

# CYBER COMPLAINT AUTOMATION SYSTEM USING BLOCKCHAIN

Akash D<sup>1</sup>, Charan C G<sup>2</sup>, Kavanashree D<sup>3</sup>, Nooman Khan<sup>4</sup>, Viresh<sup>5</sup>

<sup>1</sup>Prof: Akash D

Assistant professor,  
I. S. E

<sup>2</sup>Charan C G

Student, B.E IV Year,  
I. S. E

<sup>3</sup>Kavanashree D

Student, B.E IV Year,  
I. S. E

<sup>4</sup>Nooman Khan

Student, B.E IV Year,  
I. S. E

<sup>5</sup>Viresh

Student, B.E IV Year,  
I. S. E

Department of Information Science and Engineering  
Vidya Vikas Institute of Engineering and Technology [VVIET]  
Mysuru, Karnataka, India

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**ABSTRACT** - Due to the Internet's quick spread and the digitalization of commercial activity, cybercrime has risen dramatically. Computers or data are the intended victim of cybercrime. This paper is about "Cyber Complaint Automation System". The current cyber cell of Kerala police has a time-consuming approach. Complaint can be given in two ways. A written complaint can be given to cyber police station. Second option is to use cyber-crime reporting portal. In this portal user has to undergo four different steps to successfully register the complaint. These complaints are stored in a database and manually classified into respective departments. This methodology of a cyber-complaint takes a great deal of effort and time. The time wasted on current system helps the criminal in covering his track. As a result, the victim's time and money are squandered, and police receive criticism. We are working to create a software that will drastically shorten the time it takes to handle a complaint in an effort to remedy this scenario. Our system automates the process and prioritize emergency complaints. Thus helps the police to apprehend the criminal faster.

**Key Words:** Custom Blockchain, AWS S3, Cybercrime, Complaint Automation System.

## 1. INTRODUCTION

Cyber-crimes in India are rising 6% a year in 2021 as per the National Crime Records Bureau (NCR) information. This expansive rise within the sum of cyber-crime events results in an ensuing in cyber-crime complaints. The existing framework are time-consuming and dull. The cybercrime application letter must be sent to the Head of the Cybercrime Cell and incorporate data such as title, address mail I.D., and phone numbers. Certain archives are essential to record a complaint based on the nature of the cybercrime. First, the police need to be enrolling an FIR (To begin with Data Report) to start an examination of the cybercrime occurrence. Another, a report will be arranged based on the examination. At that point, the charge sheet will be submitted to the court. At last, the court method will be starting. Right now, "the cyber-crimes in India is about around 1,49,254 and may likely to cross the 3,00,000 by 2019 developing at a compounded yearly development rate (CAGR) of around 107 percent. As per the discoveries, each month about 12,456 cases is enrolled in India." To handling the issue of cybercrimes, CIDs (Criminal Examination Divisions) of different cities opened up Cyber Crime Cells in numerous cities. The Data Innovation Act of India states clearly that when a cybercrime has been committed, it features a worldwide ward

and hence a complaint can be recorded filed recorded Synonyms in any cyber cell.

## 2. LITERATURE REVIEWS

The venture titled as "Cyber Crime Reporting System" could be a web-based application. This computer program gives office for announcing online violations, complaints, lost people, appear criminal subtle elements. To overcome the issues in display framework we plan such a computerized data framework, which is free of all the imperfections, show within the manual framework of the established. As computer is one of the driving advances these days, so we propose a computer-based framework that will satisfy the prerequisites of the police stations effortlessly and will be the arrangement to the issues confronted by Police stations. It'll encourage both the client as well as authoritative staff of the Police Stations. Computerized framework gives exactness, security, and diminished repetition, decrease of work stack, reinforcement offices and speedier data recovery.

We are inside the progressed time where we cannot imagine our lives without the Net. Development has gotten to be a fundamentally parcel of our each day plan, and with the critical rise in development, we see tremendous advancement in cybercrimes. The utilize of information is extending each day with the approach of more social media stages that utilize millions of data per minute all comprehensive. These data join sensitive information such as trade insider realities, security, and security issues. The number of wrongdoings is extending day by day, and these cybercrimes can influence an individual, an organization, or without a doubt a aggregate nation. The examine consider focuses to spread mindfulness around cybercrimes by publicizing a nitty dirty examination of the mindfulness, influence, and challenges to anyone frail to cybercrime. The technique gotten to consider and look at the influence and challenges caused due to cybercrimes is subjective ask approximately. Being one among the preeminent rapidly developing section, web has ended up one among the preeminent vital portion of our life from work to beguilement there's no other way by and by but it comes with a taken a toll of our assurance and data. Cyber Wrongdoing in India has been rapidly progressing since the beginning of the imaginative period. Cybercrime are as often as possible characterized as a criminal offense or an unlawful act where the pc is utilized either as a device, a target or both. Cyber-attacks have as of presently caused amazing hurt and entirety to detail-retail keeping cash, fundamentally through MasterCard and installment traps. Cybercrimes are affected by way of illegal

get to into another data base, unlawful capture endeavors, data hindrances, and system obstacles, manhandle of contraptions, impersonation and electronic traps. This paper is nearly “Online complaint system for cybercrime”. Schedule strategy of a police complaint takes a magnificent deal of effort and time. In a case of cybercrime, one of the most noteworthy threats to a person or an substance directly a day. The time misused on schedule procedure makes a contrast the criminal in covering his track. Hence, the time and cash of the casualty is wasted, a criminal is free, and law authorization gets blamed. In orchestrate to change this circumstance, we are endeavoring to create an app which is able through and through decrease the planning time of a complaint and engage law authorization to secure the criminal.

### 3.PROBLEM STATEMENT

There are numerous imperfections and deficiencies within the show system. The present framework may be a manual framework. In case of display manual framework all the record is kept in recorded shape and put away in different sorts of registers. The manual framework has no appropriate framework for record capacity and putting away the information approximately wrongdoings and offenders. The show framework of police isn't computerized. The documentation of criminal records is done physically. Case records are dumped in heaps while a few are kept on racks. These vital records rapidly get dusty as a result of need of appropriate capacity, a few criminal records are truly harmed. With this kind of circumstance, it gets to be profoundly troublesome and indeed inconceivable to track down known criminal, get to past criminal history of a suspect and know the status of a few concluded cases. To overcome the issues in display framework we create propose system.

### 3.METHODOLOGY

#### 3.1 PROPOSED SYSTEM

our proposed framework we create a web application that computerization the current cyber cell of police encompasses a time-consuming approach. No legitimate framework for record capacity and putting away the data approximately wrongdoings and offenders safely. The documentation of criminal records is done physically. Blockchain innovation & AWS S3 benefit not utilized to secure cybercrime evidence. These important records rapidly get dusty as a result of need of appropriate capacity, a few criminal records are genuinely harmed. Sending the prove to the diverse portion of state or city is troublesome and done physically time expending for seeing prove any time or any put whereas examination is troublesome and take the prove detail physically.

Some of these advantages are:

- Secure cybercrime related prove beneath custom blockchain & AWS S3 Benefit
- Propose framework make works simple and will be the arrangement to the issue confronted by cyber office
- Robotization of cyber complaints & prepare framework that will satisfy the necessities of the cyber division

#### 3.2 FUNCTIONAL REQUIREMENTS

- **Cyber Head (Admin):** Cyber Head have default login Id, password for login application. Cyber Head have option to add state wise cyber head, city wise telecom staff, city wise bank staff & city wise Aadhar staff.
- **Aadhar Staff:** Aadhar staff login to the application based on login Id, password provided by Cyber Head. Aadhar staff have options to add Aadhar card holder details with photo.
- **Telecom Staff:** Telecom staff login to the application based on login Id, password provided by Cyber Head. Telecom staff have options to add user phone number with Aadhar No.
- **Bank Staff:** Bank staff login to the application based on login Id, password provided by Cyber Head. Bank staff have options to add Account holder details with Aadhar No. Bank staff manage amount deposit to account (from A/c-To A/c).
- **Cyber Head (state wise):** Cyber Head (state wise) staff login to the application based on login Id, password provided by Cyber Head. Cyber Head (state wise) have options to add cyber staff (city wise) & also view cyber complaints details.
- **Cyber Staff (city wise):** Cyber staff (city wise) staff login to the application based on login Id, password provided by Cyber Head (state wise). Cyber staff (City wise) have options to register cyber complaints, upload complaints related evidence (image copy) to AWS S3 service under custom blockchain. The evidence (image file) encrypted using symmetric algorithm & store in AWS S3 under custom blockchain. Cyber staff - trace phone number & get phone number related details. Cyber staff - trace bank A/c details & get Account holder details. Cyber staff post/receive message related to cyber complaints. Also, cyber staff able to view cyber complaints related evidence, download file from AWS S3 - decrypt file using symmetric algorithm under custom blockchain.

#### 3.3 NON-FUNCTIONAL REQUIREMENTS

- **Availability:** System is an automation cyber complaint software which is browser based and avail 24/7 and system can be accessed from different locations.
- **Reliability:** Our application provides the services according the users satisfaction and interest, and designed as per user's requirements and more user friendly, so the application is more reliable compare to other applications.
- **Scalability:** System is more scalable as we use custom blockchain & AWS S3 service for store cyber complaint related evidence. System works for dynamic data. If data changes no modifications in coding, system generates outputs based on the data.
- **Security:** System is a browser-based application which will be deployed at server side, only authorized users can access to the servers and even cyber complaint related evidence files more secured as it is log under custom blockchain & stored in AWS S3 which is more secured and there is an authentication.
- **Performance:** System uses custom blockchain & AWS S3 service for storing cyber complaint related evidence files and coding done using C# advanced concepts, programming is done in such a way that whole system is more efficient.
- **Quality of Service:** As we upgrade the program frequently it'll be simple to preserve it. Application is planned in such

a way that future alterations and improvements can be done effectively.

### 3.4 SYSTEM DESIGN

The purpose of the planning phase is to find a solution to the problem specified in the requirements record. This stage is the most important step from problem space to configuration space. In other words, start with what you need. Our plans guide us on how to make our desires come true. The structure of a framework is probably the most important factor influencing the quality of a computer program. This has a major impact on subsequent phases, especially testing and support. High-level planning allows you to see the modules you need to create to build your framework and details about these modules. Once the framework planning is complete, all important information structures, record plans, revenue designs, etc. are determined. The focus is on module recognition. In other words, it takes into account which modules you need. A point-by-point plan specifies the internal logic of each module. Emphasis is placed on designing the rationale for each module. In other words, how modules can be implemented within a program. A planning strategy is a methodical approach to creating a plan by applying a set of steps and rules. Most strategies focus on high-level planning.

### 3.5 SYSTEM ARCHITECTURE:

Engineering centers on looking at a framework as a combination of numerous diverse components, and how they connected with each other to deliver the required result. The center is on distinguishing components or subsystems and how they interface. In other words, the center is on what major components are required. The body of the paper comprises of numbered segments that display the most discoveries. These areas ought to be organized to best show the fabric.

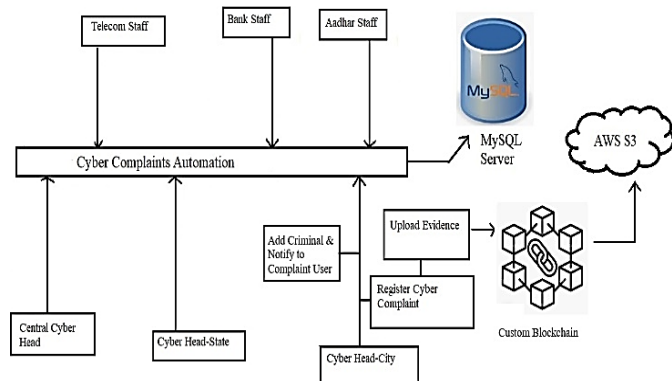


Fig 1: System architecture

### 3.6 FRONT END USED: ASP.NET

ASP.NET could be a prevalent web application system created by Microsoft. It permits engineers to construct energetic websites, web applications, and web administrations. ASP.NET gives a programming demonstrate, broad libraries, and devices for building web applications utilizing .NET dialects such as C# and Visual Essential. One of the key features of ASP.NET is its capacity to make web applications with a division of concerns through the Model-View-Controller (MVC) structural design or the more up to date Model-View-View Show (MVVM) design with systems like ASP.NET Core.ASP.NET too underpins building web APIs utilizing

innovations like ASP.NET Web API and ASP.NET Center MVC, which are commonly utilized for building Relaxing services. With its integration with the .NET System and Visual Studio IDE, ASP.NET offers a wealthy improvement environment for building strong, versatile, and secure web applications. It gives highlights such as confirmation, authorization, session administration, caching, and numerous others out of the box, making it a favored choice for numerous designers and organizations.

### 3.7 BACK END USED: C# and MySQL

C# (articulated as 'C Sharp') may be a modern computer-programming language developed by Microsoft Organization, USA. C# may be a completely object-oriented dialect like Java and is the primary component-oriented dialect. It has been outlined to back the key features of .NET system, the unused advancement stage of Microsoft for building component-based program arrangements. It may be a simple, effective, profitable and type-safe dialect inferred from the well-known C and C++ dialects. In spite of the fact that it has a place to the family of C/C++, it may be a absolutely object-oriented, cutting edge dialect reasonable for creating web-based applications. C# is outlined for building strong, dependable and tough components to handle real-world applications.

Major highlights of C# are:

- It is a brand-new language derived from the C/C++ family.
- It simplifies and modernizes C++.
- It is the only component-oriented language available today.
- It is the only language designed for the .NET framework.
- It is a concise and modern language.
- It combines the best features of many commonly used languages: the productivity of Visual Basic, the power of C++ and the elegance of Java.
- It embodies today's concern for simplicity, productivity and robustness.
- It will become the language of choice for .NET programming.
- Major parts of .NET framework are actually coded in C#.

MySQL is an open-source social database administration framework (RDBMS) that's broadly utilized for building adaptable, high-performance databases. It is created, disseminated, and bolstered by Prophet Enterprise. MySQL is known for its unwavering quality, ease of utilize, and compatibility with different stages and programming dialects.

Here are a few key highlights of MySQL:

- MySQL is based on the social demonstrate of information, where information is organized into tables with columns and columns. It bolsters SQL (Organized Inquiry Dialect) for questioning, overhauling, and overseeing social databases.



- MySQL is open-source program, which implies that it is openly accessible for download, utilize, and dissemination beneath the GNU Common Open Permit (GPL). This makes it open to engineers and organizations of all sizes. Cross-Platform Compatibility:
- MySQL is accessible for different working frameworks, counting Linux, Windows, macOS, and UNIX. It can be sent on-premises, within the cloud, or in half breed situations.
- MySQL is planned to handle expansive volumes of information and tall exchange rates. It bolsters highlights such as ordering, caching, replication, and apportioning to optimize execution and adaptability.
- MySQL gives built-in highlights for guaranteeing tall accessibility and blame resistance, such as master-slave replication, multi-master replication, and clustering arrangements like MySQL Gather Replication and MySQL InnoDB Cluster. MySQL incorporates security highlights to ensure touchy information, such as client confirmation, get to control, encryption, and reviewing capabilities.
- MySQL supports multiple storage engines, including InnoDB, MyISAM, Memory, and Archive. Each storage 26 engine has its own strengths and is optimized for different use cases
- MySQL includes a expansive and dynamic community of engineers, clients, and donors who give bolster, documentation, instructional exercises, and expansions to improve its usefulness.

### 3.8. CUSTOM BLOCKCHAIN

Blockchain may be an innovation that's utilized to store and oversee computerized exchanges (information) safely over a peer-to-peer arrange of gadgets utilizing cryptography and conveyed record innovation. By plan, blockchains are secure and outlandish to manipulate or modify. The littlest unit of data capacity could be a piece. A blockchain may be a chain of blocks linked in a connected list mold. Meaning, each piece in a blockchain is connected to the past and the following square and features a reference to the past and another piece. An unused square is continuously included to the conclusion of the chain. Once included, a block cannot be moved or evacuated from the chain. A square could be an information structure that contains a list of transactions, a timestamp, and references to the past square (by means of its hash). Each square within the blockchain is cryptographically connected to the past piece, shaping a chain of pieces. The primary piece within the chain is called the beginning piece. This essential blockchain encompasses a connected list that's composed of squares. Each piece has the taking after properties.

- Index
- Timestamp
- Previous Hash
- Hash
- Data

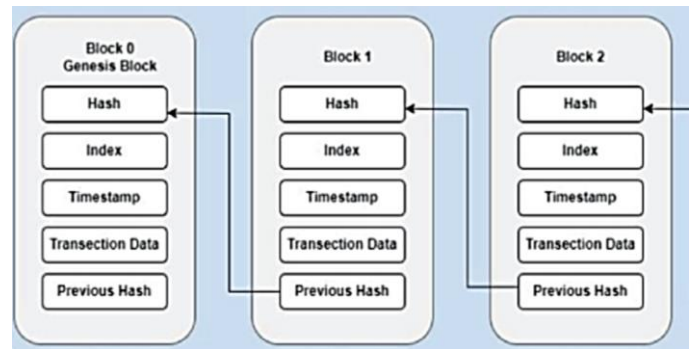


Fig 2: Custom Blockchain

Blockchain technology is designed to share, store, and protect data. The data is protected using mathematical cryptographic algorithms. Blockchain is also immutable. That means that once data is written on a blockchain, it can never be changed or deleted.

### 3.9 SHA ALGORITHM (SHA256)

Blockchain innovation employments cryptographic hashing calculations to execute information permanence. Meaning that once information is composed on a blockchain database, no one can adjust or alter it. Past hash and agreement instruments make altering with a block's information exceptionally difficult.

Steps of Calculation takes after:

1. Take input content and part it into an cluster of the characters' ASCII codes.
2. Change over ASCII codes to double
3. Cushion zeros to the front of each until they are 8 bits long
4. connect and add a 1 and cushion the twofold message with zeros until its length is 512 mod 448
5. take double 8-bit ASCII code cluster from step 3, get its length in parallel
6. cushion with zeros until it is 64 characters
7. add to your already made double message from step 5
8. break the message into an cluster of 'chunks' of 512 characters
9. 10. break each chunk into a subarray of sixteen 32-bit 'words'
10. circle through each 'chunk' cluster of sixteen 32-bit 'words' and amplify each cluster to 80 'words' utilizing bitwise operations
11. initialize a few factors and circling through each chunk:
12. bitwise operations and variable reassignment
13. convert each of the five coming about factors to hexadecimal

### 3.10 AES ALGORITHM

AES (Progressed Encryption Standard) could be a symmetric encryption calculation utilized to ensure touchy information. It is broadly received and considered secure for a assortment of applications. AES works on pieces of information and bolsters key lengths of 128, 192, or 256 bits.

Here's a essential outline of how AES encryption works:

1. **Key Extension:** The AES calculation grows the introductory key into a set of circular keys. The number of rounds (emphases) depends on the key measure 10 rounds for a 128-bit key, 12 rounds for a 192-bit key, and 14 rounds for a 256-bit key.
2. **Introductory Circular:** The calculation starts with an introductory circular of changes that incorporate including the circular key, substituting bytes, moving columns, and blending columns.
3. **Rounds:** After the starting circular, a certain number of rounds (decided by the key estimate) are performed. Each circular comprises of four changes: Sub Bytes (substitution of bytes), Move Lines (consistently shifts columns), Blend Columns (change of columns), and Include Circular Key (bitwise XOR with a round key).
4. **Last Circular:** The ultimate circular prohibits the Blend Columns change.
5. **Yield:** After all rounds are completed, the coming about information is the ciphertext, which is the scrambled frame of the input plaintext.

To unscramble information scrambled with AES, the method is basically turned around. The ciphertext is handled through the converse of each AES operation utilizing the same key, coming about within the unique plaintext. AES encryption is commonly utilized to secure information transmission over systems, ensure put away information, and guarantee secrecy in different applications, counting secure communication conventions, record encryption, and database encryption. It's worth noticing that whereas AES encryption gives solid security, it's critical to utilize secure key administration hones to guarantee the generally security of the scrambled data. To produce symmetric keys in different programming dialects, cryptographic libraries regularly give capacities or classes particularly outlined for this reason. To produce symmetric keys in C# utilizing the Framework Security Cryptography namespace. The produced keys can be utilized for symmetric encryption and unscrambling operations.

### 3.11 AMAZON WEB SERVICE (AWS)

Amazon Web Administrations (AWS) could be a comprehensive, advancing cloud computing stage given by Amazon. It gives a blend of foundation as a benefit (IaaS), stage as a benefit (PaaS) and bundled program as a service (SaaS) advertising. AWS was one of the primary companies to present a pay-as-you-go cloud computing show that scales to supply clients with compute, capacity or throughput as required. Amazon Versatile Compute Cloud (EC2) gives virtual servers called occurrences for compute capacity. The EC2 benefit offers handfults of occurrence sorts with changing capacities and sizes, custom-made to particular workload sorts and application, such as memory-intensive and accelerated-computing occupations. Amazon Basic Capacity Benefit (S3) gives versatile protest capacity for information reinforcement, authentic and analytics. An IT proficient stores information and records as S3 objects -- which can run up to 5 GB -- interior S3 buckets to keep them organized. A commerce can spare cash with S3 through its Rare Get to capacity level. Association with Amazon Basic Capacity Benefit (S3) in C# permits you to perform different operations such as uploading records, downloading records, posting objects, and overseeing buckets. Associated with AWS S3 utilizing the AWS SDK for .NET

(particularly, the AWSSDK.S3 bundle) in a C# application. An S3 client utilizing the AmazonS3Client class from the AWSSDK.S3 bundle.

### 3.12 UPLOAD FILE TO AWS S3

The "ACCESS\_KEY" and "SECRET\_KEY" with your own AWS access key and secret key, respectively. The Basic AWS Credentials object is used to authenticate your AWS credentials and is passed to the AmazonS3Client constructor. You can also specify the region you want to use by passing a Region Endpoint object to the AmazonS3Client constructor. (We're using the US East1 region). The credentials and creating the S3 client, the code uses the Transfer Utility class to upload the file to Amazon S3.

### 3.13 DONLOAD FILE FROM AWS S3

The "ACCESS\_KEY" and "SECRET\_KEY" with your own AWS access key and secret key, respectively & method takes an S3 client, bucket name, object key, and local file path as parameters. It then creates a Get Object Request to specify the bucket name and object key to download the file from S3. Finally, it downloads the file asynchronously and saves it to the specified local file path.

## 4.DATA FLOW DIAGRAMS:

An Information Stream Diagram (DFD) is a graphical representation of an "information stream" through a data framework. DFD can also be used for information processing visualization (organized planning). In DFD, information flows from an external information source or internal information store through an internal handle to an internal information store or external information sink. DFD does not provide data about the timing of forms or whether they work in arrays or in parallel. Therefore, it is very different from a flowchart, which represents flow of control through calculations and allows the user to decide which operations to perform, in what order, and under what circumstances, but it also shows what kind of information It is not possible to decide who will come and go. The framework, where the information comes from, where it goes, where the information is stored.

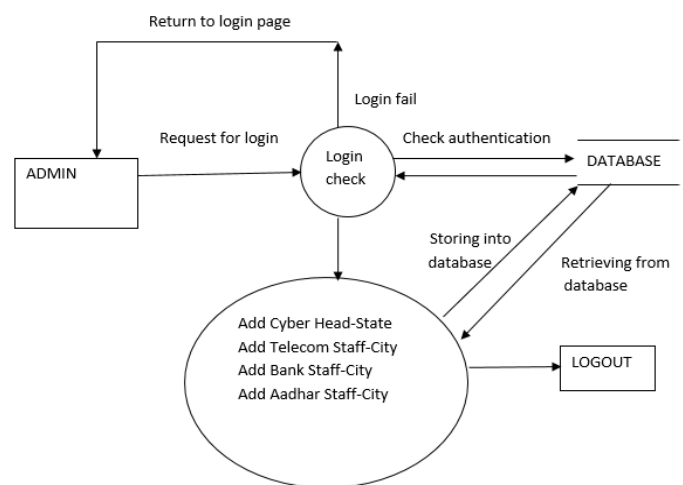


Fig 3: DFD for Admin

## 5.CONTEXT DATA FLOW DIAGRAM:

It is common hone to draw a context-level information stream chart to begin with, which appears the interaction between the framework and outside operators which act as information sources and information sinks. On the setting chart (too known as the 'Level DFD') the system's intelligent with the exterior world are demonstrated absolutely in terms of information streams over the framework boundary. The setting graph appears the whole framework as a single handle, and gives no clues as to its inner organization. This context-level DFD is following "detonated", to deliver a Level 1 DFD that appears a few of the detail of the framework being displayed. The Level 1 DFD appears how the framework is partitioned into sub-systems (forms), each of which bargains with one or more of the information streams to or from an outside specialist, and which together give all of the usefulness of the framework as a entirety. It too distinguishes inner information stores that must be show in arrange for the framework to do its work, and appears the stream of information between the different parts of the framework.

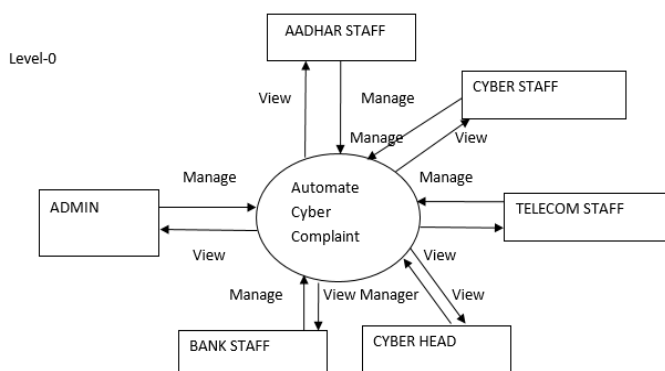


Fig 4: Context flow diagram

## 6.USE CASE DIAGRAMS:

Utilize case graphs show the usefulness of a framework utilizing on-screen characters and utilize cases. Utilize cases are administrations or capacities given by the framework to its clients. Utilize case charts are more often than not alluded to as behavior charts utilized to portray a set of activities (utilize cases) that a few frameworks or frameworks (subject) ought to or can perform in collaboration with one or more outside clients of the framework (actors). Each utilize case ought to give a few perceptible and profitable result to the on-screen characters or other partners of the framework.

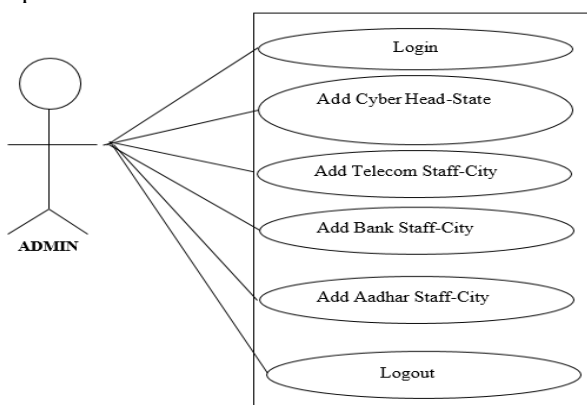


Fig 5: Admin Use-case diagram

## 7.SEQUENCE DIAGRAMS:

The Sequence Diagram models the collaboration of objects based on a time arrangement. It appears how the objects connected with others in a specific situation of a utilize case. With the progressed visual displaying capability, you'll make complex grouping chart in few clicks. Other than, Visual Worldview can create arrangement graph from the flow of events which you have got characterized within the utilize case depiction. The grouping chart models the collaboration of objects based on a time arrangement. It appears how the objects associated with others in a specific situation of a utilize case. It portrays the objects and classes included within the situation and the grouping of messages traded between the objects required to carry out the

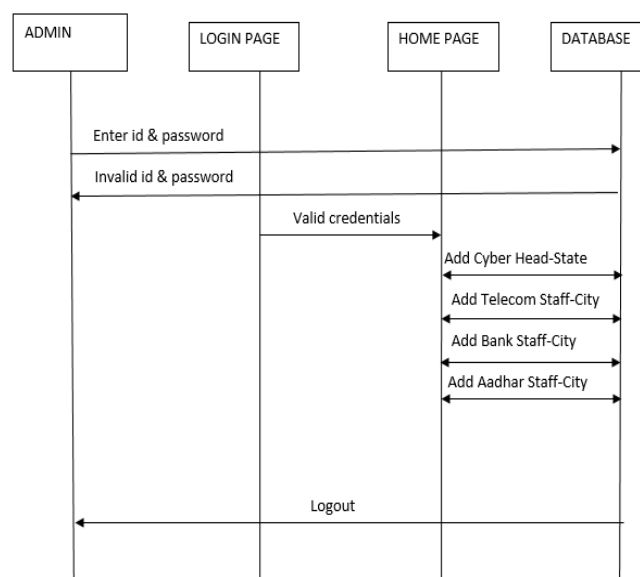
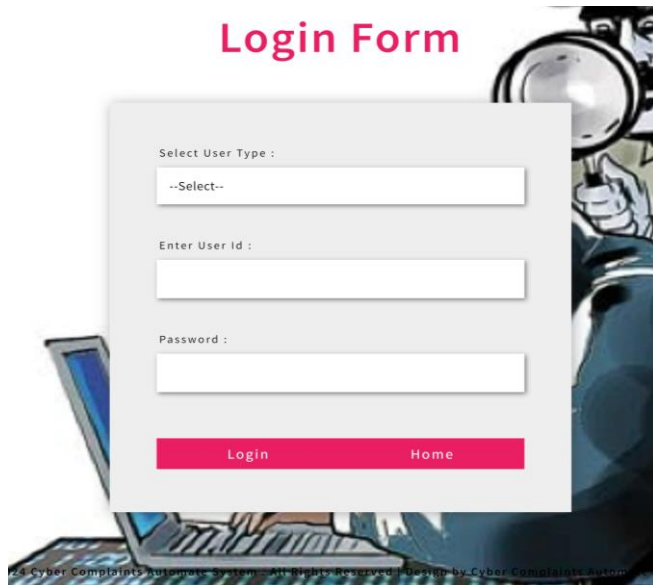


Fig 6: Admin sequence diagram

## 8.RESULT



Fig 7: Home Page



**Login Form**

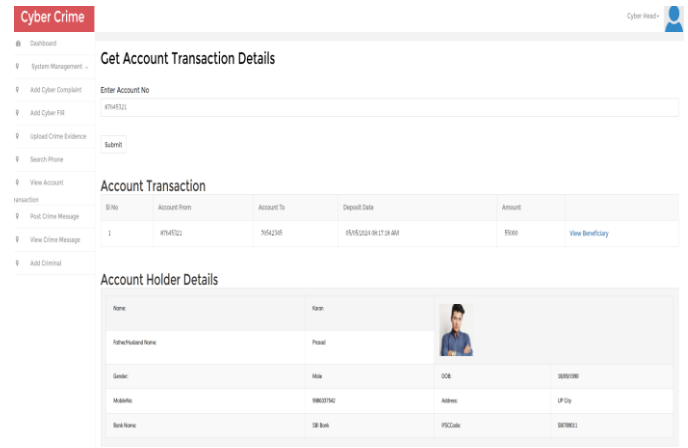
Select User Type :  
--Select--

Enter User Id :  
[Text Input]

Password :  
[Text Input]

[Login](#) [Home](#)

Fig 8: Login page



**Cyber Crime**

Get Account Transaction Details

Enter Account No  
[Text Input]

Submit

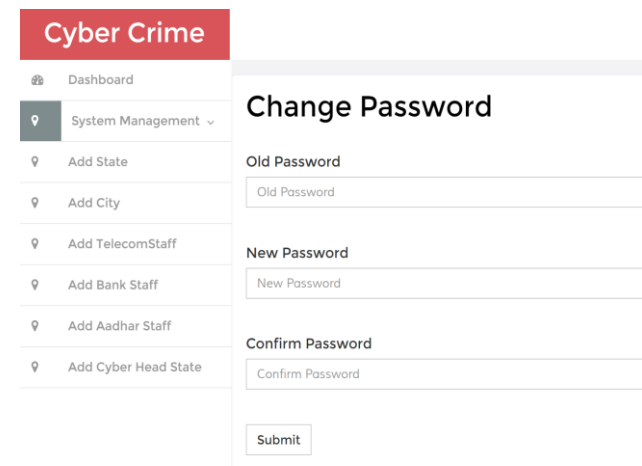
**Account Transaction**

Sl No	Account From	Account To	Deposit Date	Amount	
1	47547521	7654326	05/05/2024 08:17:38 AM	75000	<a href="#">View Beneficiary</a>

**Account Holder Details**

Name	Phone	DOB	MobileNo
Tanishkumar	7654326	05/05/2024	9876543210

Fig 11: Cyber Staff Getting Transaction Details



**Cyber Crime**

Change Password

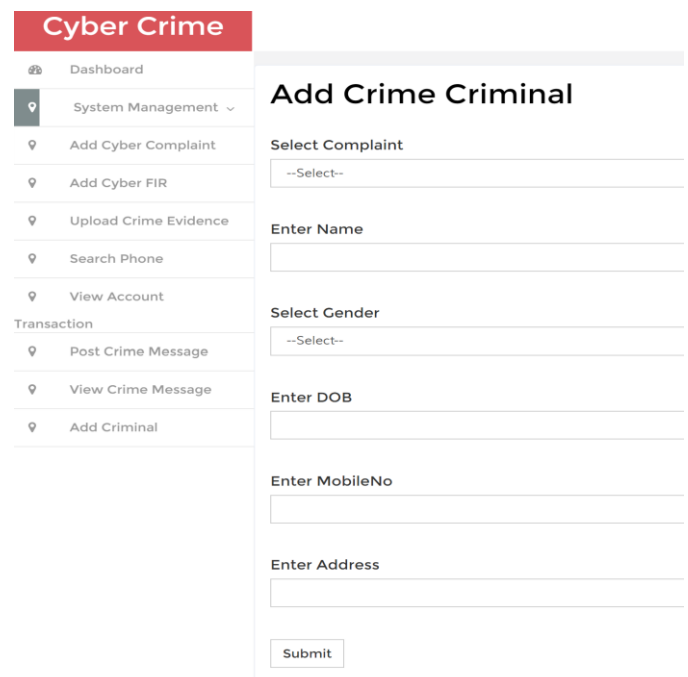
Old Password  
[Text Input]

New Password  
[Text Input]

Confirm Password  
[Text Input]

[Submit](#)

Fig 9: Application Manager (Admin) page



**Cyber Crime**

Add Crime Criminal

Select Complaint  
--Select--

Enter Name  
[Text Input]

Select Gender  
--Select--

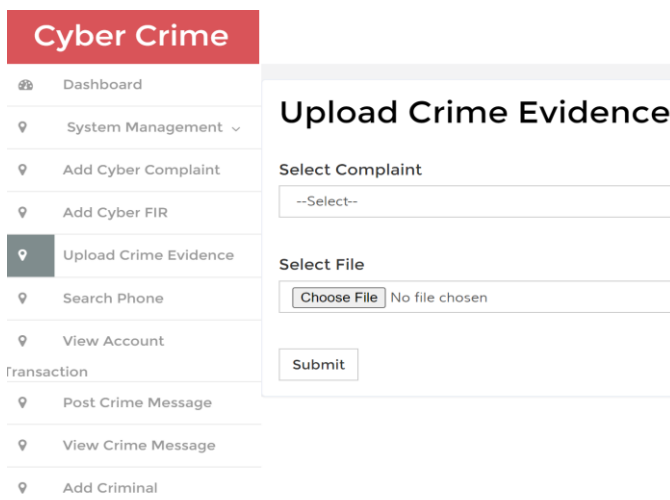
Enter DOB  
[Text Input]

Enter MobileNo  
[Text Input]

Enter Address  
[Text Input]

[Submit](#)

Fig 13: City Cyber Staff Adding the Complaint person to send the mail



**Cyber Crime**

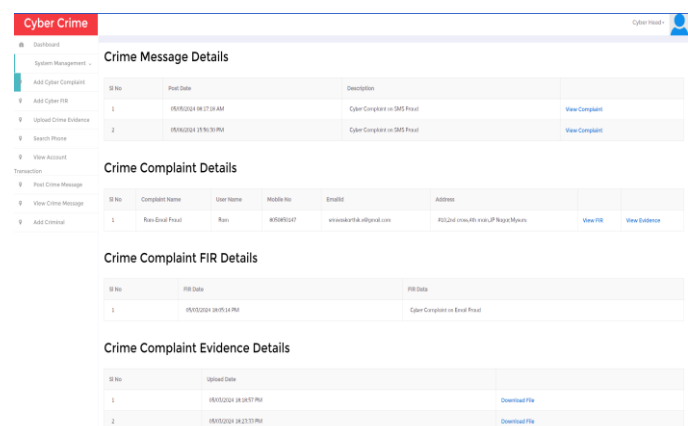
Upload Crime Evidence

Select Complaint  
--Select--

Select File  
[Choose File] No file chosen

[Submit](#)

Fig 10: City Cyber Staff Uploading Crime Evidence Detail



**Cyber Crime**

Crime Message Details

Sl No	Post Date	Description	
1	05/05/2024 08:17:38 AM	Cyber Complaint on SMS Fraud	<a href="#">View Complaint</a>
2	05/05/2024 08:17:38 AM	Cyber Complaint on SMS Fraud	<a href="#">View Complaint</a>

**Crime Complaint Details**

Sl No	Complaint Name	User Name	Mobile No	EmailID	Address		
1	Ram Doud Fraud	Ram	9876543210	ramdoud@kailashgoud.com	1012nd cross, 4th cross, JP Nagar, Mysore	<a href="#">View FIR</a>	<a href="#">View Evidence</a>

**Crime Complaint FIR Details**

Sl No	FIR Date	FIR Date
1	05/05/2024 08:17:38 AM	Cyber Complaint on SMS Fraud

**Crime Complaint Evidence Details**

Sl No	Upload Date	
1	05/05/2024 08:17:38 AM	<a href="#">Download File</a>
2	05/05/2024 08:17:38 AM	<a href="#">Download File</a>

Fig 12: City Cyber Staff Viewing Crime Message, Complaint, FIR and Evidence Detail



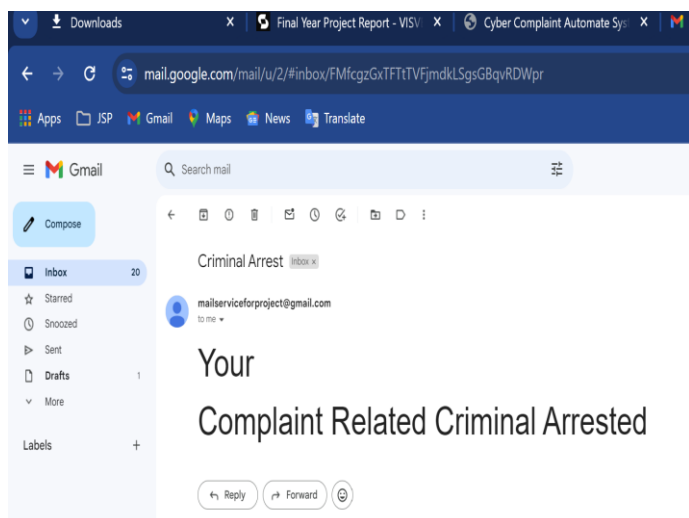


Fig 14: User or Complaint Person getting Email

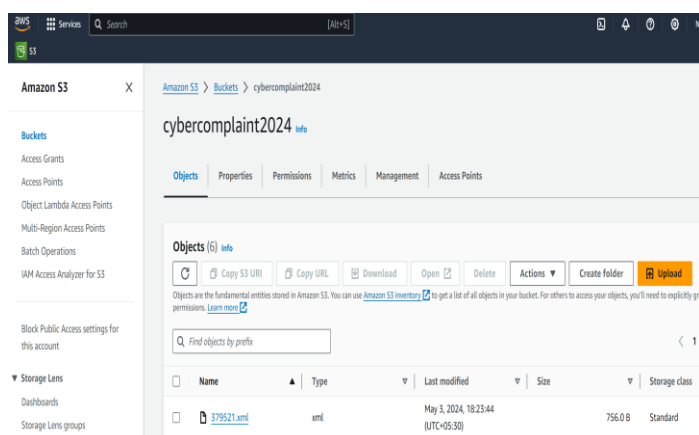


Fig 15: Storing FIR and Evidence in AWS S3

## 9. FURTHER ENHANCEMENTS

- Develop a user-friendly online platform where users can register their accounts securely.
- Implement a dedicated section for cyber complaints where users can submit detailed reports.
- Allow users to upload relevant documents, such as screenshots, emails, or any other evidence related to the complaint.
- Ensure encryption and secure storage of all sensitive information to maintain user privacy and confidentiality.
- Create a dashboard for users to view the status of their submitted complaints.
- Provide real-time updates on the progress of their complaints, including any actions taken by the authorities.
- Implement notification features to alert users of any developments or requests for additional information regarding their complaints.
- Allow users to communicate with support staff or investigators handling their cases through secure messaging within the platform.
- Collect feedback from users regarding their experience with the complaint management system.
- Use feedback to identify areas for improvement and enhance the usability and effectiveness of the platform.

## 10. CONCLUSIONS

The proposed system overcomes current manual system i.e., interaction between other state cyber staff, telecom department, bank department to identify criminal faster & solve complaint. Also, secure cybercrime related evidence. The propose system track Aadhar number, phone number, bank details, address related to cybercrime. Also, secure cybercrime related evidence under blockchain & AWS S3 service. The Propose system helps cyber department to identify criminals & resolve cases faster. In the investigation if criminal or victim is caught, then it is informed to the complained user or person. User Register Cyber Complaint through online & also Upload related documents Provide an option to user view complaint related details with more efficiency. Utilize NLP (using AIML) to analyze complaint content and categorize them. automate routing to relevant departments based on analysis. Implement monitoring to track complaint progress and performance metrics. Generate reports for insights and areas for system improvement.

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