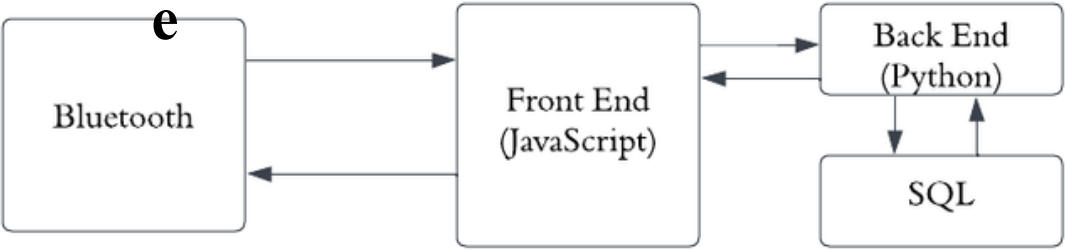


# 1.Introduction

Through our project we are mainly aiming to increase the efficiency in farming and make farming is easily done by anyone without any previous knowledge. In order to achieve it we are developing an IoT device which is capable of analysing the farming condition and make expert level suggestion by using predefined expert validated data. As this idea includes several measurements and devices as the first version, we are developing a device which is capable of analysing the soil nutrients and give suggestion for plantation that whether this soil is good for planting or what is need to add for plantation.

# 3.Web APP Architectur



### Instructions

- Fill the provided container with de-ionized or clean water up to the indicated level.
- Collect a sample of sand from your land, digging to a depth of 10 cm.
- Fill the container with the collected sand and mix it with the water thoroughly.
- Ensure the sensor probes are fully submerged in the sand by closing the top with the sensor cover.
- Click "Start" and wait for 10 seconds to complete the process.
- For enhanced accuracy, repeat the above process in different areas of your land.
- Click "Calculate" to obtain readings and suggestions based on the measurements.
- For optimal accuracy, we recommend dividing your land into (10m x 10m) sections and obtaining readings from each area. More readings will increase accuracy.

0:10

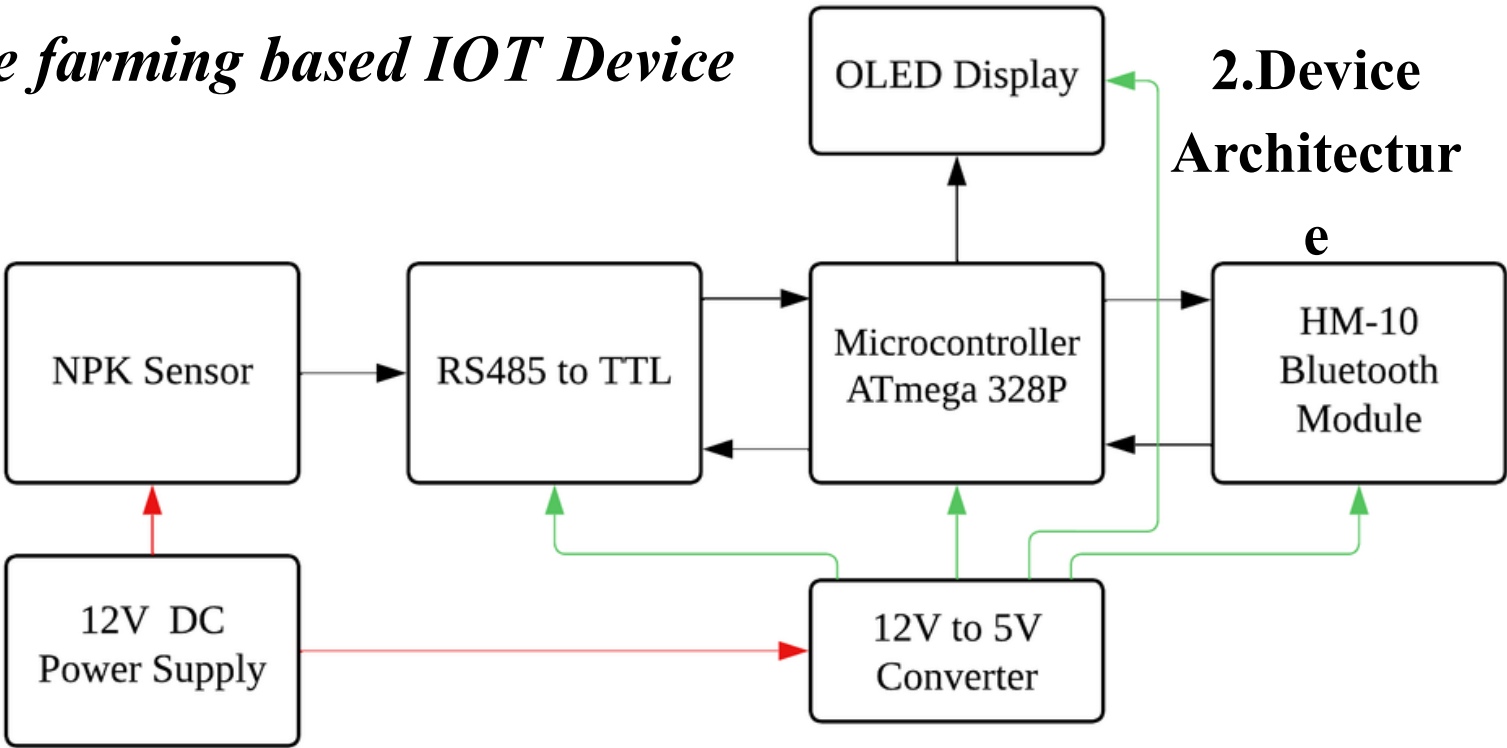
StartRemoveCalculate

Readings	Status
New Reading	measured

# Farmers' Brain

Innovative farming based IOT Device

# 2.Device Architectur



# 4.Conclusion

In the future, we'll expand our platform to include a more detailed crop database and integrate additional sensor inputs. This will enable crop-specific recommendations based on soil nutrients. We'll also introduce an AI-powered Chat Bot that provides real-time guidance, answers user questions, and offers personalized crop management tips. This will make our platform more accessible, efficient, and helpful for users.