



# PJBUMI BERHAD

*LoRa Based Alert System for Aquatank  
Water Quality (condition) and Fish  
Measurement System*

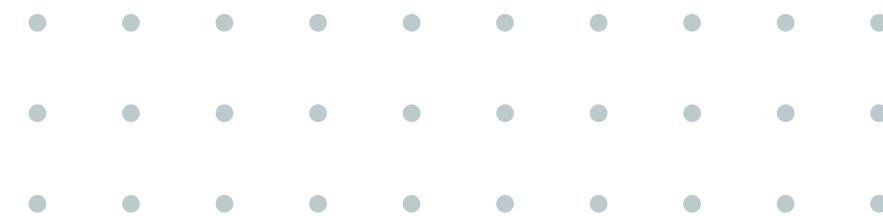
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(PJBUMI STAKEHOLDER)

Prepared by Team LoRaFish



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# INTRODUCE THE MENTOR FOR THE PROJECT

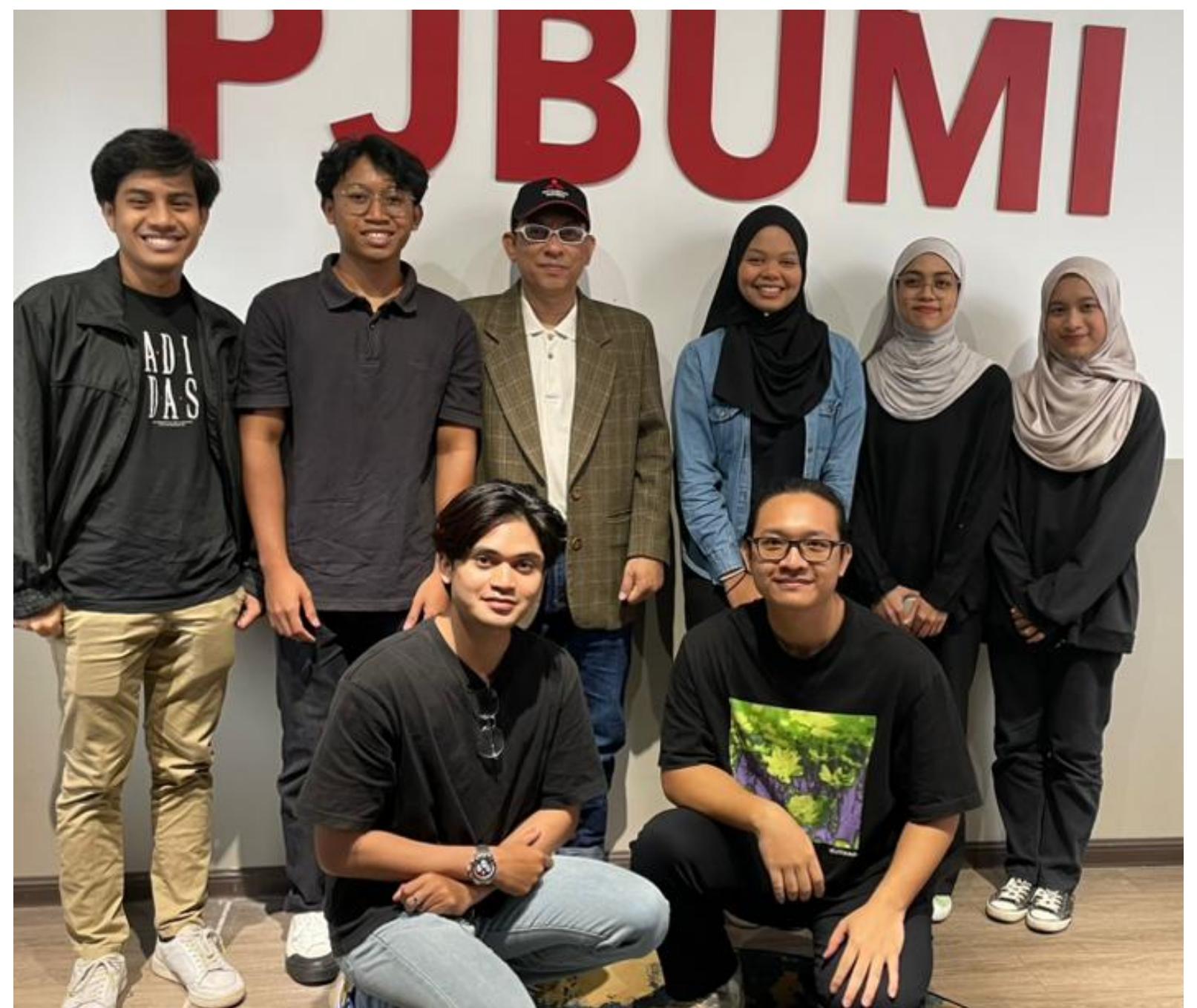
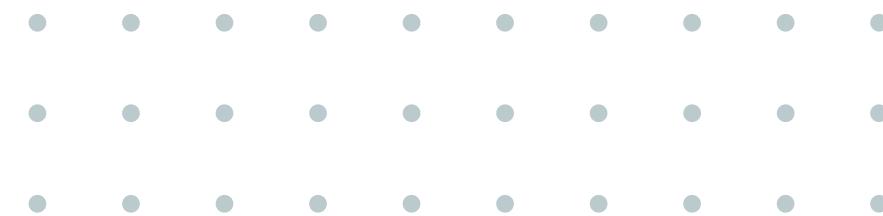


**PJBUMI BERHAD**



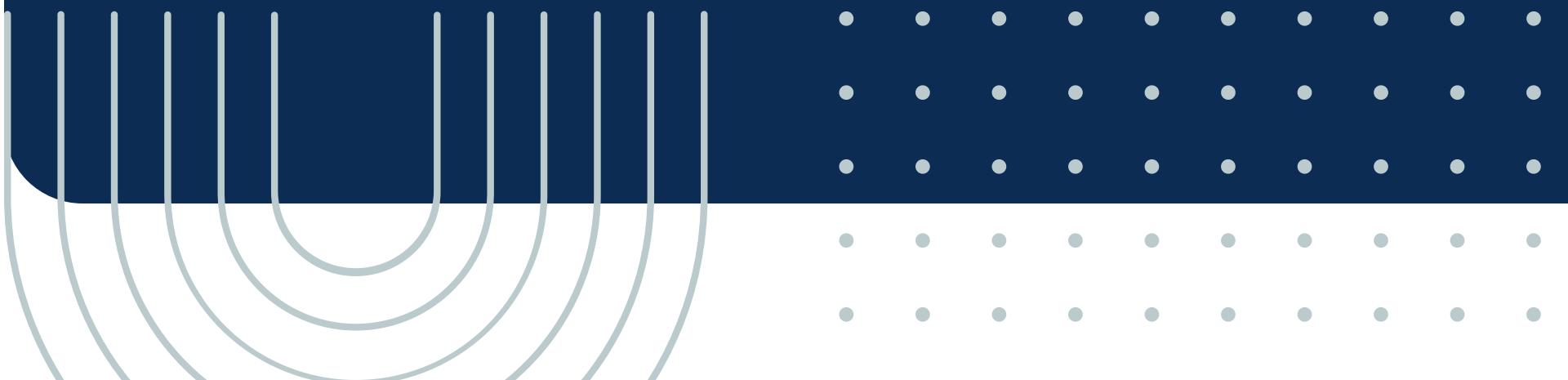
# MR MD SHAHZAR MD IDRIS

He is the Head Of Division PJBUMI in Heavy Engineering and Services since June 2022. He was the Head of Petroleum Development Division beforehand.



02.

## PROBLEM STATEMENT & OBJECTIVES



# PROBLEM STATEMENT

1. **Monitoring** and **tracking** the acidity level of aquarium water in **real-time** is **challenging**.
2. The **absence of automated software** means that tracking and analyzing acidity levels requires **manual effort**.
3. **Inconsistent data collection** and **recording** of acidity and water condition readings.

# OBJECTIVES

1. **Develop software** to **estimate** the acidity of aquarium water accurately using ***LoRa technology***.
2. **Alert** the user if the acidity level is **too low** or **too high**.
3. **Create analytics** based on reading the value of acidity monthly and yearly to know the **pattern of acidity value**.

03.

## PROJECT SIGNIFICANT



## FISH TANK MONITORING

- Aims to develop a system for monitoring and managing fish tanks.
- This has significance for organisations involved in aquaculture and fish farming.
- The system provides a platform to control various parameters of fish tanks.
- Helps ensure the well-being of the fish and optimal tank conditions.

## AUTOMATION AND CONTROL

- Enable users to remotely manage and control their fish tanks.
- Simplifies and streamlines the tank management process.
- Access and control tanks through a web interface, improving convenience and efficiency.

## DATA ANALYSIS

- Provides valuable insights into the trends, patterns, and potential issues related to the tanks.
- Helps users make informed decisions, identify anomalies or risks, and optimise the tank conditions for the well-being of the fish.

## CONNECTIVITY

- Enables long-range wireless communication.
- Allows users to monitor and control fish tanks from a distance, even in remote or challenging environments.
- Enhances accessibility and flexibility in managing the tanks, making it suitable for multiple tank setups.

04.

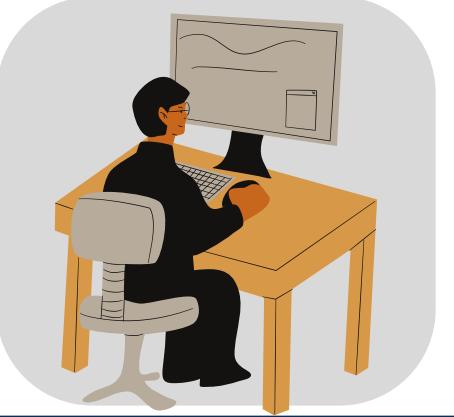
## LESSONS LEARNED FROM THE PROJECT





## STAKEHOLDER ENGAGEMENT

- Effective stakeholder engagement is essential for project success as it helps build relationships, manage expectations, gain support, and ensure alignment with project goals.
- Seeking their input, feedback, and opinions on project-related matters.



## SKILL DEVELOPMENT

- Continuing learning new skills and knowledge, adapt the up-to-date technologies, advancements.
- Learning Power BI to create a dashboard
- Learning machine learning to estimate arrange tank conditions



## EARLIER PLANNING IS CRUCIAL

- Early planning is crucial because it sets the stage for a well-organized and successful project.
- Adapting to changing circumstances and being flexible is necessary for project success.
- Respond to changing requirements

05.

# PROJECT OUTCOME DEMO



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localhost/lorafish/src/login/src/html/register.php

Search  Back  Forward  Home  Stop  Refresh  Help 

Welcome to LoraFish

Sign Up

Name

Email Address

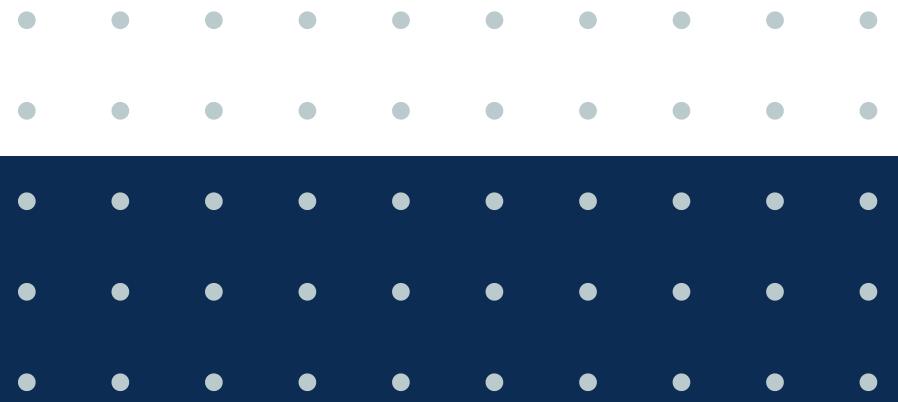
Password

Email Address  Public  
 Purchaser

[Sign Up](#)

Already have an Account?  
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# THANK YOU

