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An Android Application for Crime Analysis in San Diego

Abstract

Over the past few years, smartphone adoption has increased worldwide. In this era of smartphones, one of the easiest ways to make this information available to many users is through smartphone applications. Smartphone applications can provide requested information in a readable and user friendly format. Information related to data such as real estate, property, post offices, crime locations and many others can be very useful.

ESRI's ARCGIS provides various services and tools which help visualize real-world features, discover patterns, obtain information, and communicate that information to others. When these services work in conjunction with GPS based location services in smartphones, they create new avenues for applications. This thesis implements an Android smartphone application with features to analyze location based crime data. The user of this application can view crime data in a region and filter different crime types. The application allows the user to query and analyze crimes that have occurred near his location or at a location of interest. The application includes features to measure distance between crime spots and also measure area on the map. The user can also switch the base-map from street map to NatGeo map. Powered with this information, renters and home buyers can ensure that their new home is in a safe location. Real estate agents can buy or sell property in safer locations. Commuters can find routes which avoid crime spots. Tourists can find accommodation in safer places. Students can be aware of the high crime rate areas around the school campus. This application uses ArcGIS feature service by ESRI to render all data on the map.

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