CASA0015: Mobile Systems & Interactions

Flutter Application Name - Phone Theft Guard
GitHub Repository - https://github.com/mk20661/PhoneTheftGuard

Introduction to Application

Phone Theft Guard is a mobile application developed based on Flutter, aiming to assist users in preventing frequent cases of mobile phone theft in London. The application presents the number of mobile phone thefts in each area through a visual map. Users can switch the crime data of different months by sliding the time bar, thereby understanding the changing trends of high-risk areas. When users enter the marked high-risk areas, the application will promptly remind them through warning pop-ups or system notifications to enhance their safety awareness.

Furthermore, Phone Theft Guard offers user registration and login functions, allowing users to customize reminder settings. The application uses Firebase as the backend service to ensure data synchronization and security, and integrates bilingual support (Chinese and English switchable), facilitating the use by users with different language backgrounds.

This application integrates geographic positioning, map visualization and data analysis technologies. It not only offers an intuitive and understandable user experience, but also effectively reduces the probability of mobile phones being stolen by users due to negligence in high-risk areas through the real-time reminder function. Phone Theft Guard is dedicated to providing each user traveling in the city with an additional layer of protection, making daily travel more reassuring and worry-free.

Biblography

1. Firebase (2025). Get to know Firebase for Flutter. [online] Firebase. Available at: https://firebase.google.com/codelabs/firebase-get-to-know-flutter#0 [Accessed 21 Apr. 2025].

2. OpenStreetMap (2024). OpenStreetMap. [online] OpenStreetMap. Available at: https://www.openstreetmap.org/ [Accessed 1 Apr. 2025].

Declaration of Authorship

We, HONGBING QIU, confirm that the work presented in this assessment is my own. Where information has been derived from other sources, I confirm that this has been indicated in the work.

Hongbing Qiu

26/04/2025