CrimeTrack

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Content

- Overview
- Introduction
- Problem Statement
- Objectives
- Requirements
- Literature Survey
- Proposed Design (along with UML Diagrams)
- Implementation
- Results and Analysis
- Conclusion
- References

Introduction

The CrimeTrack app is designed to offer a secure, anonymous platform for individuals to report crimes, addressing the common concern of privacy and safety that often prevents people from coming forward. Crime reporting is an essential part of ensuring community safety, yet many individuals are hesitant to report incidents due to fears of revealing their identities. CrimeTrack tackles this issue by providing an easy-to-use platform that enables users to report crimes without compromising personal details. By integrating advanced technologies such as Firebase Authentication and Firestore, the app ensures both security and privacy for its users.

Problem Statement

There is a significant issue where people hesitate to report crimes due to the fear of exposure and retaliation. A secure, anonymous reporting system is essential for increasing trust in law enforcement and ensuring safety.

Objectives

- Provide a platform for anonymous crime reporting.

- Ensure user privacy and security through secure login and anonymous reporting features.

- Allow users to manage their reports by viewing, editing, and deleting them.

- Provide basic legal information on crime types.

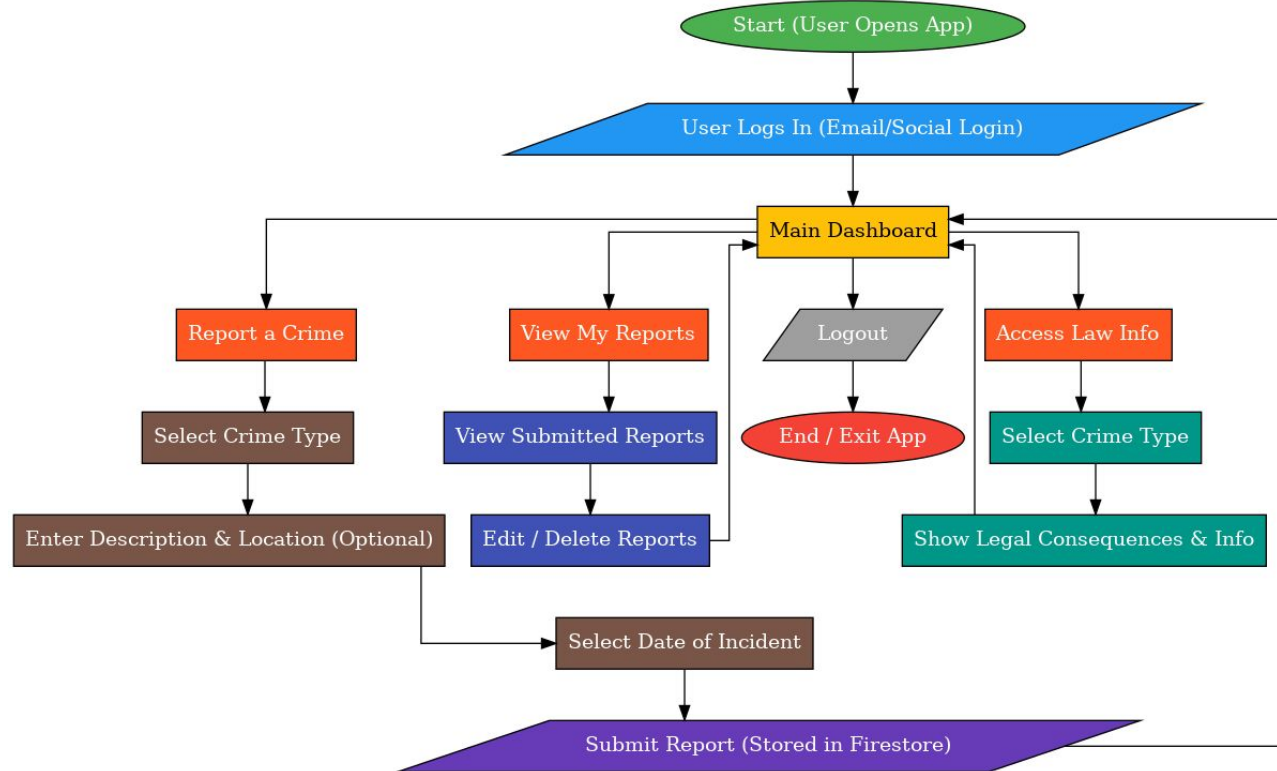- Offer a scalable solution for crime data collection and reporting.

Requirements

- **Frontend:** Flutter framework (Dart) for a user-friendly interface.

- **Backend:** Firebase Firestore for storing crime reports.

- **Authentication:** Firebase Authentication for secure, anonymous logins.

- **Basic Crime Categories:** Basic legal information on crimes, like possible punishments.

- **Platform Features:** Report creation, viewing, editing, and deleting.

Literature Survey

Name	Year	Summary
A Usable and Secure Crime Reporting System for Technology Resource Constrained Context	30 April 2015	This paper explores how crime in technology-limited environments hampers economic growth by deterring investment and driving emigration. It examines the potential of secure, anonymous reporting channels as a solution to encourage crime reporting and enhance security.

Proposed Design

Result and Analysis

- **Security:** The app provides end-to-end security via Firebase Authentication, ensuring only authorized users can report and manage crime reports.

- **Anonymity:** Users' personal information is not linked to the reports, maintaining complete privacy.

- **Ease of Use:** The app's simple and intuitive interface ensures users can easily navigate the platform, create reports, and manage them without any complexity.

Conclusion

The CrimeTrack app successfully delivers a secure, anonymous platform for reporting crimes, protecting user privacy while enabling efficient data collection. Its integration of Firebase Authentication and Firestore offers a robust solution for managing crime reports, ensuring both security and anonymity for users.

References

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