

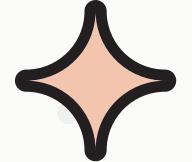
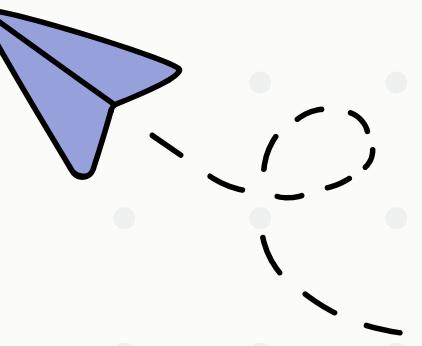
Mizan



# APPLICATION MOBILE SCALE

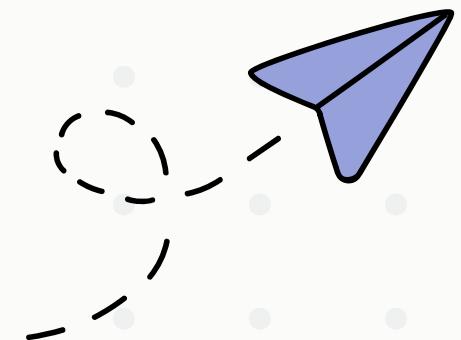
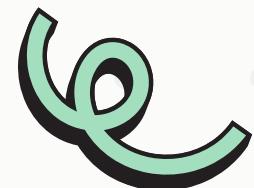
TRM 409

# MANPRO



**Agung Riyadi S.Si., M.Kom**

## OUR TEAM



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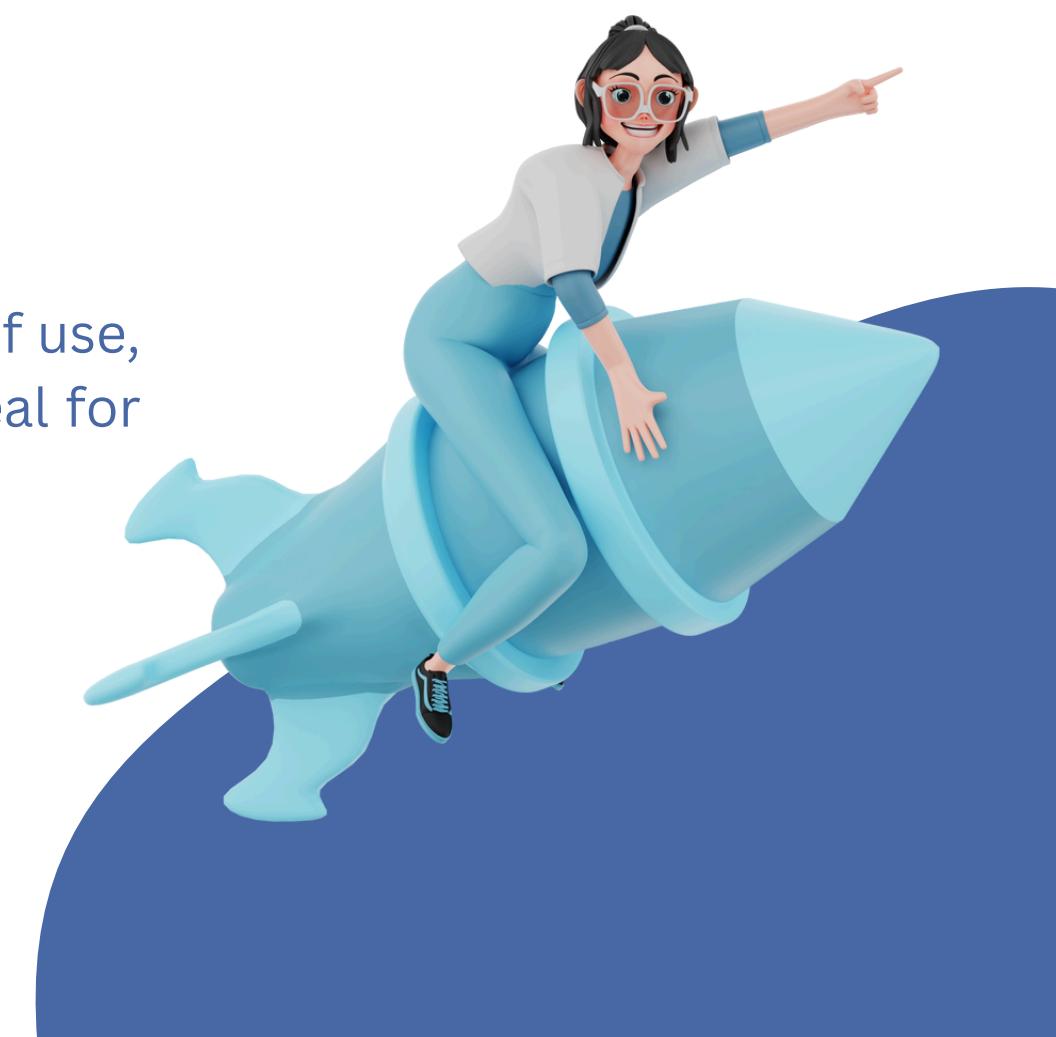
# PROJECT DESCRIPTION

The Mobile Scale application is a program installed on a smartphone or tablet to weigh various objects, such as fruit, spices, and others, with a maximum weight of 10 kg.

This app allows users to easily and accurately measure the weight of objects. Users can also convert weight units between grams, kilograms, and ounces, as well as calculate the total weight of multiple objects individually.

The Mobile Scale app offers a variety of benefits, including ease of use, portability, accuracy, time-saving, and cost-saving. The app is ideal for use in the kitchen, store, or anywhere you need to weigh objects.

LEARN MORE



# CONTRIBUTION TO THE COURSE

04

SYSTEM  
IOT

Help us finishing hardware of our project.

GENERAL  
ENGLISH

Help us in acquiring vocabulary and in speaking.

ADMINISTRATION  
SYSTEM  
COMPUTER

Tell the command work function in ubuntu.

STATISTIC

helping them to develop a better understanding of data, analyze problems, and make decisions supported by statistical evidence.

OBJECT  
PROGRAMMING

provides students with the necessary foundation to develop effective software solutions and understand the concepts underlying modern software development.

PKN

helps students understand the social context, develop critical awareness, understand government and legal systems, develop participation skills, and strengthen their social responsibility as responsible citizens.

MOBILE DEVICE  
PROGRAMMING

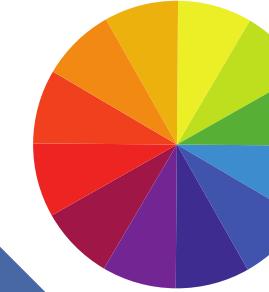
provides students with the skills and knowledge necessary to develop mobile application solutions that are innovative, relevant, and effective in solving specific problems or case studies.





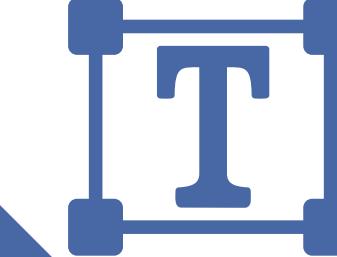
## Meaning of the Logo

The 'scale' symbol, designating the app's function for weighing items. The scale has two sides, symbolizing balance and accuracy in measurement. The three curved lines that resemble a 'bowl' symbolize the different types of ingredients that can be weighed with the app, such as fruits, herbs, and more.



## Meaning of the Color

The green color in the logo is generally associated with nature, freshness, and health. This can be interpreted to mean that the app supports a healthy lifestyle by helping users to measure ingredients appropriately.



## Meaning of the Name

The name "Mizan" has several meanings in Arabic, including balance, scales and justice. It is also the name of the Islamic concept of the Scales of Justice on the Last Day.



# LOGBOOK PROGRESS

06

Week 1

## PLANNING

Meeting with manager project to discuss the tools and materials needed for the process of creating a mobile scale application.

Week 4

## IMPLEMENTATION

Do coding using Flutter and start the debugging process, to identify the cause of errors in certain features and components.

Week 2

## ANALYSIS

Record items, and check the prices of items to be purchased, to create scale mobile applications.

Week 5

## IMPLEMENTATION

Conduct sensor experiments on Arduino.

Week 3

## PLANNING

Focus on UI creation.

Week 6

## IMPLEMENTATION

Make a mechanical mount for the load cell and make a cross-section for the object whose weight will be measured.



# LOGBOOK PROGRESS

07

Week 7

## DESIGN

Create material for presentation.

Week 10

## IMPLEMENTATION

Assembling tools and materials in an Arduino circuit that functions to run a mobile scale application.

Week 8

## IMPLEMENTATION

Create some coding and add features to the mobile scale application that function to run the mobile scale application properly.

Week 9

## IMPLEMENTATION

Continue and refine coding.

Week 11

## IMPLEMENTATION

Continued the arduino circuit that we had made and we also soldered some wires that were still not sticky.



# LOGBOOK PROGRESS

08

**Week 12**

## IMPLEMENTATION

Continue soldering the arduino circuit. There are still some wires that are still wrongly connected and still misplaced.

**Week 13**

## DESIGN

Create a poster design that contains and enhances our arduino array.

**Week 14**

## IMPLEMENTATION

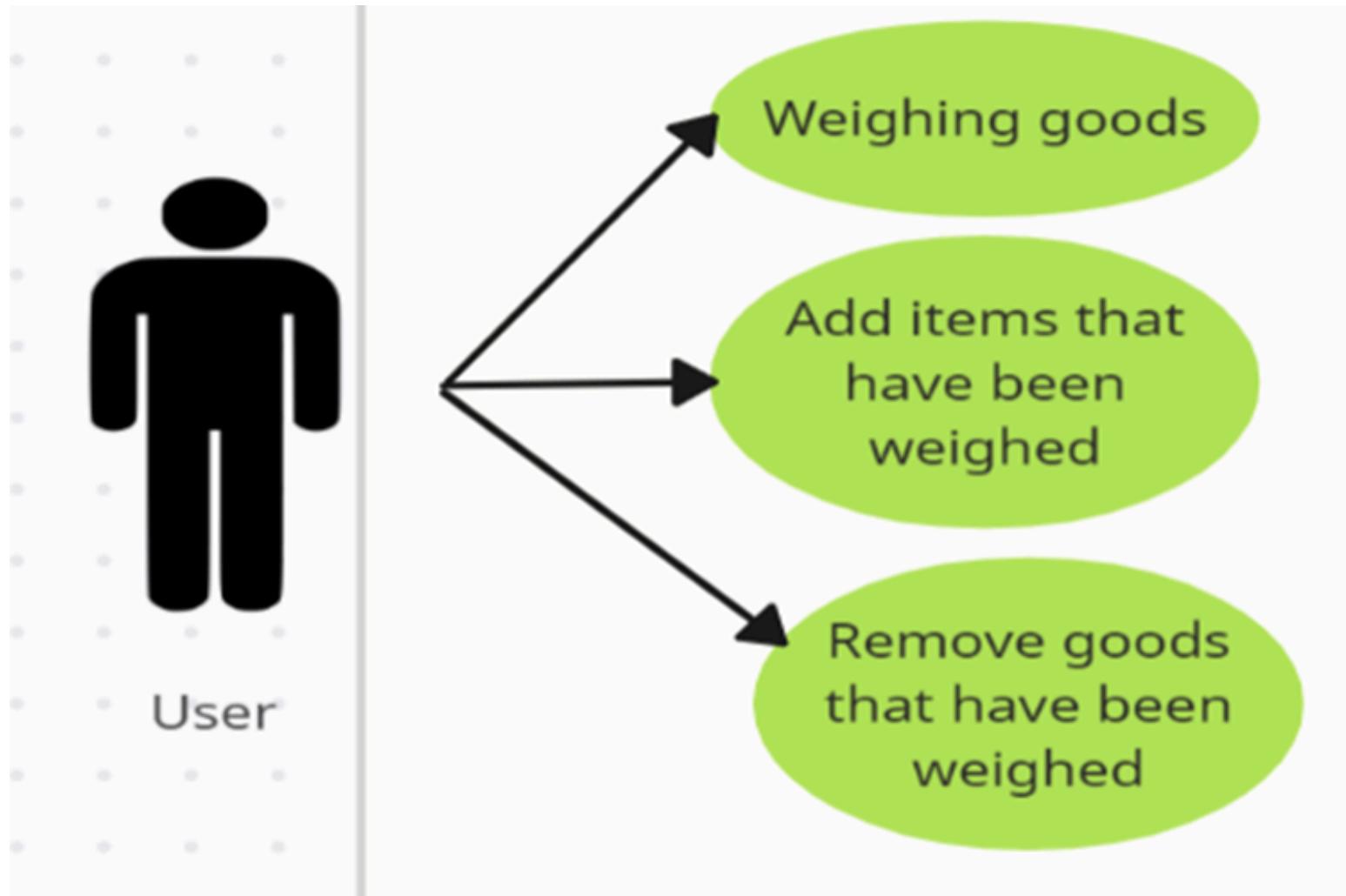
Make a final project report, make a manual book, complete the mobile scale application and handover news

# PROJECT DETAILS

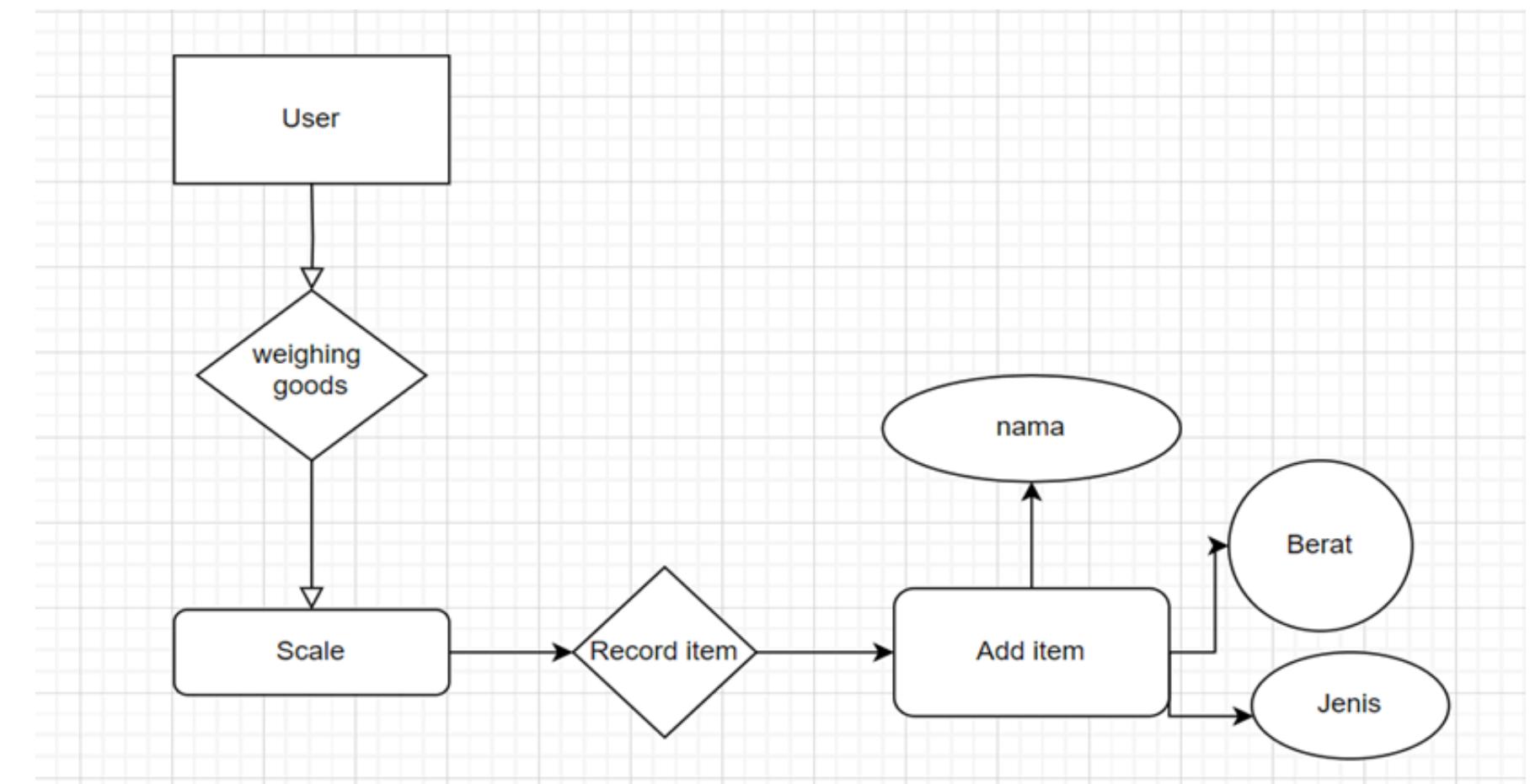
# USE CASE AND ERD DIAGRAM

10

## USECASE



## ER DIAGRAM



# FLUTTER CODING

```
lib > main.dart > ...
1 import 'package:flutter/material.dart';
Run | Debug | Profile
2 void main() => runApp(MyApp());
3 class MyApp extends StatelessWidget {
4   @override
5   Widget build(BuildContext context) {
6     return MaterialApp(
7       home: Scaffold(
8         body: SafeArea(
9           child: Padding(
10             padding: const EdgeInsets.all(20.0),
11             child: Column(
12               children: [
13                 Text('Sign In', style: TextStyle(fontSize: 24)),
14                 Image.asset('assets/images/SCALE.png'),
15                 TextField(
16                   decoration:
17                     InputDecoration(labelText: 'Email atau Nomor Telepon'),
18                   ), // TextField
19                 TextField(
20                   obscureText: true,
21                   decoration: InputDecoration(labelText: 'Kata Sandi'),
22                   ), // TextField

```

```
23               ElevatedButton(onPressed: () {}, child: Text('Lanjutkan')),
24               TextButton(onPressed: () {}, child: Text('Lupa Kata Sandi?')),
25               Row(children: [
26                 ElevatedButton.icon(
27                   onPressed: () {},
28                   icon: Icon(Icons.apple),
29                   label: Text("Masuk dengan Apple"), // ElevatedButton.icon
30                 ),
31                 ElevatedButton.icon(
32                   onPressed: () {},
33                   icon: Icon(Icons.mail),
34                   label: Text("Masuk dengan Google") // ElevatedButton.icon
35               ], // Row
36               Row(children: [
37                 Text("Baru di Mizan?"),
38                 TextButton(onPressed: () {}, child: Text("Daftar"))
39               ]), // Row
40             ], // Column
41           ), // Padding
42         ), // SafeArea

```

# DESIGN UI/UX HOME SCREEN

## 01 - Homepage

This is our homepage and bring up our scale app logo and our name logo is 'Mizan'.

## 02 - Get Started

When click 'get started', we directly move to login page.



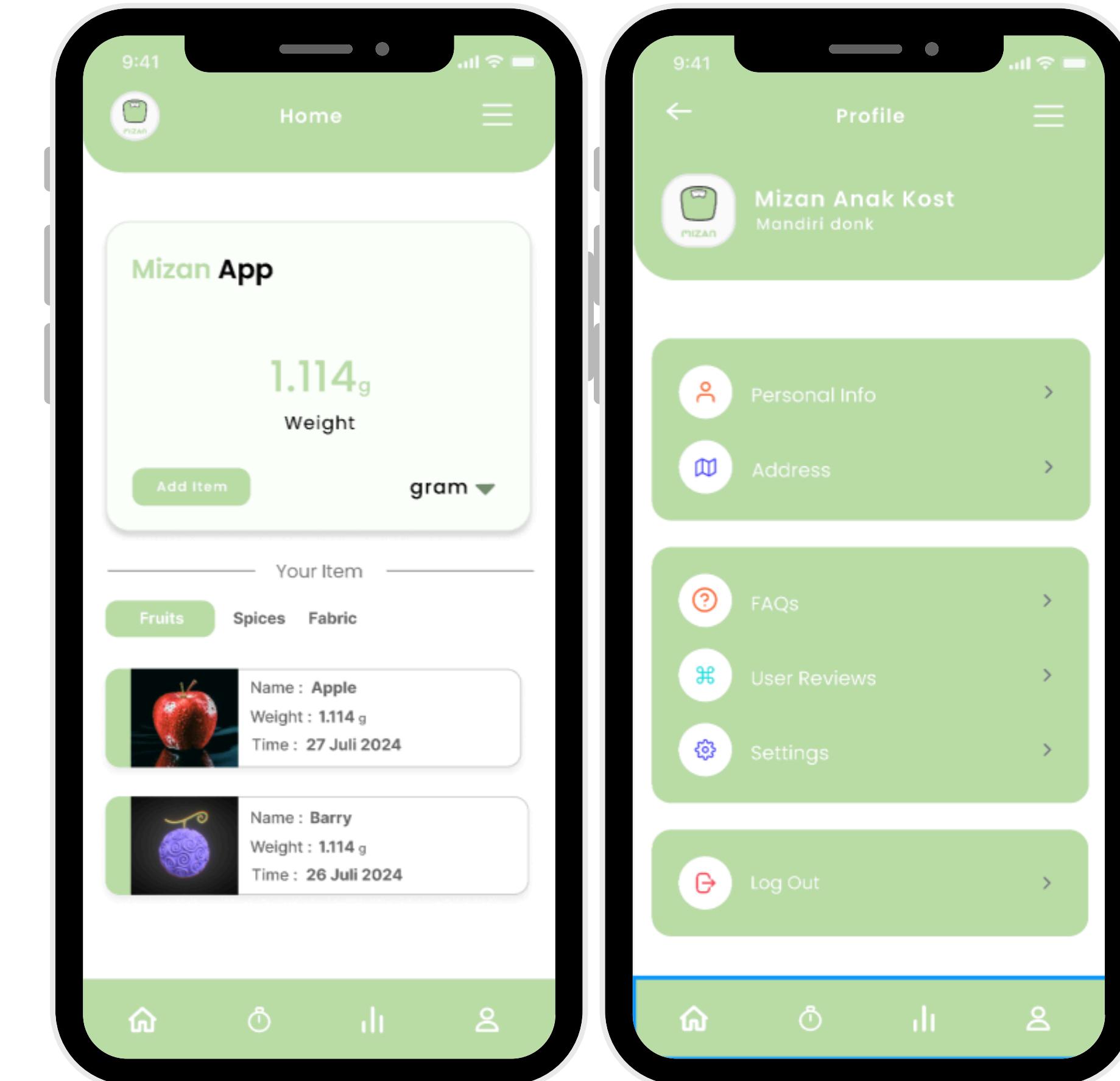
# DESIGN UI/UX DASHBOARD

## 03 - Dashboard

In dashboard page, there is measuring scales for measuring fruit and others. Then, there is the add weight data icon on fruits and others

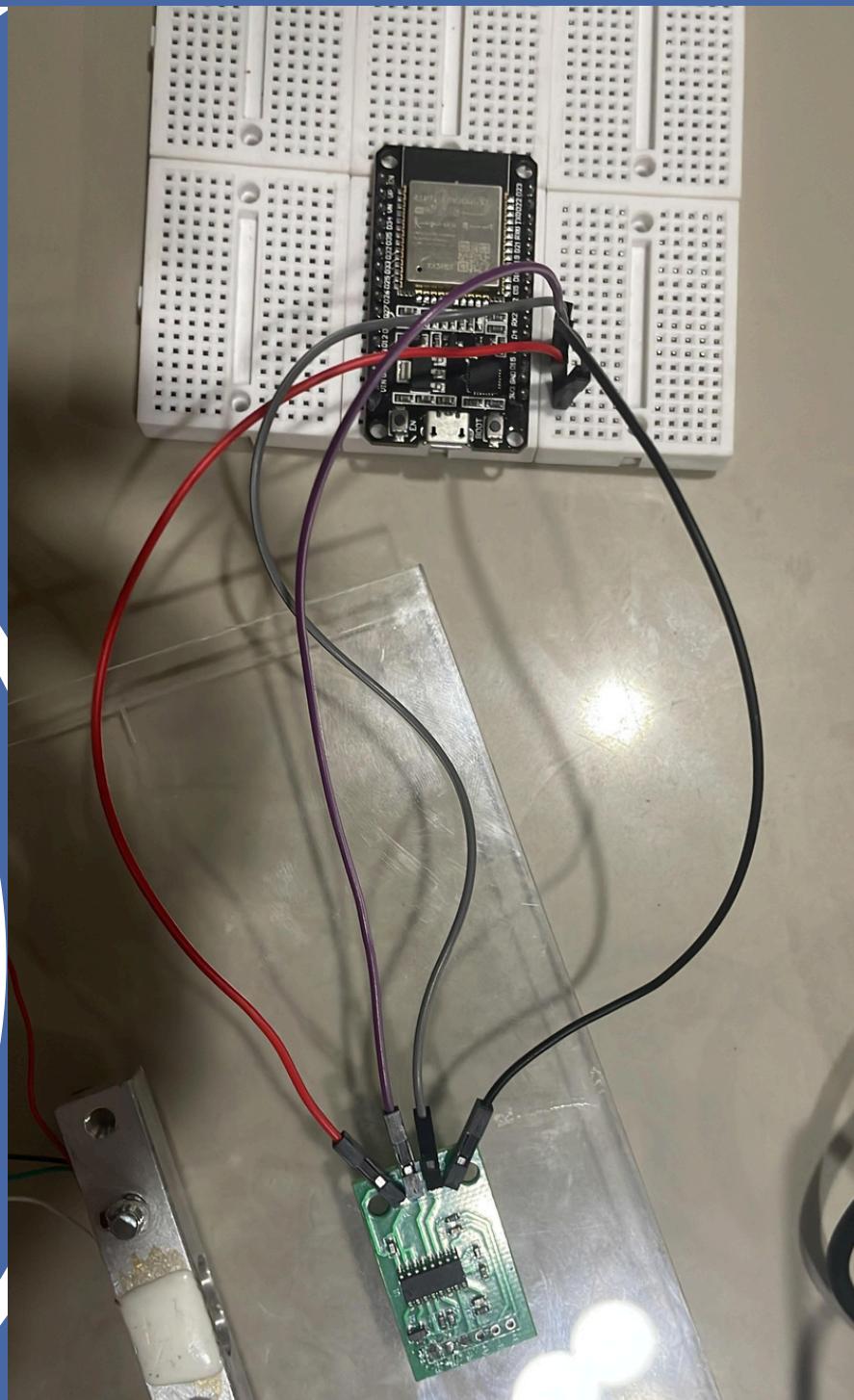
## 04 - User Setting

Then, in the user settings menu, there is a lot of information for account data and there is an exit from the application.



# IOT DEVICE

14



Iot mobile scale is an internet-connected digital scale equipped with a mobile app. It can measure the weight of objects and send the data to the mobile app for further analysis and storage.

# EACH MEMBER'S CONTRIBUTION

15



**Rona Martha**  
Programming IoT



**Sofyan Fahro**  
UI/UX Design



**Yupiter Andrian**  
Leader/Flutter



**Hendra Riyanto**  
Flutter



**Cindy Putri**  
UI/UX Design

# PROBLEMS & SOLUTIONS

 In our team, all are workers. This condition, makes it difficult for us to divide work time with study time.

 When there is a team meeting, sometimes one of us is unable to attend which results in communication constraints.

## PROBLEMS

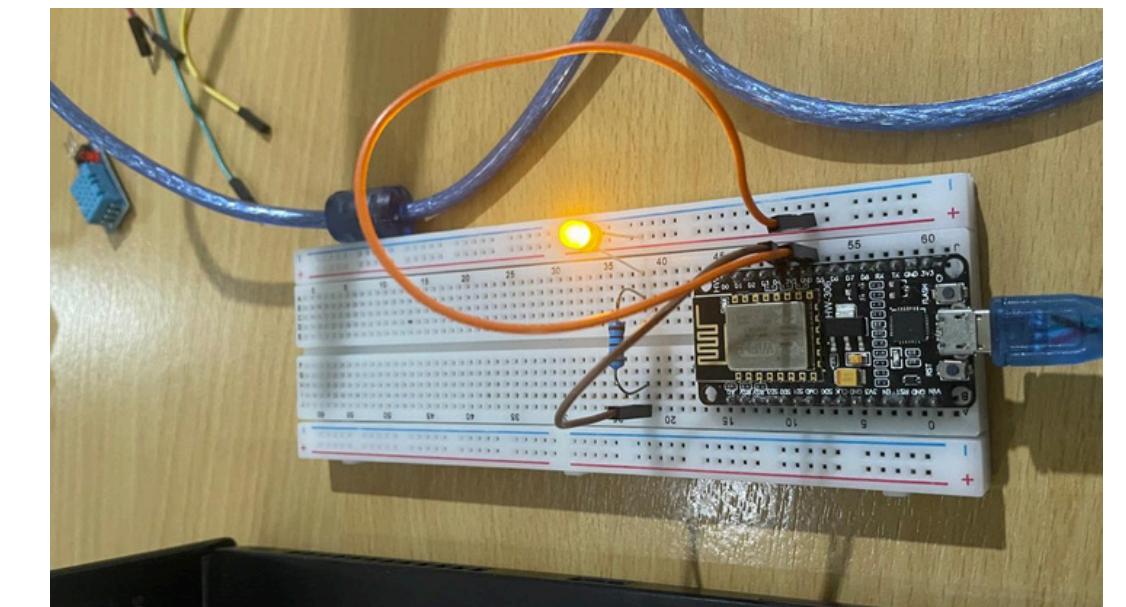
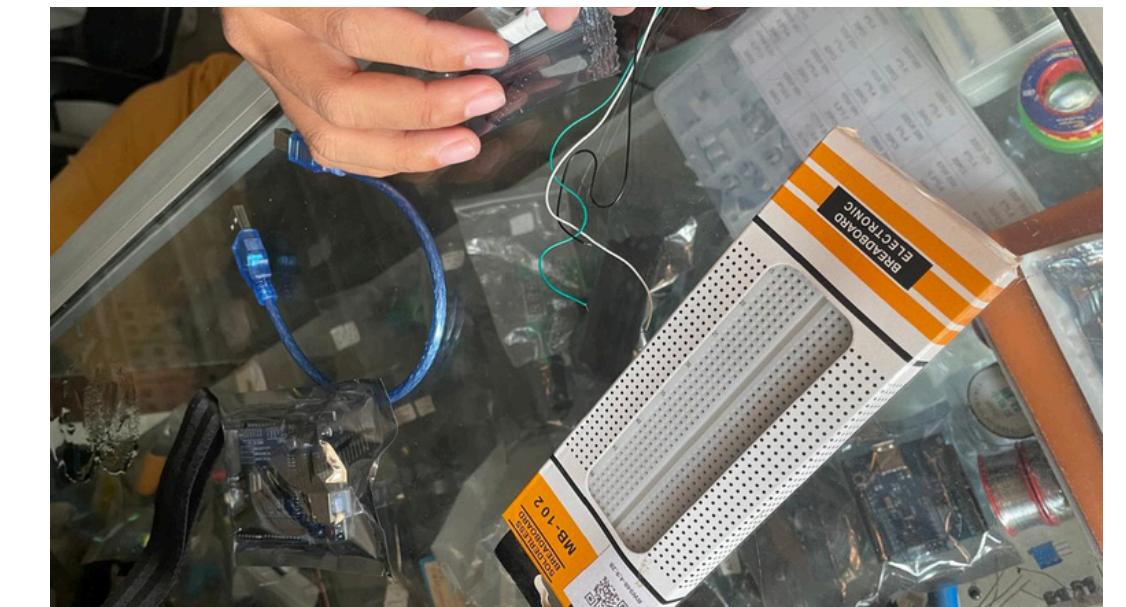
 First understand the obstacles that occur in the project process.

 Doing time management as well as possible & Maintain communication.

## SOLUTIONS

# WORK PROGRESS DOCUMENTATION

17





**THANK YOU**