

SERVICE AGREEMENT

This agreement is entered into by and between:

Client:

Gerald Christian Rey R. Balindan

Hanns Jaspher A. Elalto

Paul Francis B. Masangcay

Jeroh Lee M. Mojica

AND

Developer:

John Patrick D. Buco

Date Signed: 07/16/2025

Project Title

Design and Development of IoT-Enabled System with Near-Infrared (NIR) Spectroscopy for Determining the Quality of Sugarcane Juice (*Saccharum officinarum*)

Project Timeline

Start Date: July 16, 2025

Completion Date: on or before December 2025

The developer agrees to deliver a fully working prototype, accompanying mobile web application, and support until project defense.

Total Project Cost

Component	Cost	Description
Hardware Materials	₱5,500	ESP32, NIR Sensor, LCD, Battery, Buttons, Casing, 3D print, wiring
Firmware & IoT System Dev / ML Integration	₱25,000	ESP32 code, scanning logic, Wi-Fi, sensor/ML integration
Mobile Web Application	₱10,000	Real-time sync, historical data, modern UI
Testing + Calibration	₱7,500	Testing and calibration based on provided samples
System Integration + UI/UX	₱7,500	LCD Interface, responsive casing, power circuit

Support (until defense)	₱4,500	Final adjustments, bug fixes, guidance during defense
Total	₱60,000	

Payment terms

Milestone	Amount	Due Date
Down Payment	₱10,000	Upon contract signing
Final Payment	₱50,000	Upon final prototype delivery

Deliverables

- Fully working IoT-enabled prototype
- 3D-printed casing
- Functional firmware (ESP32)
- Working machine learning model integration
- Backend API
- Mobile web app (React JS)
- Defense support until project completion

Terms and Conditions

- All source code, hardware, and project materials will be turned over upon final payment
- Any additional features or requests not specified in the agrees scope may incur additional changes

Signatures

Developer:

Signature: _____

Name: John Patrick D. Buco

Date: 07/16/2025



Clients:

Signature: _____

Name: Gerald Christian Rey R. Balindan

Signature: _____

Name: Hanns Jasper A. Elalto

Signature: _____

Name: Paul Francis B. Masangcay

Signature: _____

Name: Jeroh Lee M. Mojica

Date: _____