

Google Maps Aided Land Availability System for Chitungwiza Municipality

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Abstract

The current local municipalities' bureaucracy and the slow manual processing of land enquiry and status checking is frustrating. Firstly information dissemination in respect to land availability is mostly through state media like newspapers on random dates and an online classified.co.zw platform which either most people don't buy or have little access to. Secondly municipality uses a traditional file system with many details of land imprinted on files which makes tracking land status very difficult. This research scrutinizes selected alert systems and proposes a Land Availability Alert System (LAAS). An incremental process model was used for implementation to incorporate changing system requirements along with agile methods. The LAAS implementation will consist of a three-tier architecture with a centralized database (MySQL database), a Web and mobile application (Android app). The proposed solution will enable users (i.e. land seeker, surveyor, staff) to log into their account and carry out all operations (check land status, view advertised land etc.) receiving alerts via Google Cloud Messaging from a remote location without visiting the municipal offices saving time and transport expenses. Moreover a centralizing information will result in better recover plan and information retrieval. Google Maps Application Programming Interface (API) was used for visualization and accurate land location using Global Positioning System (GPS) land location.