

Conceptual design and prototype of smart calling system research

ABSTRACT

This study is conducted with the intention of designing, developing and testing a prototype of a Smart Calling System for Mechanical Engineering Department (MED) in Polytechnic Sultan Azlan Shah (PSAS), Behrang Perak. The MED building is consists of 3 floors of staff offices, 4 floors of classrooms and a total of 1388 students. As this involves a large number of students, there is a frequent movement of students flow into the department office to meet their relevant lecturers. The current communication method in MED which is using telephone and PA system is not very effective and has created an unpleasant environment in the staff s office. Therefore the objective of this study is to develop a Smart Calling System for the communication purpose in the MED offices. This study was planned based on the Design Process Model (DPM) activity. Results of the developed prototype showed that it provides a better communication tool between the lecturers and students.

Keyword: Calling system; Conceptual design; Prototype; Communication; Design process model; Product design specification; PIC controller