

# Integration of Crime & Complaint Reporting and Effective Data Sharing in Remote Cloud Storage with Multi User Access

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**Abstract---** Crime is used in technology resource restricted environments which has vicious effect on economy. Secure divulged channels are used for anonymous crime reporting. A system has been burgeoned to expedite secure and furtive crime reporting for residents of a university community located. In the modification part, there will be three main login, 1.User 2.Police, and 3.Admin. User can give the crime report along with the initiation of current GPS or can give location details manually like Type, Date, Time and Evidences such snapshots are provided to the server. Admin can view the status of action taken. Server registers a complaint only if more than three people report the same event to the server. User can also report general complaint like Drainage, Water and EB to the corresponding departments. User can also transfer their files from the Android to the Remote Server.

## I. Introduction

Innovation of mobile phones assets obliged situations has triggered the exploration towards utilizing mobile phones for submission of crime reports to law implementation offices. Results of studies demonstrate that cellular telephone utilization has not accomplished boundless prevalence as crime reporting medium during compelled situations. Consequently key concern users have versatile crime reporting system security. Moreover, results of different studies reveals mobile phone aids security affirmation divulging crime particularly when casualty needs somebody to aid them promptly. Be that as it may, as per the studies completed, perspective of each user differs based on estimation of security provided by their mobile phone. E.g. a few users freely use their mobile phone to convey their well-wishers as a way to avoid latent aggressors when others see esteem using the gadget simply after been assaulted.

### *Incentive and Problem Statement*

Unrevealed crime because of trepidation of security infringement is a progressing worry in innovation asset compelled situations. Report of South African Institute of Race Relations generally 50% crimes are never revealed to police. Increased rate of unrevealed violations influences general public in basic leadership and regulation requires offices for allotment of assets. Accordingly, Requisites for a crime reporting stage assurances obscurity and security. Crime reporting probabilities for making a report by an individual are not basic as filling a form as inquired. It has been established that digitizing reporting procedure just does not enhances probabilities for people to lodge crime reports however it can likewise yield more complete and significant reports. As indicated, utilizing mobile phones provide security for crime reporting. Apparently, Requisites mobile application encourages reporting in incognito method. Based on this, an interface must be planned which serves for proper utilization of paper based on administration using fusing great configuration standards and guaranteeing mobile platform.

### *Contribution*

With a specific goal to make application which encourages crime reporting via secured and clandestine method, the digitized crime reporting System in a University Campus settings. They accomplished answer into two segments: front-end and back-end framework. Back-end framework guides communication and capacity required for application. Front-end framework concentrates in improvement on user interface. User can create and fill adequately which is permitted by Interface, crime reports resemblance like current paper which is based on crime report in secured and incognito method. Two sorts of crime reports are allowed by interface. First report is labeled as "full crime report", digitization of current paper is based on reporting framework. The second report is labeled as "crisis

report", which is used during adverse conditions and consequently orders significant user data and permits user to report.

In versatile crime reporting framework, user utilizes Android Operating System mobile phone for reporting crime episodes for regulations requirement powers. Structure comprises of 3 fundamental parts to be specific 1. User Interface, 2. Secure Data Transfer and 3. Information Storage. User is allowed to make and fill adequately crime reports which are empowered by user interface after taking current paper based on crime report. Protected information exchange empowers fruitful exchange of information from the mobile phone into information stockpiling. The information stockpiling segment deals with the information gathered from are sent to dedicated department people based on the reports collected from user. Likewise, it deals with entrance control for information inside the power association. This paper is focused on user interface segment. Keeping in-mind that end goal to build up the user interface, where the user focused outline approach in an iterative method was utilized all through the improvement phase of Mobile Crime Application System. Target of outline was first to explore whether a mobile phone can be utilized adequately to make crime report taking into existing account where reports utilized by law authorization powers. Besides examine what degree is conceivable for crime reporting in split second to go about as frenzy catches in crisis circumstances.

### ***A Cross Culture Study on Phone Carrying and Physical Personalization***

Mobile ended up as one of the crucial articles that are carried by any individual. By organizing, Concatenation Street interviews on 4 continents and in 11 cities. The interaction experiences with mobile phone differ based on the user cultures. They additionally distinguished into several cultural varies from existing cases and covers, to ensure presence of mobilephones. Non-instrumental attributes are identity, sociability, and aesthetics.

### ***Game Theoretic Approach to Location Sharing with Privacy in a Community-based Mobile Safety Application***

Era of social networking mobile applications is emerging. User desire is to protect their data and requirement for fine-grained information. Their work was inspired by mobile application committee called Aegis. The enhancement of personal safety by sharing location information with trusted nearby well-wishers. Privacy participation trade-off used in this application by utilization of game theoretic formulation. Users act naturally intrigued in this game. Obtaining fine-grained information of others while restricting own particular security spill. They deserve another component to user incentives to add it to application. An algorithm yields as Pareto ideal Nash equilibrium is been proposed. Algorithm guarantees polynomial time convergence could be executed in appropriated manner.

### ***Spatial Cloaking for Anonymous Location-based Services in Mobile Peer-to-Peer Environments***

This paper handles privacy in location based services (LBS), where mobile users report their precise area information to LBS provider to acquire the coveted administrations. For instance, user wants to issue an inquiry getting some information about her closest service station needs to report her accurate area to a LBS supplier. In any case, numerous researches demonstrated that noteworthy private area information could be possibly un-trusted; LBS provider may prompt major protection ruptures. To save user area privacy, spatial cloaking is the most regularly utilized protection improving method as a part of LBS. The essential thought of spatial cloaking procedure to obscure a user's definite area into a shrouded region which fulfills user determined protection necessities. Existing spatial cloaking algorithms de-marked LBS depends altered communication infrastructure. e.g., base stations and centralized servers. Algorithms which cannot connect mobile peer-to-peer (P2P) environment where mobile users communicate with different peers through P2P multi-hop routing without support of fixed communication servers. Spatial cloaking algorithm for mobile Peer-to-Peer environments is been proposed in this paper. Mobile Peer-to-Peer environments have numerous kind impediments. e.g., user versatility, limited transmission range, multi-hop communication, scarce communication resources, and network segments, three key components to enhance algorithm are (1) Information sharing plan empowers mobile users to share assembled peer area information to diminish communication; (2) Plan permits mobile users to use stale peer area information to beat network allotment issue; and (3) Shrouded zone modification plan ensures that spatial cloaking algorithm which is free from "center-of-shrouded region" security assault. Exploratory results demonstrate that P2P spatial cloaking algorithm is adaptable.

### ***Welcome to the Jungle: HCI after Dark***

The increase in urban spaces happens when murkiness fall simultaneously exhilarating and menacing, and in the course of recent months, the potential for portable innovation to help users to manage with their own wellbeing worries in the city during the evening is been explored. Their discoveries subverted generally held thoughts of

vulnerability, with danger of viciousness felt similarly by men and women. Meanwhile ladies felt secured on portable innovation, where men rejected it as computerized Man Mace.

### ***Designing a Mobile Crowd Sourcing System for Campus Safety***

Wellbeing on school grounds remains a desperate issue. Current reporting strategies are still lumbering and incorporate no improving social perspective. Given the novel open door that colleges are required to distribute their wellbeing report logs, they directed a preparatory information examination of a college's security report log. The examination permitted us to identify important patterns in reporting conduct, particularly relating to where, when, and how soon the group would report security episodes. Roused by these discoveries and also writing advancing intuitive reporting frameworks, they then planned a novel versatile application which means to empower the spread of group sourced open security data. This application takes into consideration prompt mass sharing of a security episode report, and also the open door for witness reporting. Criticism from a paper model meeting study showed that these qualities would encourage expanded intuitiveness among its user group, and at last advance better familiarity with grounds wellbeing.

### ***Android User***

Develop an android application. They cannot store lot of data in a mobile due to limited memory. So, there is no space to store new files. Also they cannot delete the old files. However, loss is there. Android application is installed by User's on Android Mobile Phone. They perform activities on the application; first page consists of User registration Process. Create User Login Page by Button and Text Field Class in Android. While creating Android Application, they design a page by dragging tools like Button, Text field, and Radio Button. Once they designed the page they will write codes. When mobile application is created, it is generated as Android Platform Kit (APK) file. This APK file will be installed in User's Mobile Phone as an Application.

### ***Cloud Server***

Cloud Server contains large quantity of information in data Storage. Server maintains all user information to be attested. When user, login into their account. User information will be stored in Database of Cloud Server. Also Cloud Server will redirect User requested job to Resource Assigning Module for processing user requested Job. Requests of all Users will be processed by Resource Assigning Module. Communicate with User and opposite modules in Cloud Network, Cloud Server will establish connection between them. Create User Interface Frame for this purpose. Also Cloud Server Provider will send user requested job to Resource Assign Module in First in First out (FIFO) manner.

### ***Profile Registration***

The Profile Registry is primarily meant to host profiles which are based on registered conditions and characterization data sets. so the registration for the police, user, and all the civics bodies, so that they can have own login to view the information upload for the respective designation.

### ***Crime Reporting and Status Monitoring***

In this module they develop a crime reporting page and status monitoring, in this user manually enter the crime reports about their crime by giving the some personal information like name, email, mobile no, police location, police station id and after a days they can able monitor the status where the report have accepted or not.

### ***Complaint Reporting and Status Monitoring***

In this module they develop a crime reporting page and status monitoring, in this user manually enter the crime reports about their complaints by giving the some personal information like name, email, mobile no, police location, police station id and after a days they can able monitor the status where the complaint have accepted or not.

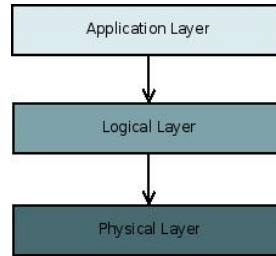
### ***File Sharing and Retrieval***

In this file sharing process they can able to share the file by using FTP protocol, and they use Android application to share the file, and important that the file are not shared bulkily they have been chunked and stored in the different server by using index value of each part of file.

## **II. Architecture**

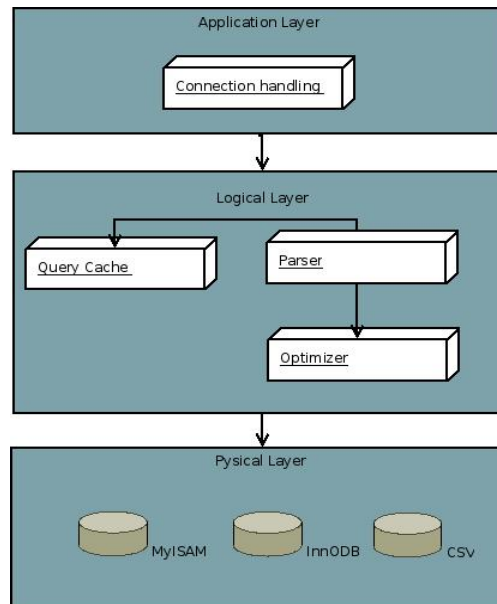
### ***MySQL Architecture***

MySQL architecture is classified into three layer model:



- Application layer consists of common network services for connection handling, authentication and security. Divergent users communicate with MySQL these users will write in different API's: .NET, Java, C, C++, PHP, Python, Ruby, Tcl, Eiffel, etc. in this layer.
- In Logical Layer MySQL intellect resides, includes functionality for question parsing, analysis, caching and all built-in functions. This layer also provides utility common across the storage engines.
- Physical Layer is liable for storage and retrieval of data from "MySQL". This layer is associated with storage engines, where MySQL interacts with basic customary API's. Each storage engine has strengths and weakness; some engines are MyISAM, InnoDB, CSV, NDB Cluster, Falcon, etc...

### Some Internal Components



Each user connection gets unique thread at intervals of server method.

When users (applications) connect to MySQL server, it needs to evidence them.

Before even parsing query, servers consult query cache, and solely stores statements, along with result.

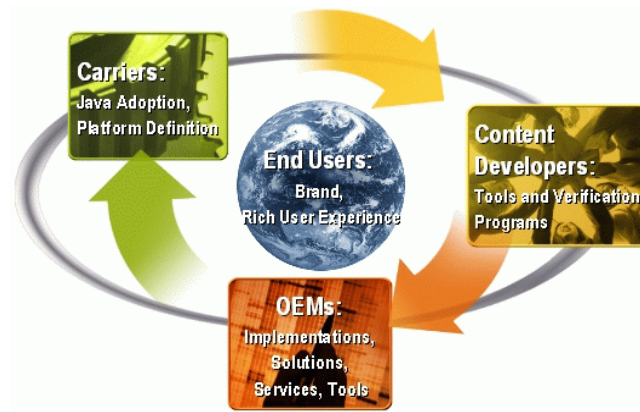
Storage engine does have an effect on however the server optimizes question.

### Storage Engines

MySQL has several storage engines as handlers for divergent table types. MySQL storage engines include each transaction-safe tables and those handle non-transaction-safe tables.

| Feature             | MyISAM | Memory | InnoDB | Archive | NDB   |
|---------------------|--------|--------|--------|---------|-------|
| Storage limits      | 256TB  | RAM    | 64TB   | None    | 384EB |
| Transactions        | No     | No     | Yes    | No      | Yes   |
| Locking granularity | Table  | Table  | Row    | Row     | Row   |

### N-Tier Architecture

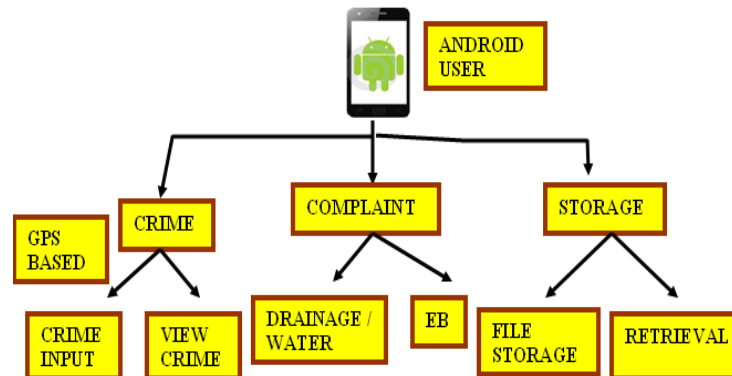


### Android Operating System

Android is operating system (OS) presented by Google for mobile, based on Linux kernel and it is designed primarily for mobile devices.

It is stack of software parts that square measure classified into 5 sections and 4 main layers as shown below within the diagram.

### Application Architecture



## III. Conclusion

Technological resource constrained environments are used for reporting crime. To report crime in secured and covert method requires a system. Furthermore, digitization of crime report in order to improve likelihood of increase in crime reporting. Based on proposed system, reporting crime via mobile, that promptly allows user to lodge crime report in a secure and incognito method.

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