PLANTPAL PRO

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INTRODUCTION



What is
Plantpal pro?

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PROBLEM STATEMENT

Nursery owners suffer from wasting a lot of time and effort while planting seedlings in general and flowers in particular.

OBJECTIVES



Planting seedlings and providing the necessary components for their ideal growth in a fully automated manner

The possibility of providing the seedlings the customer needs with the push of a button without effort from the farmer

Creating a new culture in the approved agricultural mechanisms in Palestine

TARGET GROUP

- Nursery owners
- Garden and park owners
- Flower shop owners





METHODOLOGY

Drawing a model of the project and its mechanism

Study and research the necessary parts and tools for application.

Communicating with nursery owners, studying the most appropriate method of cultivation and identifying the problems they face. We went to Al-Junaidi Nursery.



Study the mechanism for delivering and installing the project using the correct steps to reach its final image

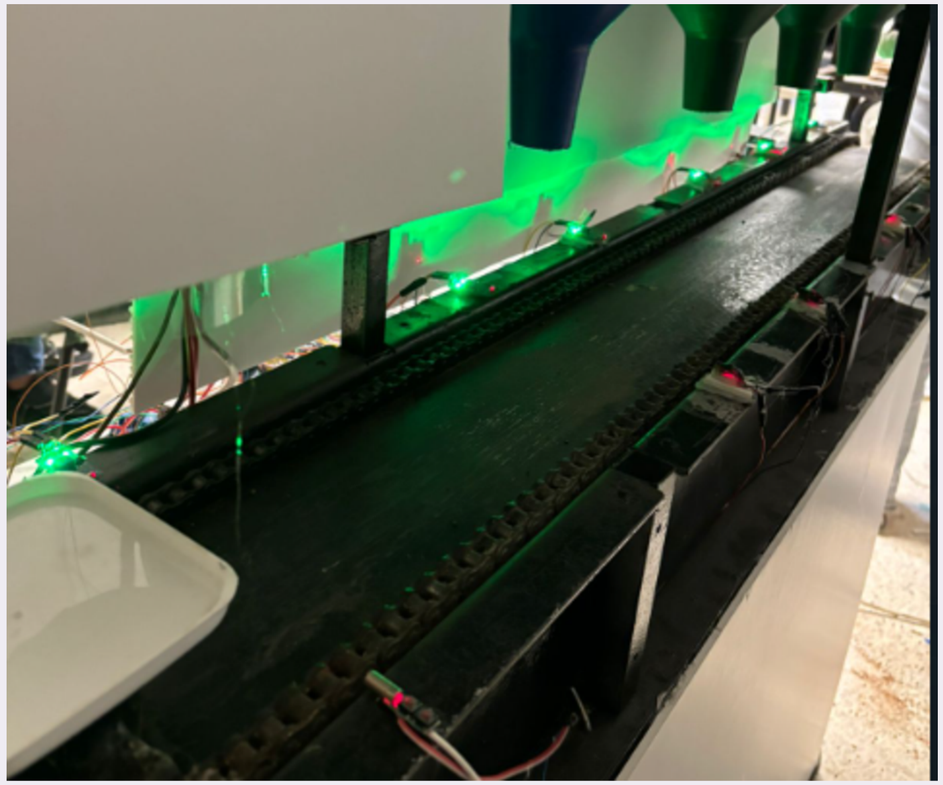
FEATURES

Track and stop system lasers and ldr



For the track: Motor with 5 A driver

Stop system: Laser and LDR



FEATURES

Feature of falling seed pots





DC motor - H-bridge -
used with Arduino

FEATURES

2 * Dust fall feature





NEMA 23 motor -3.5
driver -Ultrasonic

FEATURES

8*Seeds and growth vitamins feature



Ultrasonic- Servo Motor-

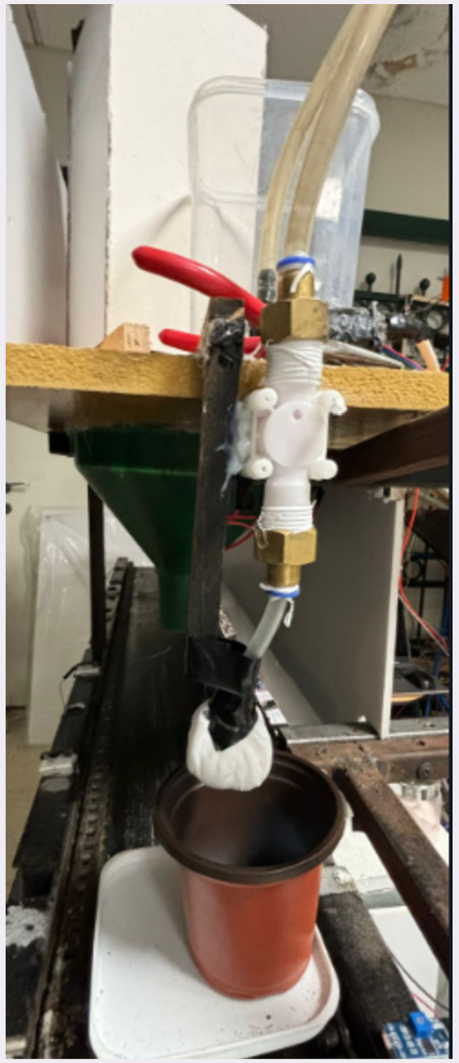


Cones for collection

FEATURES

Seedling irrigation feature





Pump and valve connected
with relay with arduino

FEATURES

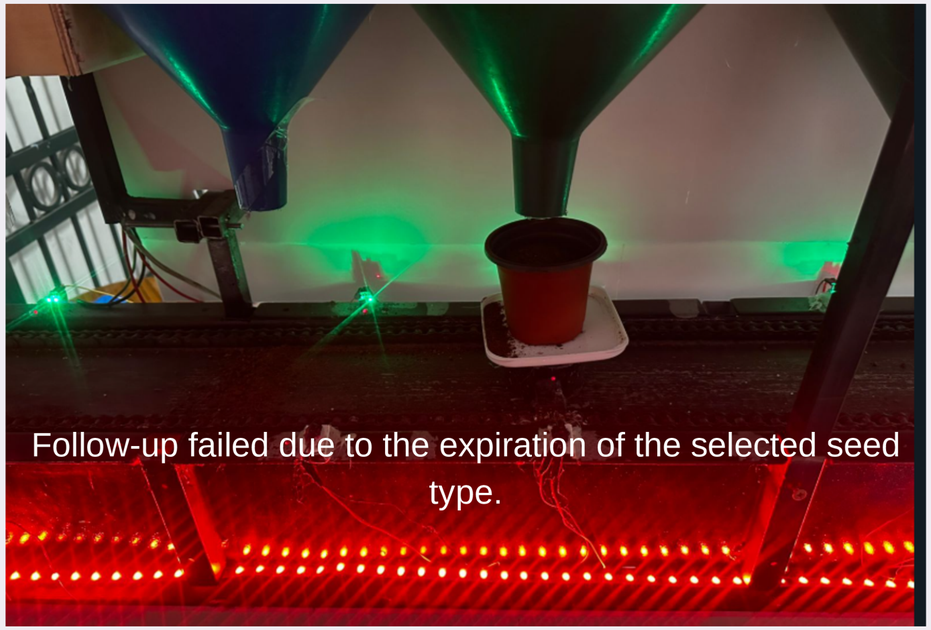
Smart lighting feature



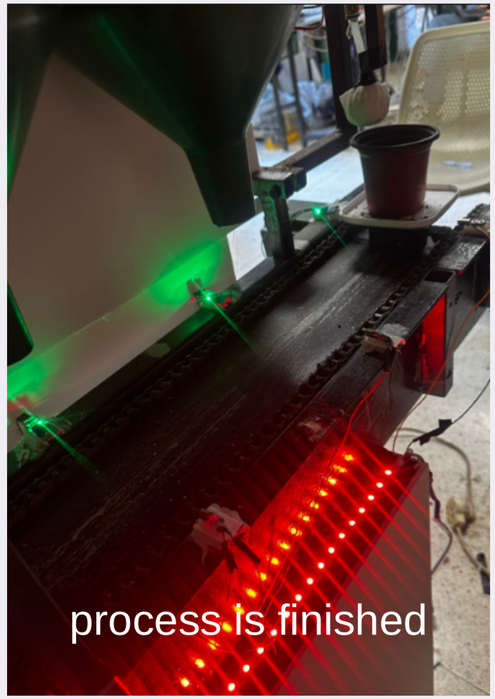
Green light during process

FEATURES

Smart lighting feature



Follow-up failed due to the expiration of the selected seed type.

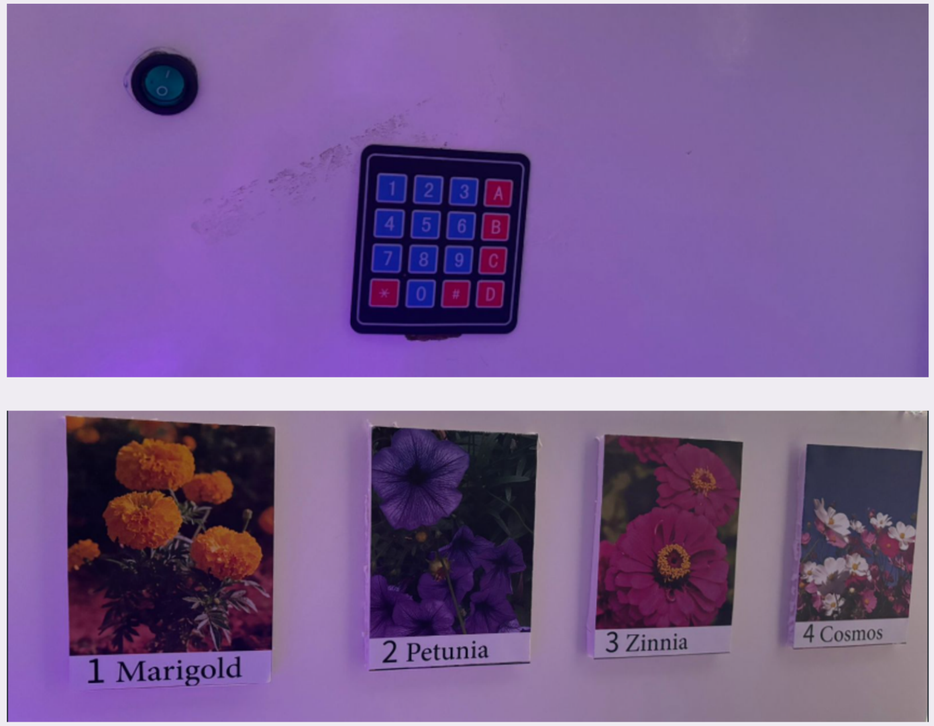


process is finished

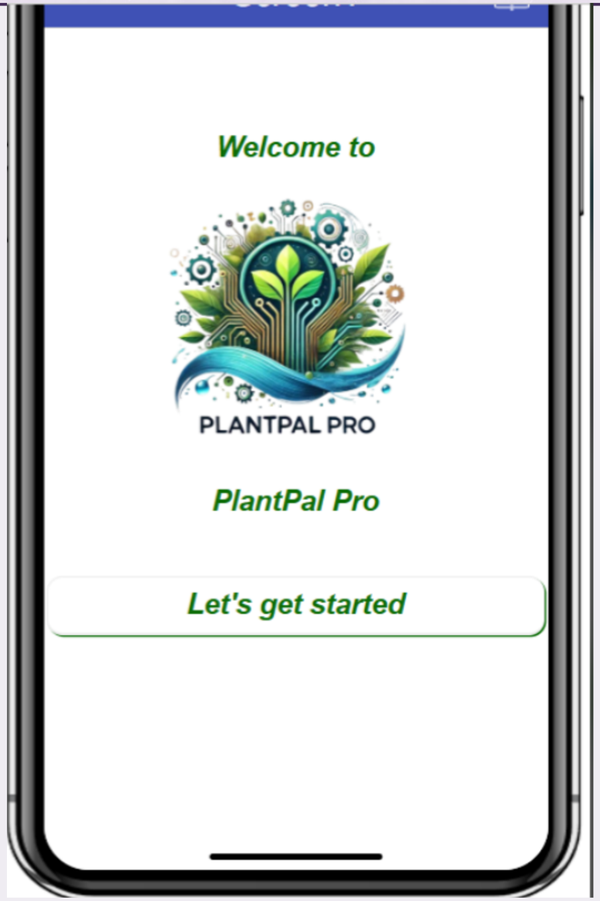
Red light when the process is finished or fails due to the end of one of the components

FEATURES

Control



Control via keypad with attached menu



Control via mobile

SOFTWARE APP

Mobile Design

App Inventor

Connecting the mobile

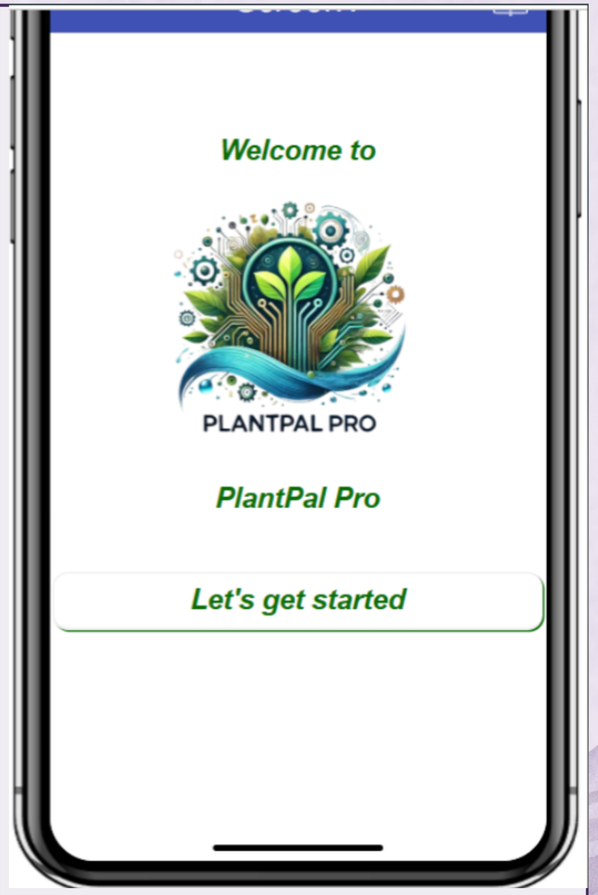
Wi-Fi chip: ESP 32

Arduino

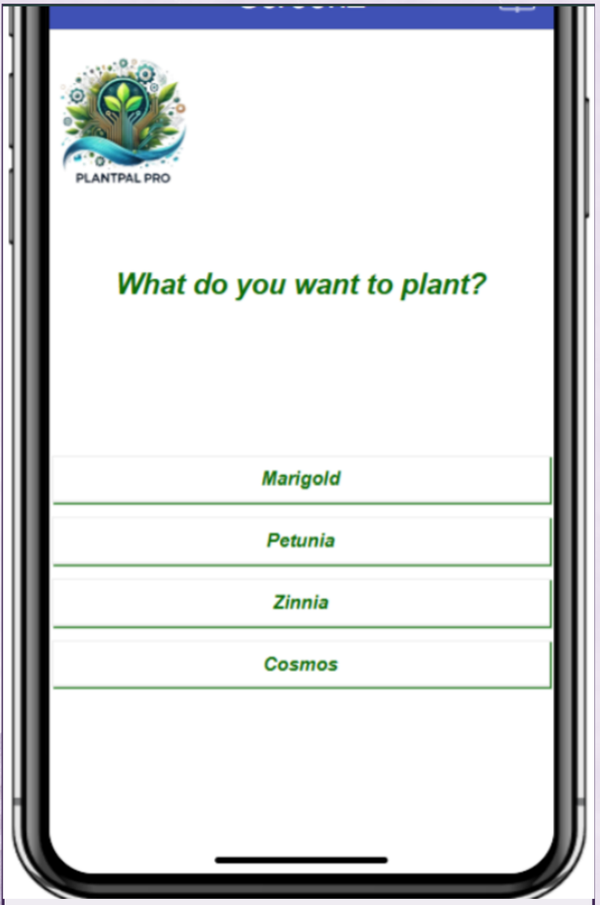




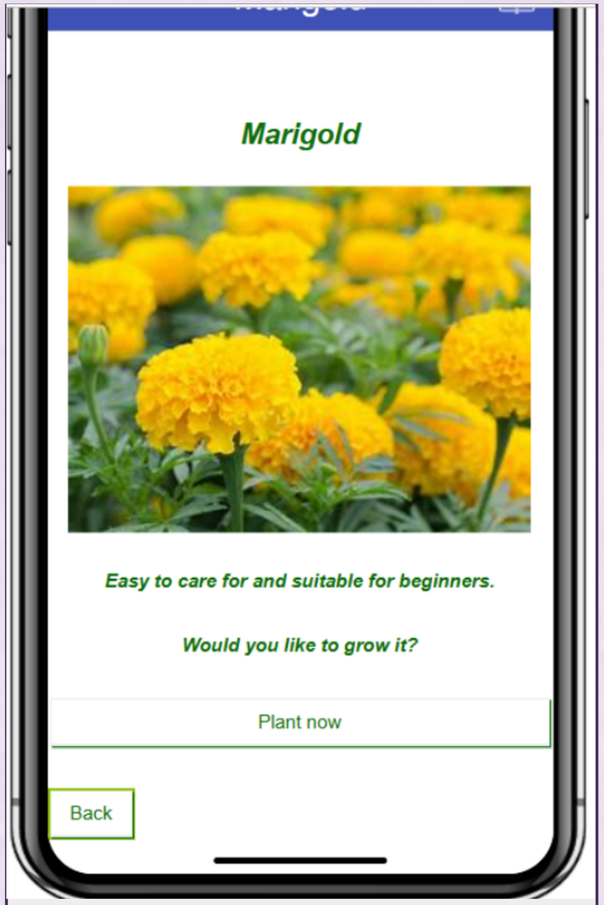
SOFTWARE APP



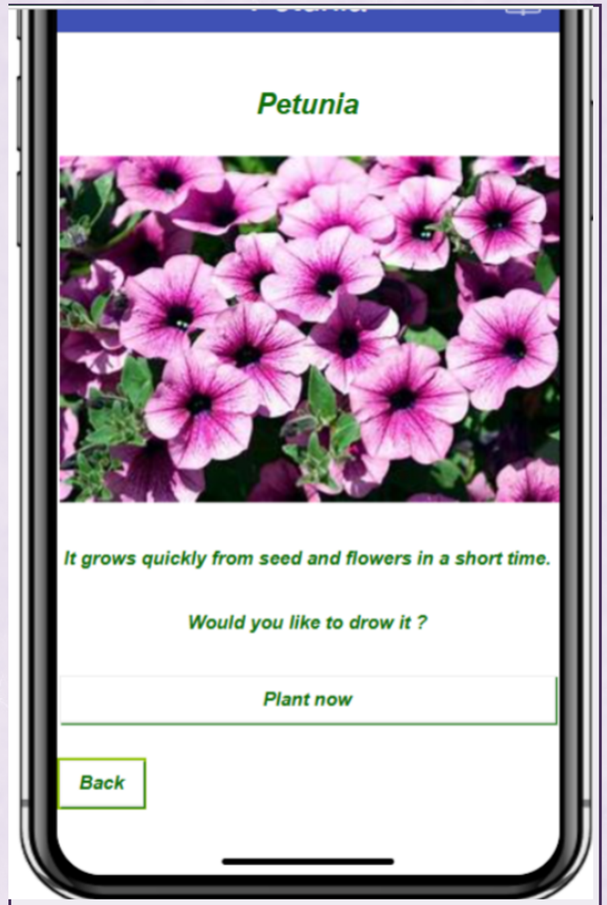
Home Page



Seed type selection page



Select the type of seed and request planting.



Select the type of seed and request planting.

FUTURE WORK

Plastic house for flowers to ensure complete care for the plants after planting

Possibility of choosing a larger number of seed types and greater production





THANK YOU

