# JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY SEC-62, NOIDA



# MINOR PROJECT -2 (PROJECT SUMMARY SHEET)

**TOPIC-** "CityCare: One stop Solution to All Civic Problem"

## **SUBMITTED TO:**

# **SUBMITTED BY:**

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Under the supervision of: Dr. Shikha Jain

## **MOTIVATION BEHIND THE PROJECT**

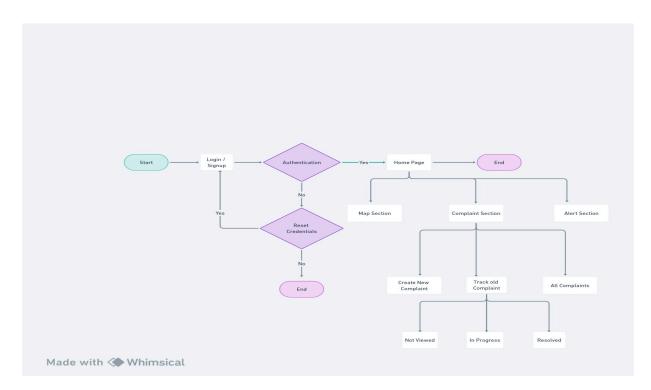
The motivation for CityCare stems from the pressing need to empower citizens with a voice and an effective mechanism to contribute to their community's well-being. By providing a user-friendly, accessible platform, CityCare aims to encourage civic participation, ensuring that urban issues are not only reported but also addressed in a timely manner. The project is driven by the belief that a collaborative approach, leveraging technology, can significantly improve the quality of urban life and governance.

### **TYPE OF PROJECT**

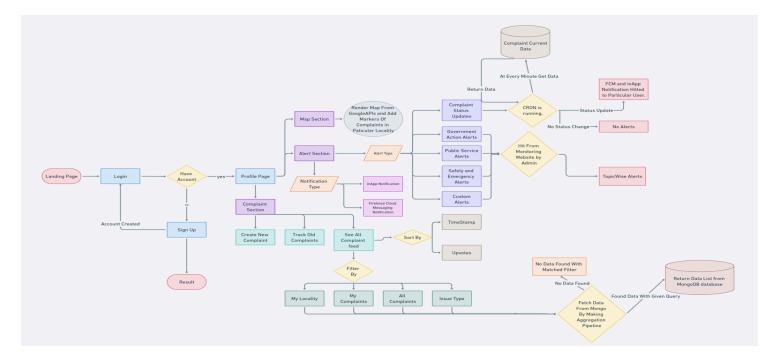
• Pure Development Project

## **FLOWCHART**

# **Frontend**



# **Backend**



### **FEATURES BUILD**

- Comprehensive Issue Reporting and Tracking: Users can report new complaints, complete with type, description, location, and multimedia evidence. Each complaint can be tracked through its lifecycle from submission to resolution.
- 2. **Community Engagement:** The platform enables citizens to view, upvote, downvote, or mark their issues as similar to existing complaints, fostering a community-driven approach to issue prioritization.
- 3. **Alerts and Notifications:** Through in-app notifications and Firebase Cloud Messaging, users receive updates on complaint status, new issues in their locality, government actions, and more.
- 4. **Interactive Map Visualization:** A dynamic map displays issues within the user's locality, enhanced with symbols for immediate recognition of problem types, alongside analytical reports.
- 5. **Customizable Alert Preferences:** Users can tailor alert preferences to receive notifications that match their interests and concerns.
- Complaint Monitoring Website: A web application to be used by government officials of respective organizations to see all complaints of respective category and also provide features of locality based filtering of complaints and Alert management system.

### **TECH USED**

**Software Used:** Vs Code, GitHub

Programming Language: HTML CSS JavaScript

Tech Stack Used:

1. **Backend:** Node.js, Express, Firebase for alerts and security.

- 2. **Frontend:** React-Native for mobile applications, React for the web interface, supplemented with HTML, CSS, and JavaScript. TailwindCss for responsive UI.
- 3. **Databases:** MongoDB, with considerations for future implementation of Redis for caching and Kafka for increased data throughput.
- 4. **Deployment and Scalability:** AWS suite including EC2, S3, Route53, with Nginx and Certbot for web server management and SSL certification.
- 5. **Additional Technologies:** Multer for media uploads ,Google APIs for map integration, CRON jobs for status tracking, and Firebase Cloud Messaging for alerts.

### **DIVISION OF THE WORK AMONG STUDENTS**

Aashutosh Pradhan
 Ajit Kumar
 Aman Upadhyay
 Backend Development, Project Report
 Web Application, Project Report
 Android Application, Summary Sheet

#### **CONCLUSION**

CityCare represents a forward-thinking solution to urban management, addressing the need for a more responsive, transparent, and efficient system for civic issue resolution. By harnessing the power of technology and community engagement, the platform not only facilitates immediate improvements in urban living conditions but also fosters a culture of participatory governance and civic responsibility.

## <u>REFERENCES</u>

- 1. <a href="https://developers.google.com/maps/documentation">https://developers.google.com/maps/documentation</a>
- 2. <a href="https://reactnative.dev/docs/getting-started">https://reactnative.dev/docs/getting-started</a>
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- 5. <a href="https://nodejs.org/docs/latest/api/">https://nodejs.org/docs/latest/api/</a>