

Ignium Hackathon

Problem Statement:

Navigating cities at night can be risky, especially for night workers or individuals returning from bars late in the evening. Traditional map applications focus on finding the fastest route, often ignoring safety concerns such as poorly lit streets, high-crime areas, or isolated paths.

How can we ensure that people can choose the safest route for their journey, giving them peace of mind as they travel at night?

Solution

To address the need for safer routes at night, we are developing a map app that helps users navigate with security in mind. The app utilizes the **Google Maps API** for mapping and real-time directions, ensuring users have reliable, up-to-date route information. However, unlike standard map applications that focus on speed or distance, this app will prioritize safety.

The app will integrate with the **Crimometer API**, which provides comprehensive crime data, including the types of crimes committed and their frequency in specific areas. It goes beyond reporting individual incidents by offering a concentration map of crime hotspots, allowing users to avoid areas with high levels of criminal activity. This data is updated frequently, ensuring that users receive accurate information about potential risks along their route.

In addition to crime data, the app will include a **crowdsourcing feature** that empowers users to report recent safety concerns, such as suspicious activity or ongoing incidents, directly to the map. This real-time information can alert other users to avoid dangerous areas immediately, creating a community-driven layer of security. As these reports come in, they will be integrated into the app's routing algorithm to adjust directions accordingly.

By combining data-driven analysis and user-generated reports, the app aims to provide travelers with the safest possible routes, particularly during vulnerable nighttime hours.

Impact:

This app has the potential to transform the way people approach travel, particularly in urban environments where safety is a major concern. The app provides an invaluable tool to ensure a safer journey for night workers, people returning home late, or anyone who feels vulnerable walking through unfamiliar areas. By prioritizing routes that avoid high-crime areas and incorporating real-time user reports, it empowers individuals to make informed decisions about their travel, offering peace of mind during typically dangerous hours.

For people working late shifts, such as healthcare workers, bartenders, or delivery drivers, the app could significantly reduce the risks associated with returning home after dark. Parents and loved ones can also feel more reassured knowing that their family members have a way to find the safest routes possible, potentially preventing them from becoming victims of crime.

Moreover, the crowdsourcing feature encourages community participation, allowing users to contribute to a collective sense of security. This feedback loop creates a safer, more connected environment where people look out for each other. By reporting suspicious activity or hazards, individuals can warn others in real-time, creating a sense of community-driven safety.

Ultimately, this app could help reduce crime rates by guiding people away from dangerous areas and enabling faster reporting of incidents. Over time, it has the potential to foster safer city landscapes, especially for those who rely on public transportation, walk, or bike during non-peak hours.

How it helps for social good?

This project is designed with social good at its core, aiming to improve public safety and foster a sense of community among its users. By providing a tool that prioritizes safety over speed, it addresses the critical issue of personal security, especially for vulnerable individuals like night workers or people traveling late at night. The app empowers these users to avoid high-crime areas, helping reduce their risk of becoming victims of crime and offering peace of mind during nighttime travel.

The crowdsourcing feature allows users to contribute real-time reports about suspicious activity or safety concerns, creating a shared responsibility for public safety. This collective effort encourages community participation, where users look out for one another by providing up-to-date information that can prevent others from encountering dangerous situations.

Moreover, by diverting traffic away from crime hotspots, the app can help law enforcement focus on high-risk areas. With fewer people in these zones, police can respond more quickly to incidents, improving emergency response times and potentially lowering crime rates. Over time, this could lead to a safer, more secure urban environment, where people feel more confident about their travel choices.