

An open cloud-based platform for the creation and delivery of smart applications and services

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Abstract:

With the increasing integration of computers and smartphones into our daily lives, in addition to the numerous benefits it offers over traditional paper-based methods of conducting affairs, it has become necessary to incorporate one of the most essential facilities into this integration; namely: colleges. The traditional approach for conducting affairs in colleges is mostly paper-based, which only increases time and workload and is relatively decentralized. This project provides educational and management services for the university environment, targeting the staff, the student body, and the lecturers, on two of the most used platforms: smartphones and web applications. The services include project management, attendance marking, various notifications and alerts, files and resources, a grading system, and an assignment management system. This project also aims to ultimately digitalize most of the information inside the college. The web platform contains accounts for an admin; who is the person with the highest authority within the system, the head of the department, the department coordinator, the project coordinator, the lecturers, and the students. Each of those accounts has its privileges and the interaction between those accounts is managed via a backend system. The mobile platform targets the students exclusively and is linked with the web platform.

Keywords: Smart Campus; Web Portal; Mobile Application; Cloud; IoT.

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