
King Fahd University of Petroleum & Minerals
College of Computer Sciences & Engineering

**Department of Computer
Engineering**

COE 400: DIGITAL SYSTEM DESIGN(1-6-3)

Digico

Project Statement

PROJECT

Totally Controlled Irrigation System

PROBLEM

Watering house plants is a resource hungry process. Many commercially available systems rely on timers regardless of the atmosphere or the surrounding. In this project we will design a web enabled irrigation monitoring and control system with an all weather station for warning against hot temperature, sun intensity and sand winds in real time and adjusting water level according to rain, humidity and time. Also the system should measure the distribution of watering based on water pressure and availability. The distribution takes in account the area or zones and the nature of plants.

Usually plants are grouped in zones and each need to be controlled and monitored separately. The system should be scalable which means that additional zones can be added with no modification on the main controller.

The system would be able to provide some statistics about the operation through SMS messaging. Also basic control can be provided by SMS.