



Guru Gobind Singh College of Engineering and Research Center, Nashik.

Department of Computer Engineering

Academic Year: **2023-24**

Final Year Project Work

Review 4

Date : 28 Oct 2023

Group ID	G - 2
Project Title	Civic complaints registering application for citizens of Rural/Urban areas.
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Presentation Outline :

- Introduction :
 1. Problem Statement
 2. Motivation
 3. Objectives
 4. Scope
- Software & Hardware Requirements
- Literature Survey
- Feasibility Study
- Requirement Analysis
- System Architecture
- UML Diagrams : Class, Object, Use Case, Data Flow, Sequence, Activity
- Conclusion.

1. Problem Statement

Civic Complaint Registration Application for Urban/Rural Areas.

The Civic Complaint Registration Application for Urban/Rural Areas is a solution to address complaints related to waste material, streetlight issues, sewer line blockages, road repairs, and more in both urban and rural regions.



2. Motivation

1. **Addressing Civic Needs:** A Civil Complaint Registration Application that directly addresses civic needs by resolving issues in both rural and urban areas.
2. **Positive Impact:** It promises to have a positive and lasting impact on both rural and urban areas, improving the quality of life for citizens and enhancing the efficiency of municipal services.
3. **Community Engagement:** By facilitating citizen engagement and feedback, the project fosters a sense of community involvement and ownership.

3. Objective

1. To enhance civic engagement
2. Improve administrative efficiency
3. Contribute to the overall betterment of communities
4. Streamline Complaint Reporting
5. Automated Complaint Evaluation
6. Priority Assignment

4. Scope


1. **Data-Driven Decision Making:** Collect, Analyze, and Visualize complaint data to provide local authorities with valuable insights for better resource allocation, urban planning, and evidence-based decision-making.
2. **Transparency and Accountability:** Transparency in local governance by providing real-time updates to citizens on the status of their complaints, ensuring they remain informed throughout the resolution process.
3. **Collaboration with Local Authorities:** Collaborate closely with municipal authorities,.
4. **User Adoption and Community Impact:** With a focus on reaching underserved areas, to empower citizens and create a positive impact on their communities.

Software- Hardware requirement

Resources: The requirement of the resources for designing and developing the proposed system are as mentioned below:

- Hardware / Software Requirement
 1. Laptop/PC with minimum hardware and software versions(2GB Ram, 256SSD & OS: Windows 7 and above).
 2. Visual Studio Code, Flutter, Dart.
 3. 3G/4G/5G Smartphone.

5. Literature Survey

Name of paper	Authors	Working	Merits	Demerits
Civic Complaint Application under Smart City Project	<ol style="list-style-type: none"> 1. Satish Kumar Prasad 2. Ritesh Patil 3. Sagar Beldare 4. Prof. Anita Shinde 	Web application to reporting civic issues via mobile	<ol style="list-style-type: none"> 1. Used tools and technologies to replace conventional manual complaint registration. 	<ol style="list-style-type: none"> 1. Manual Entry of Civic Issue details.
				

5. Literature Survey

Name of paper	Authors	Working	Merits	Demerits
Adversarial Adaptation of Scene Graph Models for Understanding Civic Issues	<ol style="list-style-type: none">1. Shanu Kumar2. Anjali Singh3. Mohit Jain	Used Scene Graph Model to address Civic issues via Image Processing.	<ol style="list-style-type: none">1. Complete representation of all objects and relationship.	

5. Literature Survey

Name of paper	Authors	Working	Merits	Demerits
A Survey of Scene Graph: Generation and Application	<ol style="list-style-type: none">1. Pengfei Xu2. Xiaojun Chang3. Ling Guo4. Poyao Huang5. Xiaojiang Chen6. Alexander G. Hauptmann	Scene graph generation methods are proposed to build a more complete scene graph by a variety of network models, feature extraction methods, and even by introducing the prior knowledge.	<ol style="list-style-type: none">1. More accurate object detection in Images.	

5. Literature Survey

Name of paper	Authors	Working	Merits	Demerits
Civic Complaint Reporting Using Image Processing.	1. Anjaly Antony 2. Minla K.S	Online Web Application that let Citizens report there problems with infrastructure in their City to relevant authority.	1. Used tools and technologie s to replace conventiona l manual complaint registration.	1. Citizens Voting based priority assignment for complaints.

5. Literature Survey

Name of paper	Authors	Working	Merits	Demerits
Smart Civic Issue Reporting System.	<ol style="list-style-type: none">1. Dnyanesh Walwadkar2. Saurav Yadav	Research on using social middleware for Civic issue reporting	<ol style="list-style-type: none">1. Leveraging Civic tech as well as enhancing its capabilities to foster the engagement of people.	

Feasibility

The system will leverage automation technology, including Machine Learning (ML), Data Science, Computer Vision and Image Processing.

Feasibility Aspects:

1. Technical Feasibility :

- Technology stack
- Image processing capabilities
- Integration with geographic information systems (GIS)

2. Economic Feasibility :

- Initial Investment : Expenses related to software development, hardware, licensing, training, and any other startup costs.
- Operational Costs : Expenses such as server hosting, maintenance, staff salaries, and any third-party services or software licenses.

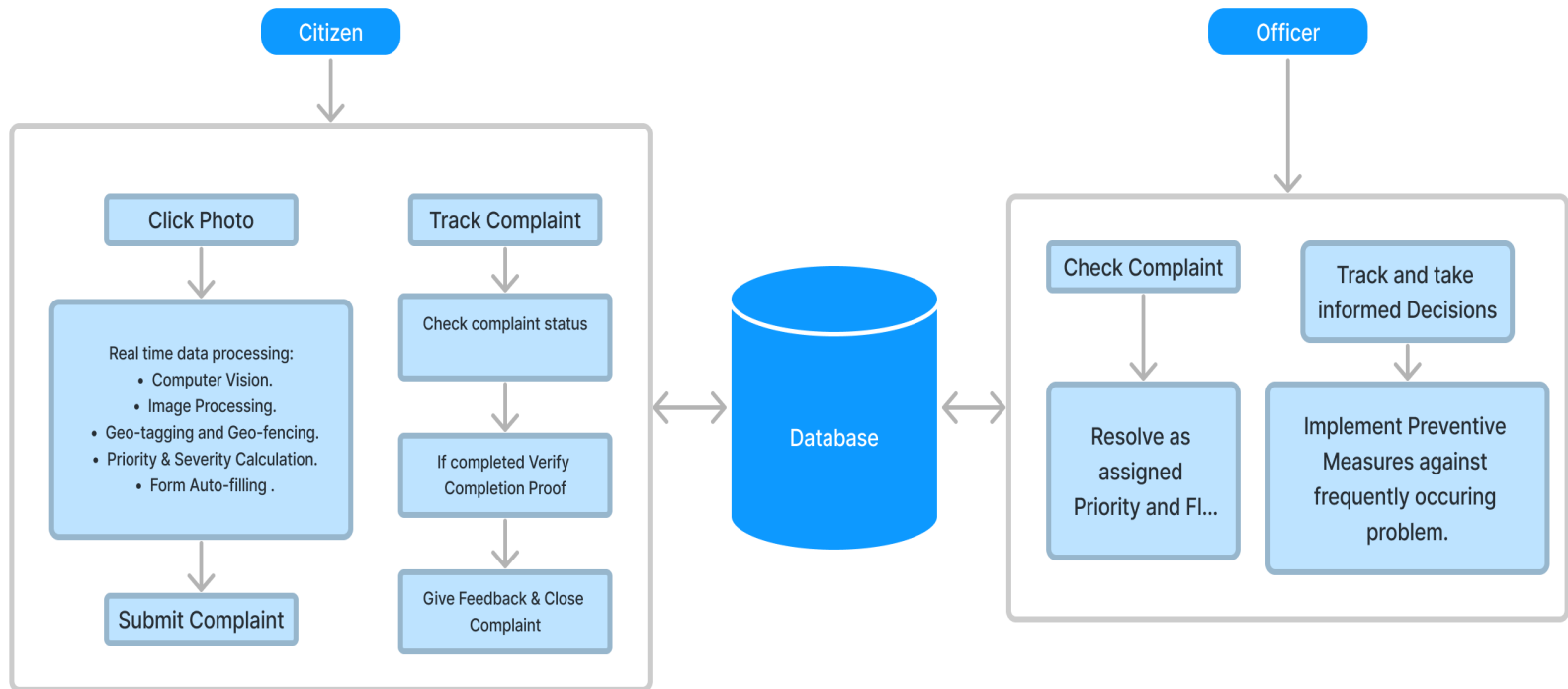
3. Operational Feasibility :

- Support and Maintenance
- Compatibility
- Timeframe

Requirement Analysis:

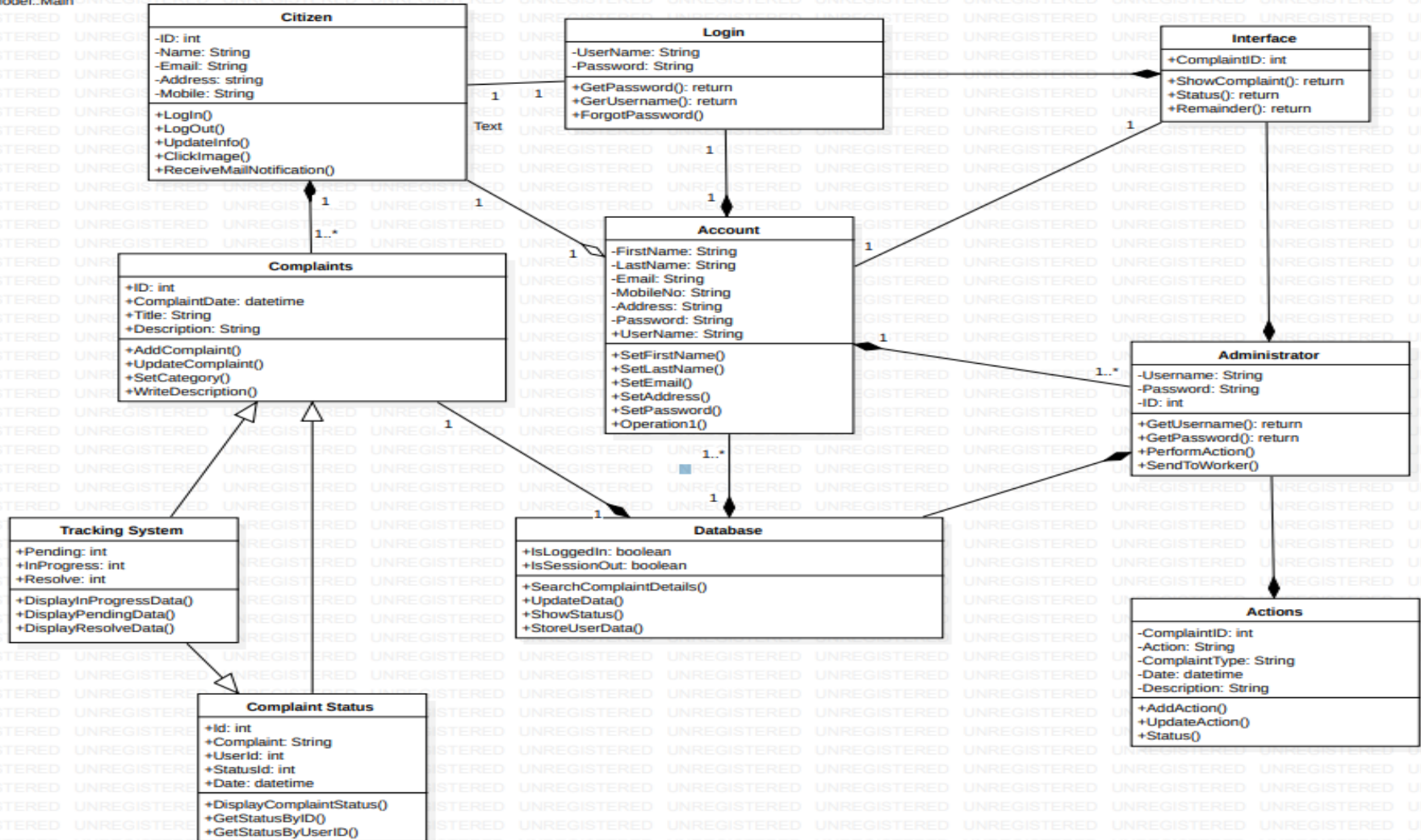
- **Datasets:**
 1. Municipal corporation's Geofencing dataset.
 2. Civil complaint Classes dataset.
 3. Local authorities hierarchy dataset.
 4. Historical civil complaints dataset.

System Architecture:

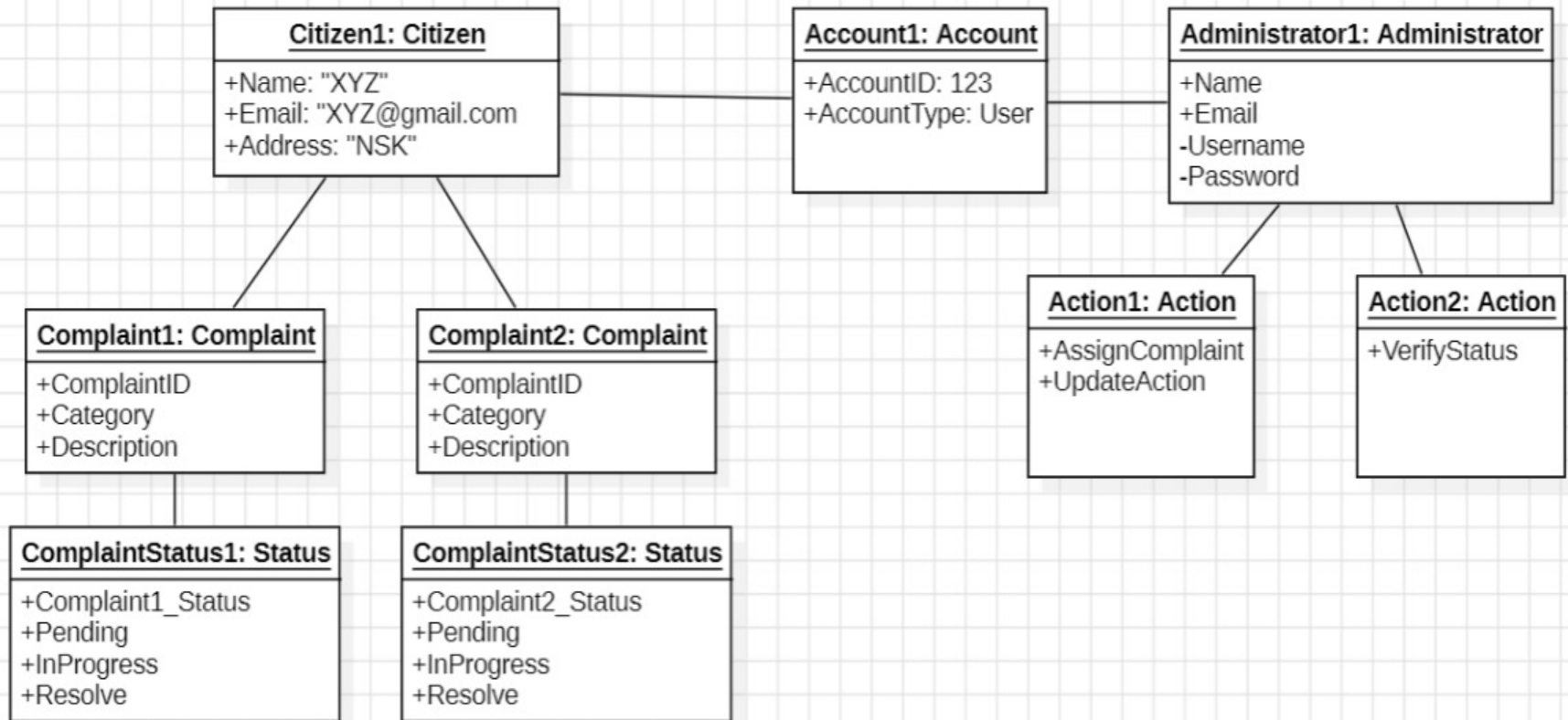


Class Diagram

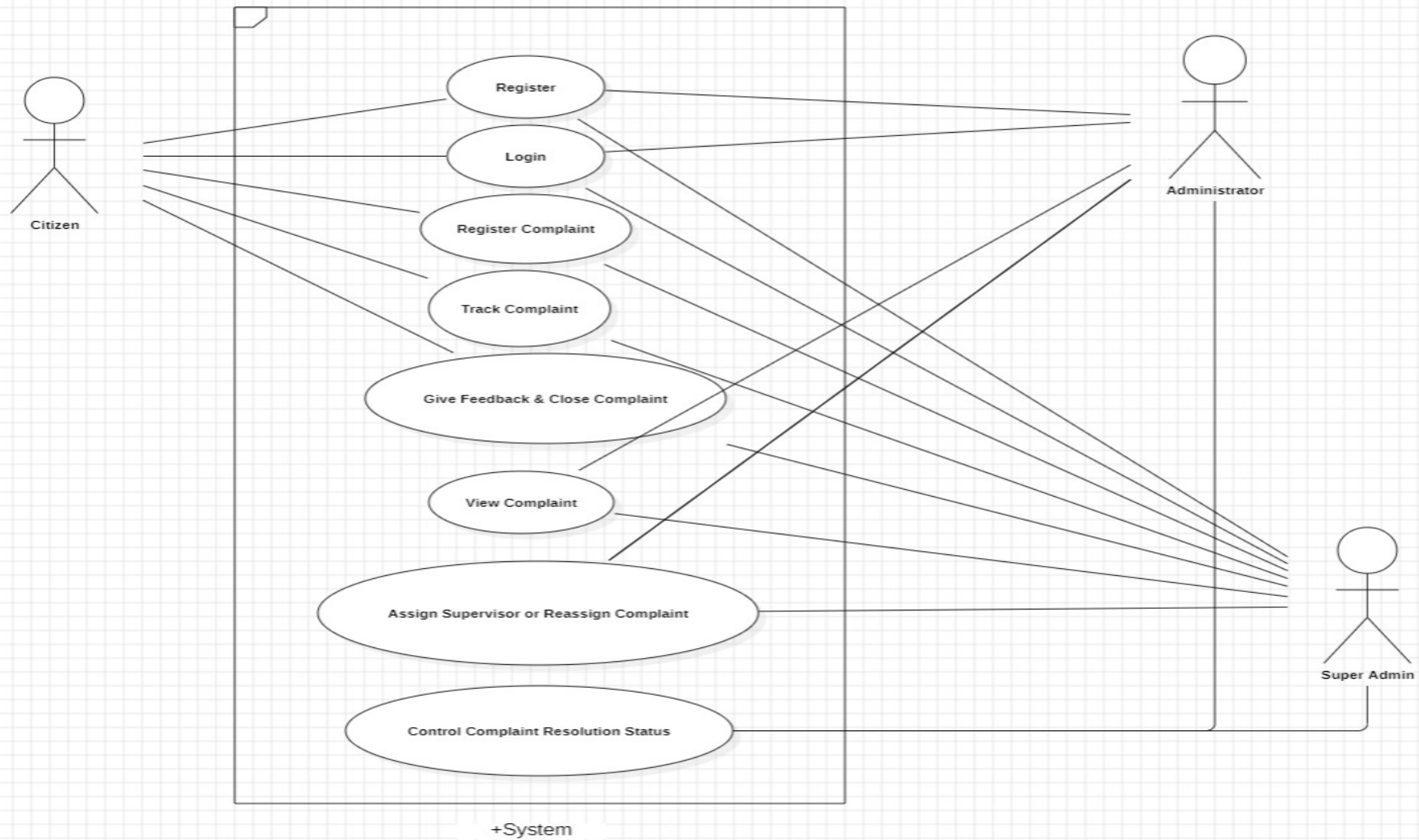
Model: Main



Object Diagram:

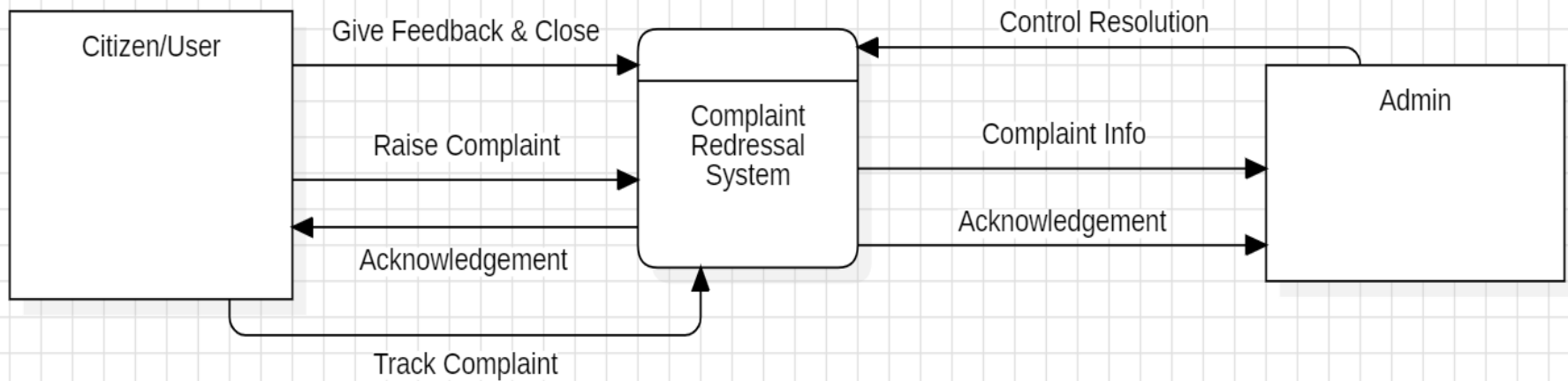


Use Case Diagram:



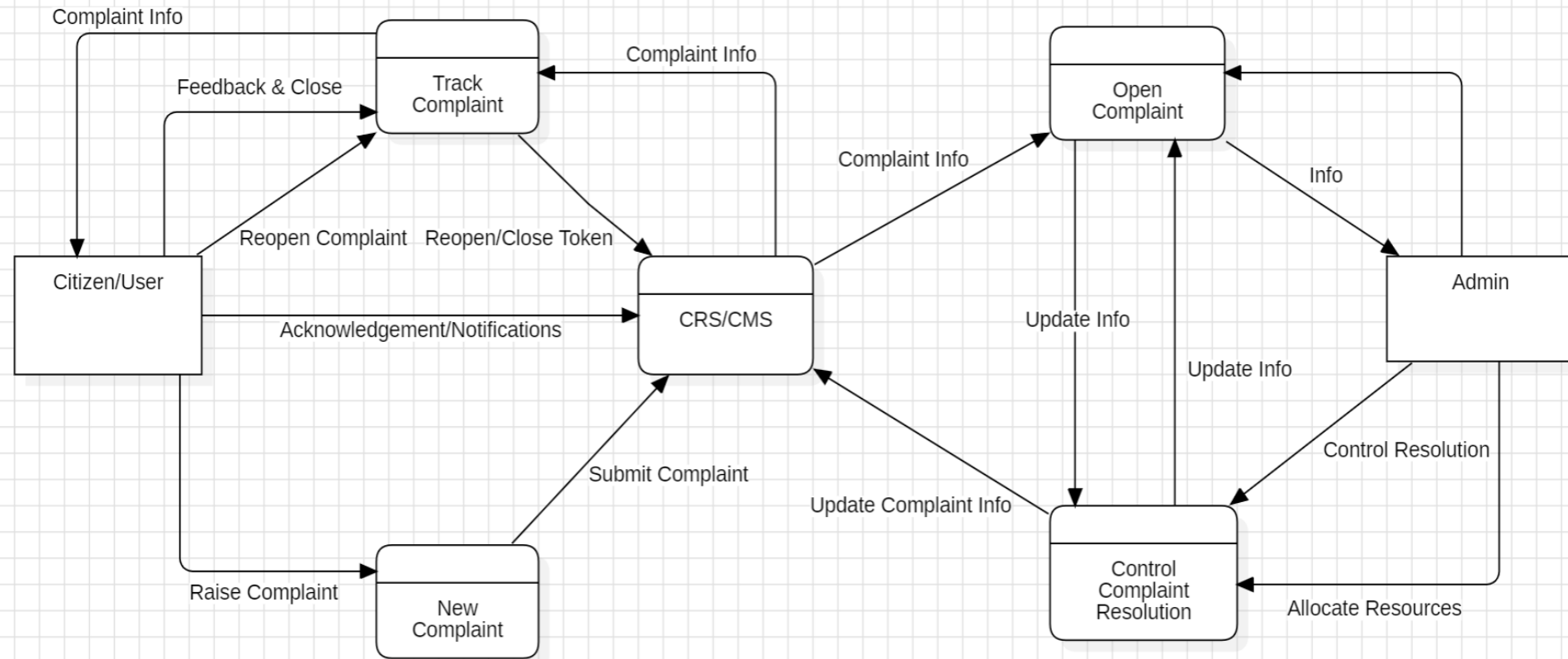
DFD Level 0:

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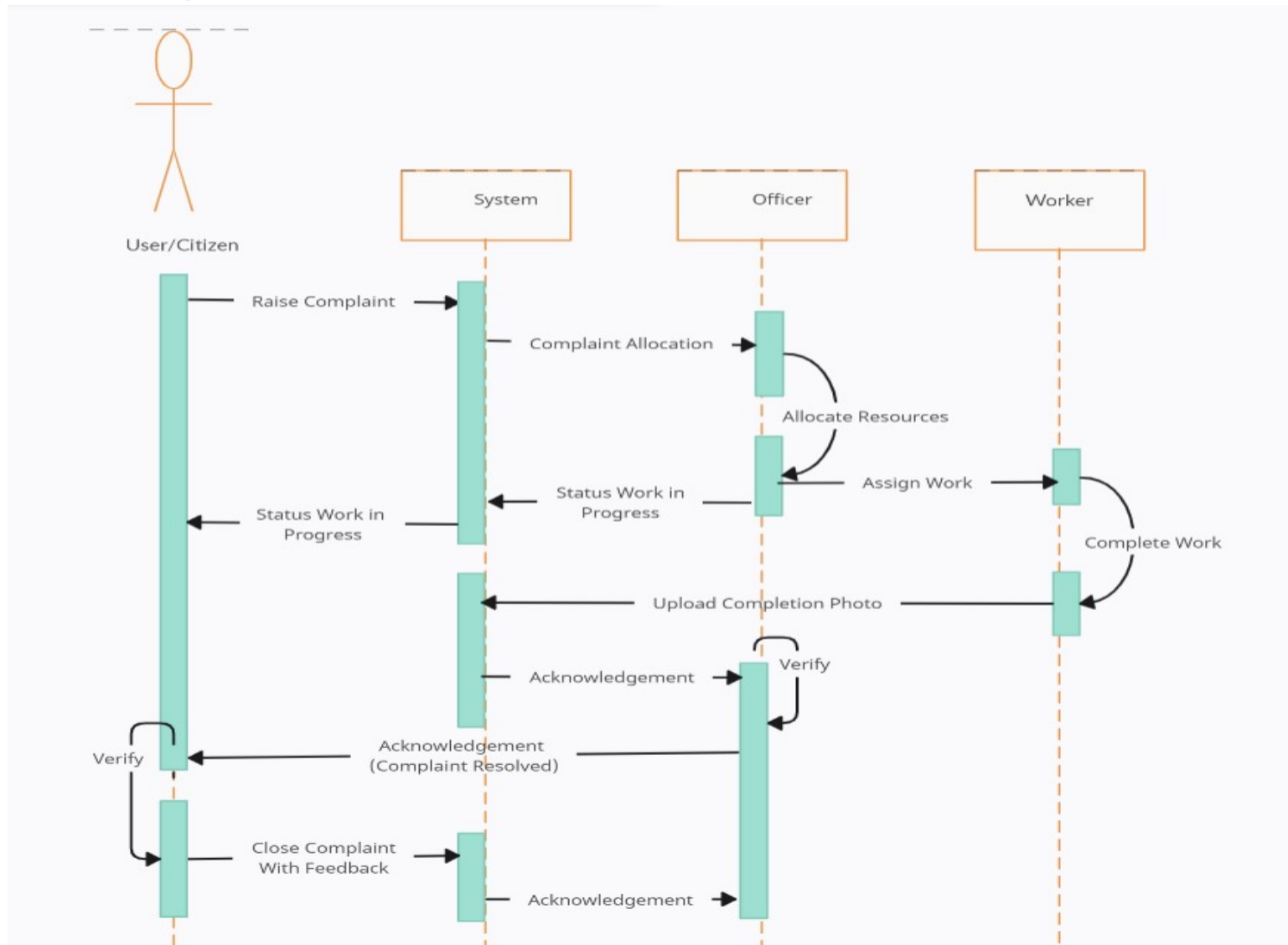


DFD Level 1:

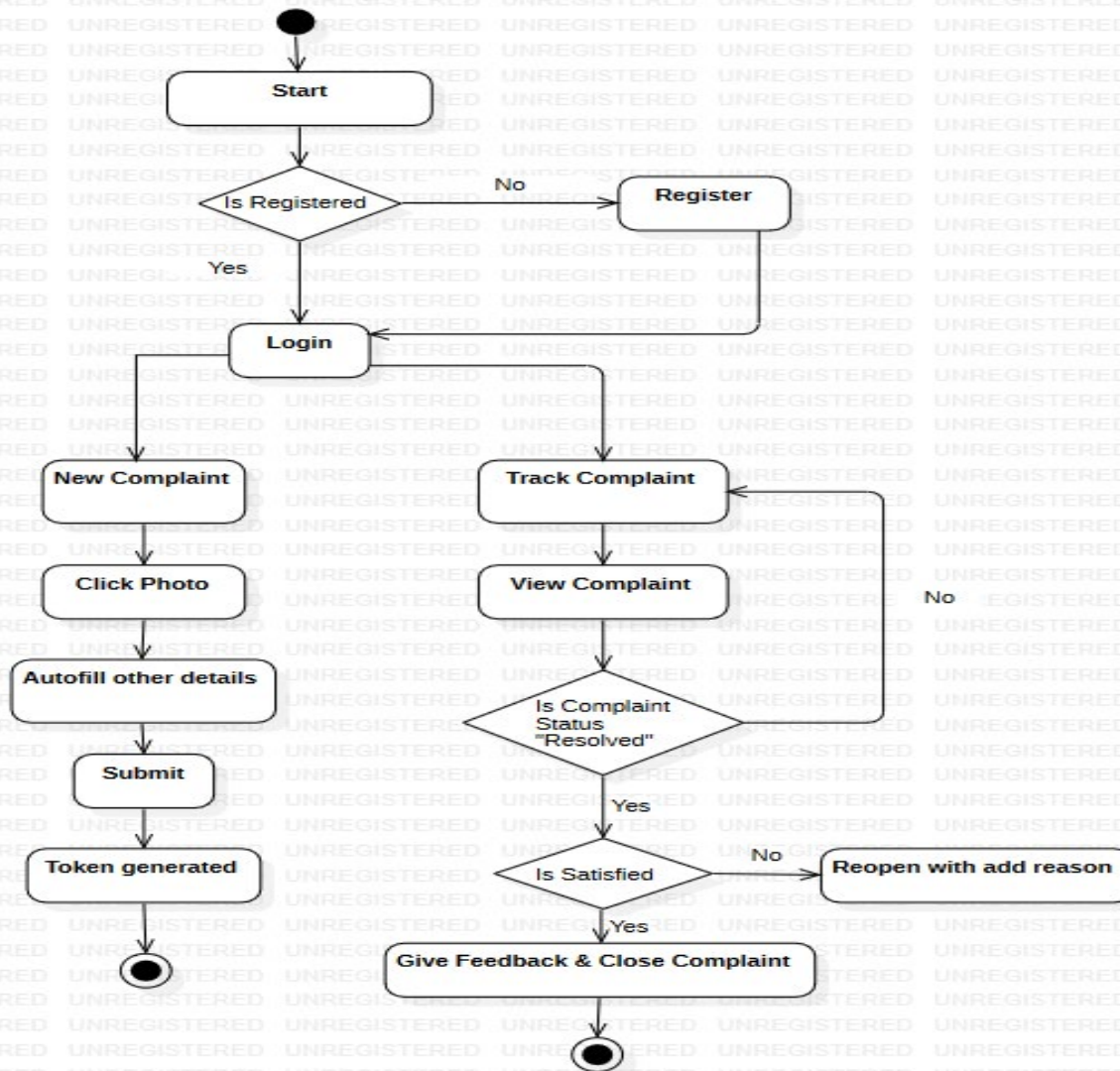
DFD Level 1



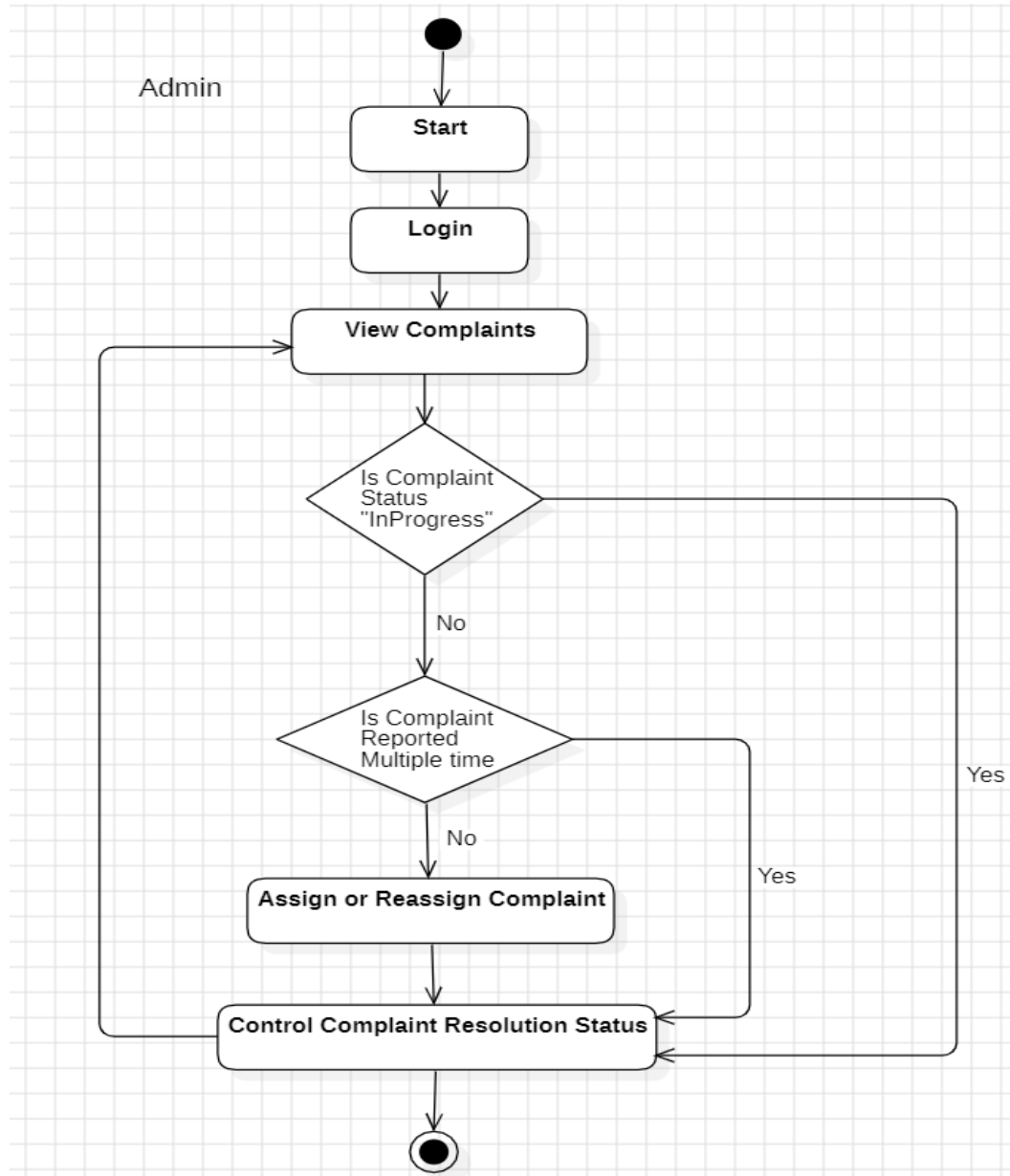
Sequence Diagram :



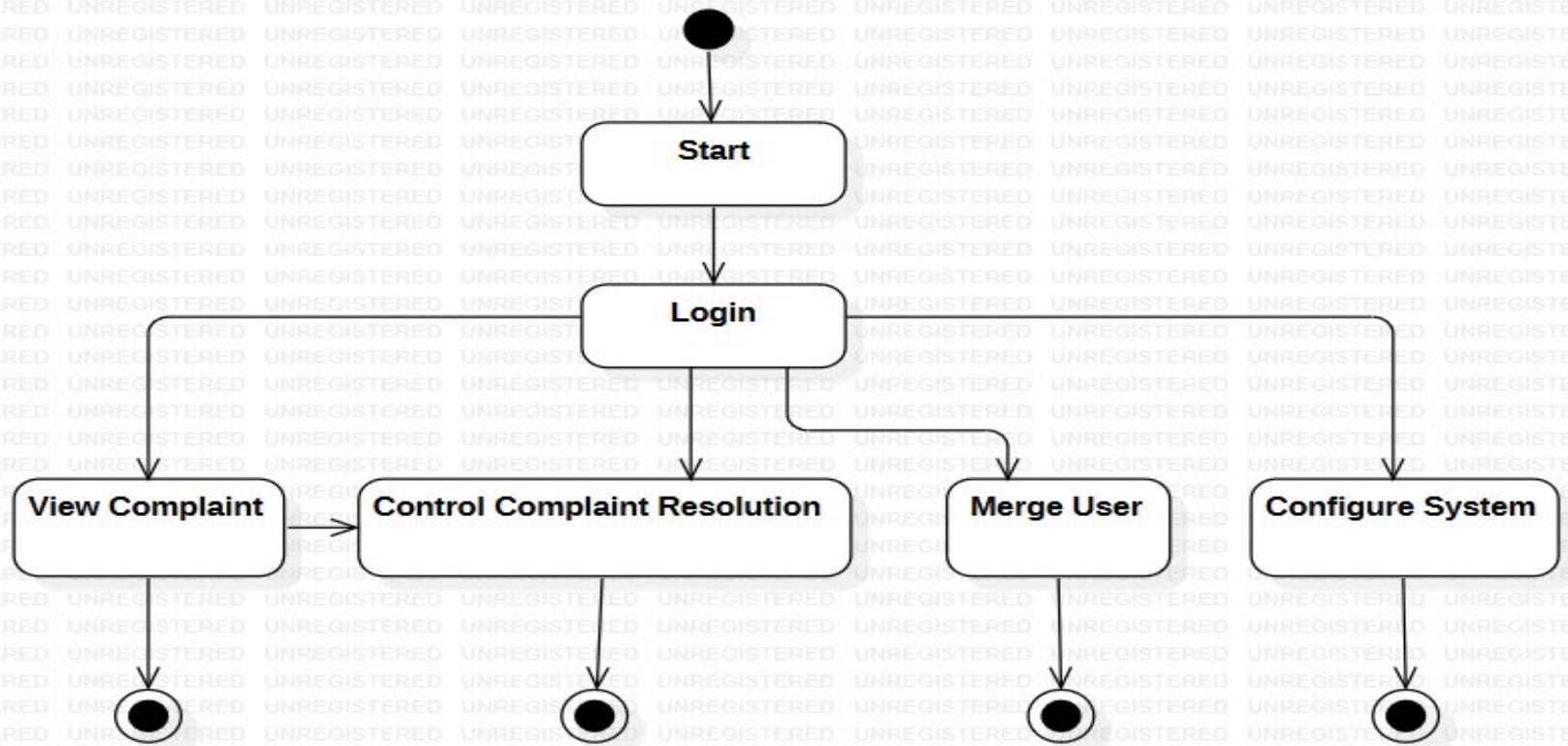
Activity Diagram : User/Citizen



Activity Diagram :Admin



Activity Diagram : Super Admin



Conclusion

Our proposed "Civic Complaint Registering Application" leverages advanced technology to empower citizens, streamline complaint resolution, and enhance community engagement. It has the potential to revolutionize the way urban and rural areas address critical issues and foster transparency in local governance.