Developing an offline android map application for KDU-Southern Campus

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Abstract

Land navigation has become easier with the development of the mobile navigation applications. These mobile applications have developed by the combination of the Global Position System (GPS), Remote Sensing and Information Technology methods. Campus Navigators are also a new trend in the mobile navigation application field which use different technologies and for different purposes. Most of the existing mobile navigation applications are online applications and those are mostly using the satellite images as the navigation map layer. This study aims to address the requirement of campus navigator for KDU-Southern Campus, Sooriyawewa as a support for the all kind of university community by developing a mobile navigation application. This application has developed as an offline Android application using Android Studio platform to address many users. This application will be different from the existing applications mainly since it is using the orthomap which is created by using Drone images instead of satellite images. Being offline application this will be useful in area like Sooriyawewa where the network connection is mostly in unstable condition. This application will be provide basic information of the locations within the Southern Campus premises. Additionally, since the University is still in developing stages using drone images will help to keep visual records of the development of the Campus as well.

Keywords: Campus Navigator, Android Studio, Drone, Orthomap