

# Modernizing Agriculture: Addressing Challenges in Traditional Farming Methods





# The Challenge: Traditional Farming

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- Reliance on manual labor and rudimentary techniques
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- Lack of precision in irrigation leading to overwatering or underwatering
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- Inefficiency and susceptibility to human error
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- Crop losses and economic instability for farmers





# Solution: AI- Powered Farming

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- Machine learning algorithms predict crop pests.
- Real-time data collection from in-field sensors.
- Dynamic irrigation scheduling and automated valve control.
- Precise water delivery and minimized waste.

# Technological Stack:

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## Hardware:

1. Arduino UNO
2. DHT22
3. Soil moisture
4. ESP32cam
5. ESP8266
6. Servo motor

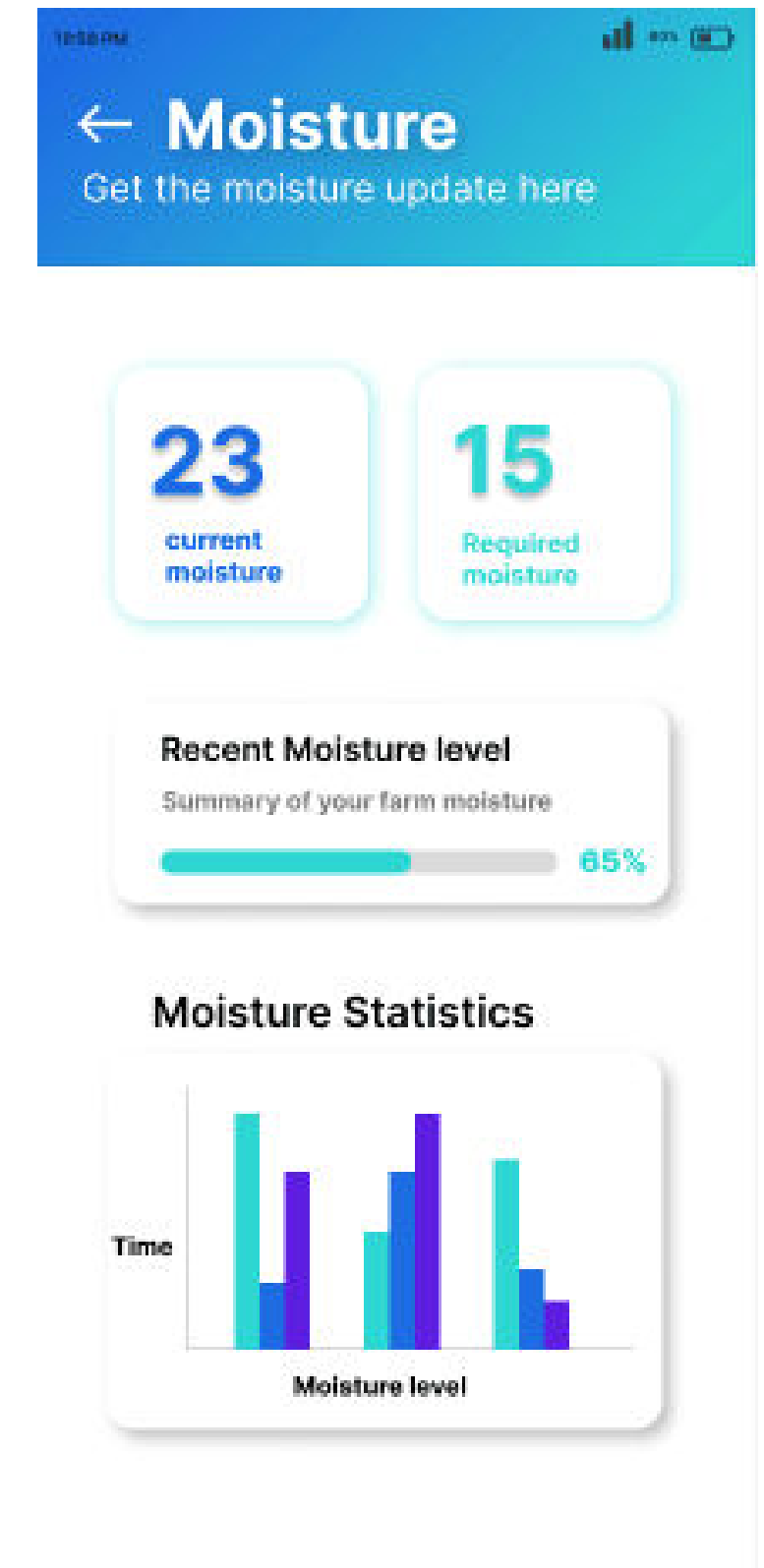
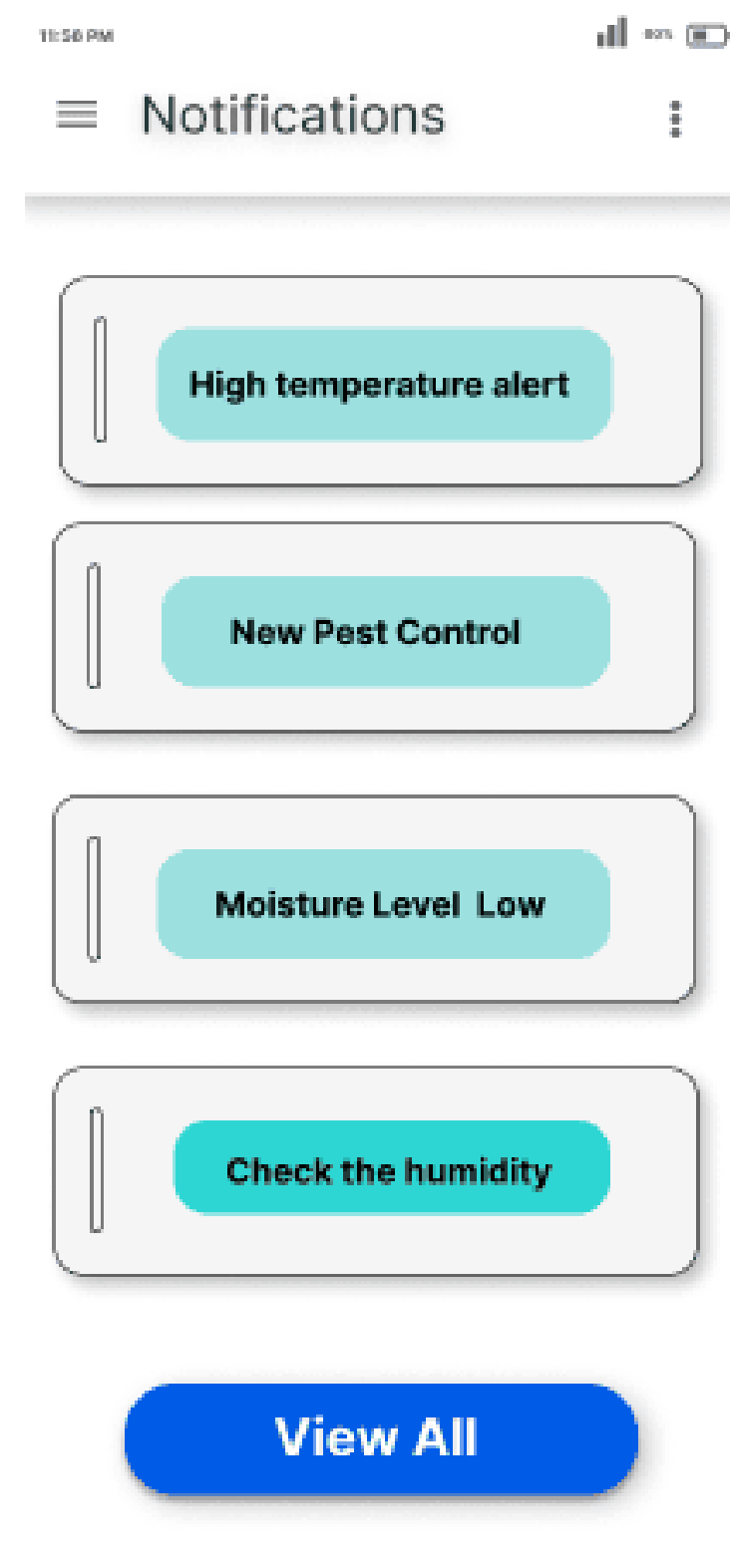
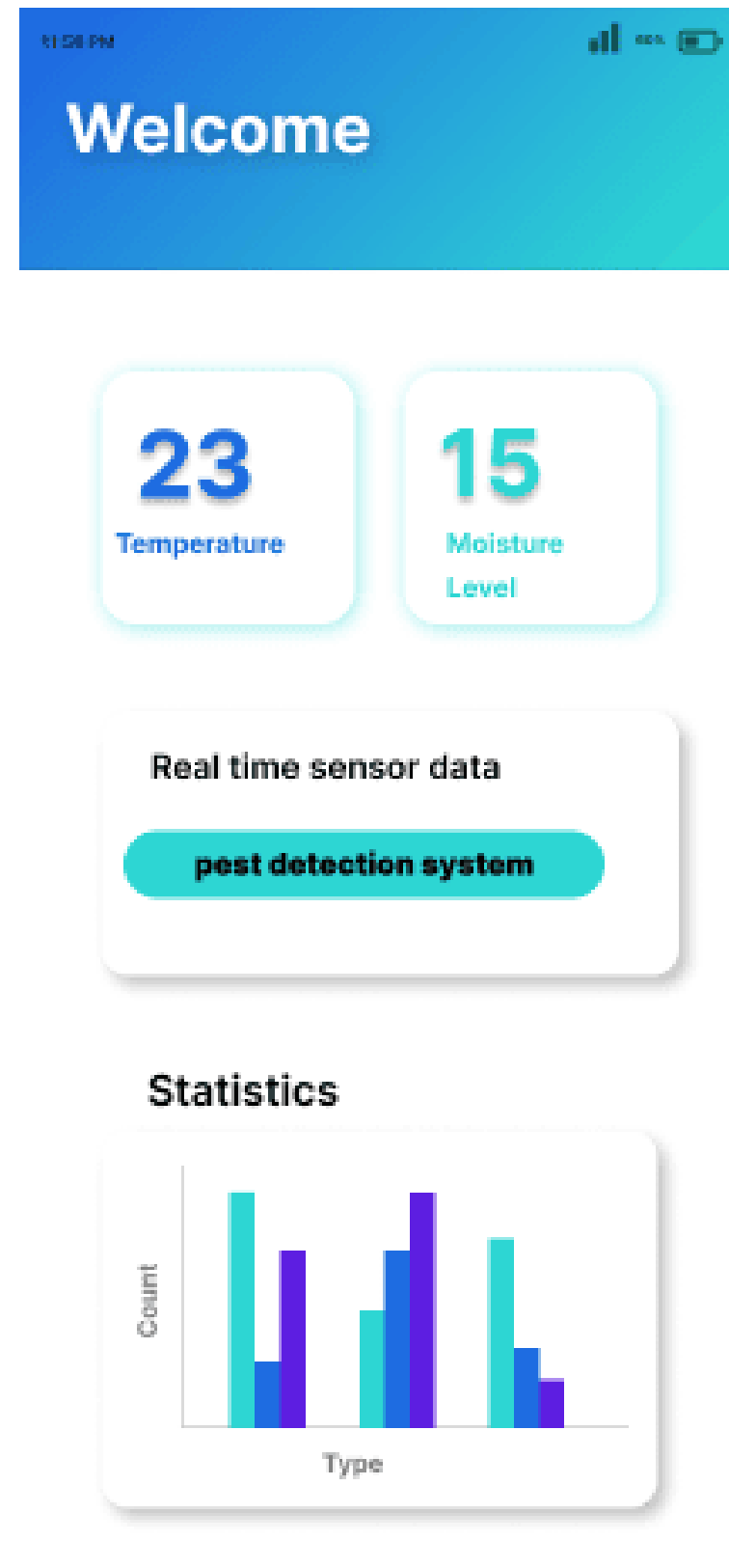
## Software:

1. TensorFlow
2. Python
3. Flutter
4. Firebase

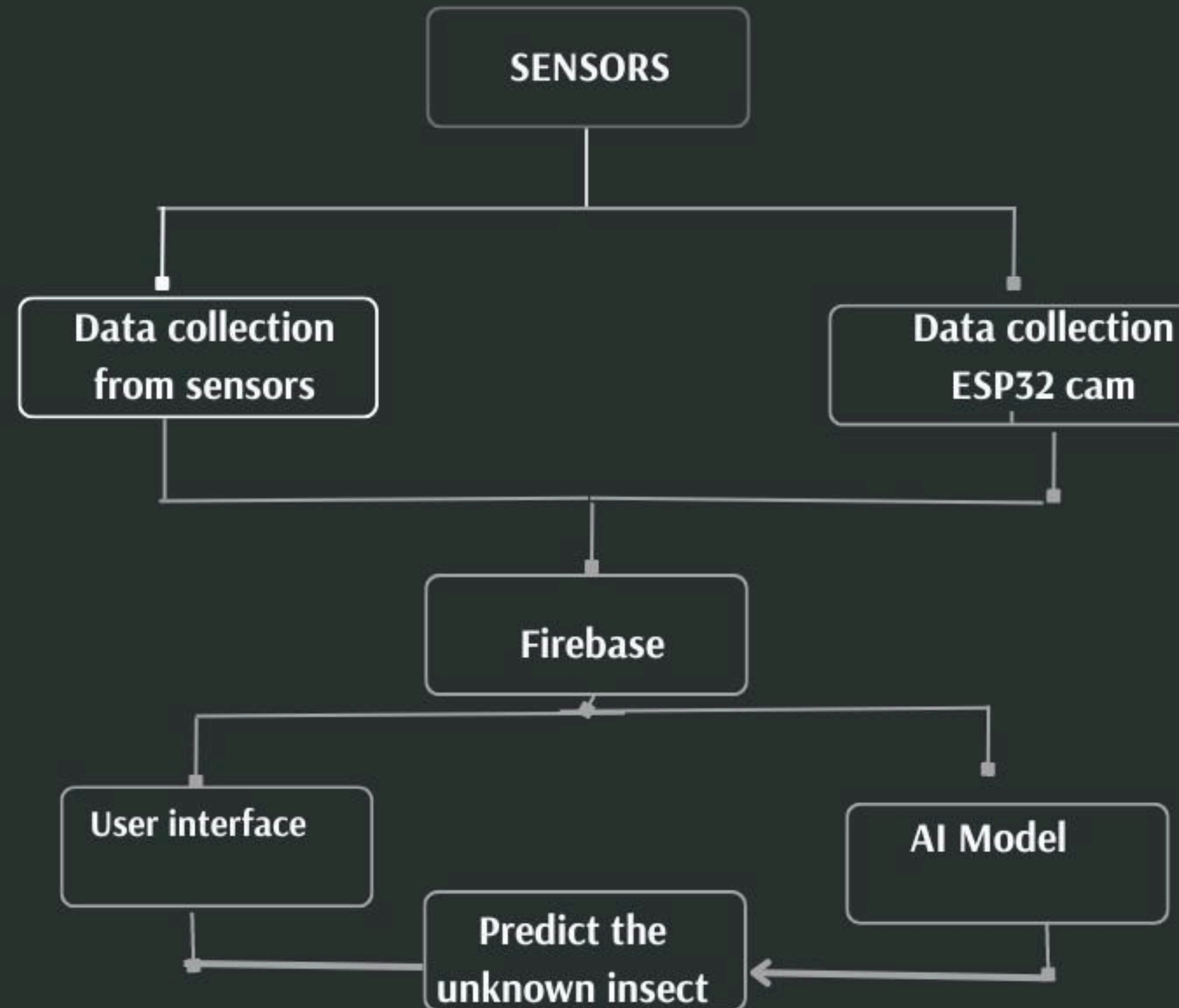


TensorFlow

# User interface:



# WORK FLOW



# Thanks!

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