime, through stricter criminal penalties. These penalties may include longer terms of imprisonment, mandatory sentencing, three strikes laws, and in some countries, capital punishment.

Supporters of "law and order" argue that an effective decisions combined with interaction is the most effective means of crime prevention. Opponents of law and order argue that a system of harsh criminal punishment is ultimately ineffective because it does not address underlying or systemic causes of crime.

"Law and order" is a recurring theme in political campaigns around the world.

Candidates may exaggerate or even manufacture a problem with law and order, or characterize their opponents as "weak" on the issue, to generate public support. The expression also sometimes carries the implication of arbitrary or unnecessary law enforcement, or excessive use of police powers.

The **police** are a constituted body of persons empowered by the state to enforce the law, protect property, and limit civil disorder. Their powers include the legitimized use of force.

The term is most commonly associated with police services of a state that are authorized to exercise the police power of that state within a defined legal or territorial area of responsibility. Police forces are often defined as being separate from military or other organizations involved in the defense of the state against foreign aggressors; however, gendarmerie and military police are military units charged with civil policing.

Law enforcement, however, constitutes only part of policing activity.

Policing has included an array of activities in different situations, but the predominant ones are concerned with the preservation of order.

In visiting our website one will find it to be both interactive and easy to navigate. It contains a wealth of resources and information.

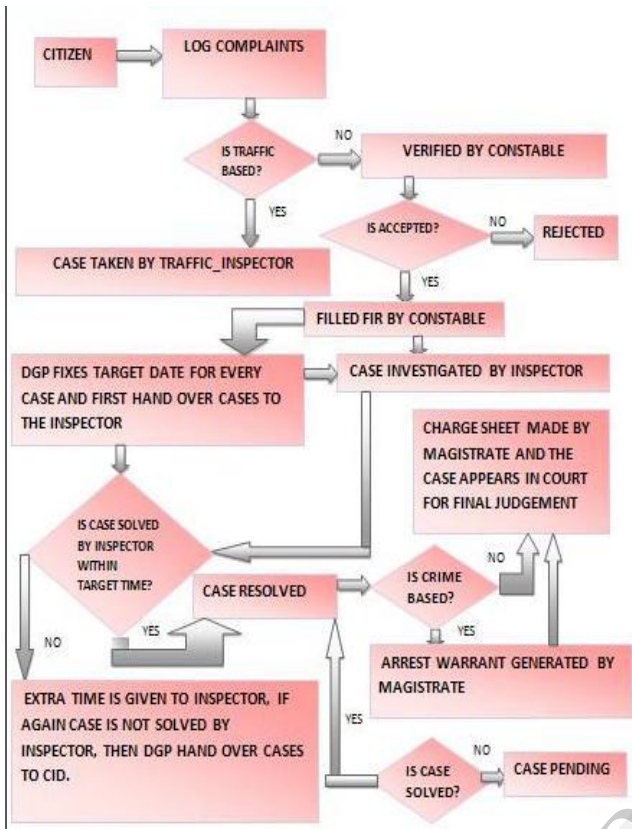


FIGURE 2: WORK FLOW DIAGRAM

The users of Law and Order Automation are:

- A. Citizen
 - B. Employees (Police-Officers: Constable to DGP, CID, and MAGISTRATE)
 - C. Administrator
- A. **Citizen:** The citizens will be able to take part in this online interface by logging complaints to their local created Police Stations.

B. **Employees:**

a. **Police-Officers:** Responsible for accepting FIR from citizen, making charge sheet from citizen, can approve license, and can share details with other stations.

Police-Officer can be subdivided into following designations:

1. DGP (Director General of Police)
2. Inspector

3. Traffic Inspector
4. Constable

b. **CID (Crime Investigation of Department):** Responsible for providing additional crime details to police investigation and help in resolving the crime.

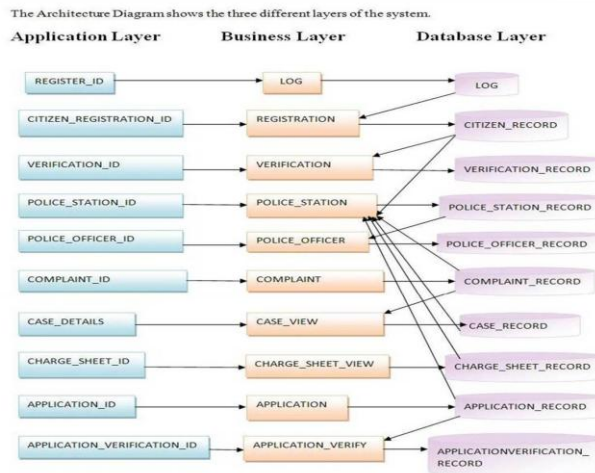
c. **Magistrate:** Responsible for providing generating charge-sheet and arrest warrant.

C. **Administrator:** Responsible for maintaining and keeping records of all the databases and generating reports of cases.

So, the functional requirements are:

1. Secured Registration for Citizen.
2. Online seeing of report.
3. Online complaint registers.
4. Online sharing of case details.
5. Online communication between Police Officers, Detectives through chat, polls.
6. Online apply for various licenses and application status can be known through email.
7. Online filling the charge sheet.
8. Download of forms can be possible.
9. Online report for missing persons.
10. Downloading various forms like complaint form, application form.
11. Provide foreign registration.

4. ARCHITECTURE DIAGRAM



5. TECHNOLOGIES AND TOOLS USED

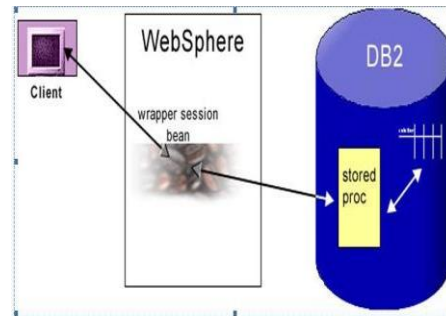
The tools and technologies used to develop the website are as follows:

- ⊙ **Eclipse 3.5 IDE:** For development.
- ⊙ **IBM DB2 Express-C:** Act as a database to store data.
- ⊙ **Apache Tomcat:** Act as a WEBSERVER.
- ⊙ **HTML & CSS:** For the presentation logic.
- ⊙ **JSP:** For business logic.
- ⊙ **JavaScript:** To implement the view logic.
- ⊙ **AJAX:** For creating fast and dynamic web pages.
- ⊙ **jQuery:** For making much easier to use JavaScript on website.



FIGURE 1: Diagrammatic Representation of the tools used

6. PRODUCT PERSPECTIVE



The web pages (XML/JSP) are present to provide the user interface on customer client side. Communication between customer and server is provided through HTTP/HTTPS protocols.

On the server side web server is for EJB and database server is for storing the information.

7. FUTURE SCOPE

- Video calling will be available in this online system.
- Multitasking of applications, with unique handling of memory allocation, will be available.
- This online system will provide Streaming Media support.
- Built in text to speech will be provided by Talk back for people with low or no vision.

8. CONCLUSION AND DISCUSSION

We strongly believe that such a tool will revolutionize the way law and order of the cities is handled currently.

This online interface will help city authorities to effectively deal with issues and not waste time, effort and money in handling customers at rage and it will also provide better serve the police-officers of the city and make them happy.

The system provides a systematic way to handle all the cases, and to keep the record of criminals.

This system provides an efficient and effective way handling law and order for all the users involved in the system and thus this online interface has a **high commercial viability**.

9. ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without the mention of the people who made it possible, whose constant guidance, supervise and encouragement crowned our effort with success. We consider our privilege to express gratitude and respect to all who have guided us in the completion of the project.

I convey my gratitude to our project guide **Mrs. Anindita Mukherjee** for his timely help, encouragement, constructive suggestion, adequate information & many innovative ideas in carrying out the project.

10. REFERENCES

1. <http://mumbaipolice.maharashtra.gov.in/>
2. <http://apstatepolice.org>
3. www.ksp.gov.in
4. www.goapolice.gov.in
5. www.delhipolice.nic.in
6. www.manipurpolice.org
7. www.keralapolice.org
8. www.meghalaya.gov.in
9. <https://www.ibm.com/developerworks>
10. <http://www.scribd.com/doc/38012804>

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