

ENGINEERING DESIGN PROJECT

EN1190

Automated Plant Watering System

PRODUCT PROPOSAL



GROUP NO: 04

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PROBLEM

Due to the prevailing economic instability in our country, there is an urgent need to increase the national production rate. To suppress the food crisis government has advised public to engage in home gardening. But it appears to many as a impossible task to manage this among their busy schedules.

SOLUTION

Proposed solutions,

1. Greenhouse control system
2. User notifier on taking care of plants
3. Automated plant watering system

We finally agreed on developing an automated plant watering system.

GOAL

Our main goal is to encourage people for more home gardening at least to meet their daily needs in the time of this crisis and beyond. We wish to develop this product affordable as much as possible while people in our country going through an economic crisis. This product will be user friendly, easy to repair and easy to reproduce with less resources.

TARGET USERS

Government and Private sector workers, especially low-income people

DESIGN SPECIFICATION

Our sensors are measuring the moisture level of soil and when the soil get dried than the threshold level, it triggers the irrigation system to water the plant. And this automated system notifies the user to refill the water reservoir when the water level is low. And our whole electronic and electrical components of our system is protected by enclosure which is watertight and have resistance to all damaging factors of both indoor and outdoor environment. This system is friendly, in case of any repairing the user can easily access it.