Engineering Clinics Review-1

Title of the Project :-

Expression Planter.

Team Members –

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PROBLEM STATEMENT

Taking care of plants are more important. Missing even a small scheduled task for the plant can result in the drying up of the plant and even its death. We don’t know when the plants need Sunlight and water for it, even excess of it leads to plants death. This is a big problem in houses where shifting the plant to place of the sunlight at the required time. Watering the plant by checking the amount of moisture in the soil of the pot is another very important. All these processes or tasks can result in a makes sure that the plant stays alive and healthy. This is the main goal of this project. The Expression planter do tell all the above tasks, when it actually required by showing the expressions on planter accordingly like a pet planter.

Required Components and approximate cost:

S.no.	Name of the Equipment	Cost (Rs)
1	1 x Raspberry pi zero 2W	3400
2	1 x LCD Module	899
3	1 x Moisture sensor	600
4	1 x LM35 Temperatures sensor	240
5	1 x LDR module	30
6	1 x ADS115 ADC	350
7	1 x 5V 2A adapter	365
8	1 x Micro USB Breadboard 5V Power Supply Module	40
9	5m 30AWG Silicone wires	58
10	Perforated board	200
11	Pot	150

Plan of action

The Expression planter which is a planter that displays the built in emotions according to the situations. The plants are more important essenticial resource for all living things. Taking care of plants in a scheduled time is un remberable and we dont know when actually plants wants resources.

The planter with moisure sensor in the soil checks the moisure level and displays emotion on the LCD display module when plants needs water and other emotion for enough of water. The planter is fixed with LM35 Temperature sensor displays different emotions when needed sunlight and not needed. Along with all this sensors and adapters are connected to Raspberry pi with coded in the way displays the emotions which like a pet planter. Where this feel people like the planter looks cute and helps to take care the plant only when it needed makes plant be alive and healthy.

Timeline of the Progress:

Feb 2nd week	Feb 3nd week	Feb 4th & mar 1st week	Mar 1st & 2nd week	Mar 3rd & 4th week	Mar 4th & Apr 1st week	Apr 2nd week
Literature Survey	problem identification	Hardware Analysis	Coding - Raspberry Pi	Integration with IDE	Testing	Submission

Concluding remarks

- The project is more helpful for people to take care the plants to be stay alive and makes environment healthy.

Reference cited

- https://jegamboafuentes.medium.com/building-an-iot-flowerpot-from-scratch-bad9e6623f48