

PROJECT-BASED LEARNING REPORT

TEKNOLOGI REKAYASA MULTIMEDIA
POLITEKNIK NEGERI BATAM
2024



GROUP MEMBER

TRM4A MALAM

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June, 2024

MULTIMEDIA ENGINEERING TECHNOLOGY BATAM STATE POLYTECHNIC

Compiled by: Evening 4A Group TRM-4A02



PROJECT IDENTITY

Project Title : Scale Mobile Application
Project Owner : Sandi Prasetyaningsih, S.T., M.Media
Project Manager : Agung Riyadi, S.Si. M.Kom
Project Co-Manager : -
Client : Agung Riyadi, S.Si. M.Kom

Outputs

:

<input checked="" type="checkbox"/>	Final Report
<input checked="" type="checkbox"/>	Product: <i>Mobile Application</i> / Hardware / <i>video</i> *
<input checked="" type="checkbox"/>	Demo video / trailer *
<input checked="" type="checkbox"/>	Scientific Poster
<input checked="" type="checkbox"/>	Intellectual Property Rights Document
<input checked="" type="checkbox"/>	Handover Document
<input type="checkbox"/>	Contest Proposal (optional)

Group PBL TRM-4A02:

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Approved by,
Batam, 26 June 2024

Agung Riyadi, S.Si. M.Kom
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PROGRAM STUDI
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DOCUMENT HISTORY

Table 1 Document History

Date	Writer	Description
18 / 1 / 24	All members	Pbl group creation
29 / 1 / 24	All members	Creation of a pbl group with the project manager
12 / 2 / 24	All members	Understand and analyze project requirements (RPP)
15 / 2 / 24	All members	Conduct and search for reviews of the progress of the application you want to make on the internet
17 / 2 / 24	All members	Met with mapro and discussed the creation of an IoT system-based application
20 / 2 / 24	All members	Collect data, what materials and equipment you want to use in this PBL
29 / 2 / 24	All members	Experiment with the tool with project manager tools needed for this scale mobile application
1 / 3 / 24	All members	Select the title of the application you want to create
2 / 3 / 24	Azahra	Making UI designs for mobile scale applications
3 / 3 / 24	Lidya	Carry out UX application design
4 / 3 / 24	Azahra, Rifai	Purchase of tools
7 / 3 / 24	Dendra	Creation of application logo
13 / 3 / 24	Rifai	IoT device connector
15 / 3 / 24	Luiz	Running a test of the Arduino Lolin weighing sensor, IoT Device Programming
17 / 3 / 24	Dendra	Creating application use cases
18 / 3 / 24	Azahra	Creating entity relationship diagram applications
21 / 3 / 24	Lidya	Making PBL progress reports
20 / 3 / 24	Luiz	Running the scale sensor
21 / 3 / 24	Lidya	Manufacture of weighing boards
29 / 4 / 24	Dendra, Azahra, Lidya	Making an Indonesian insight poster
8 / 5 / 24	Azahra	Demonstration of application UI projects using Visual Studio Code and Android Studio



13 / 6 / 24	All members	Meeting with the examining lecturer, discussing connecting flutter to an IoT device
21 / 6 / 24	Dendra	Pbl poster making
22 / 6 / 24	Rifai, Azahra	Making pbl powerpoint
	Lidya	preparation of PBL reports

PROJECT WORK HISTORY

Table 2 Project Work History

Stages	Completion Date	The resulting output
Planning	15 – 22 February 2024	Conduct the first meeting with the manpro, plan the budget, products, tools, and fill out the RPP
Planning	22 – 23 February 2024	Hold meetings between groups. Discuss and make a comprehensive list of tools to be purchased and used
Design	26 – 28 February 2024	Designing user interfaces, logos, colors and application names for mobile scales based on nationality
Analysis	29 February – 2 March 2024	meeting with manpro. discuss and practice directly, the tools that will be used later. for mobile scale we use Arduino-MCU Lolin V3
Design	4 – 8 March 2024	Create and design UI Design. welcome page, star page, dashboard, automatic scale page. Adapt the design to the application you want to use. carry out UX design
Implementation	11 – 16 March 2024	Assembling IoT devices, ensuring sensors are connected and lollin works, carrying out the process of implementing UI into Flutter

Implementation	18 – 21 March 2024	Make improvements to the sensor section, by making a sensor base (tray/container) at the top. Where the container will be made using cardboard which can support the weight of an object +- 10 kg
Implementation	15 – 26 April 2024	Carrying out the process of creating application UI using Android Studio and Visual Studio Code. displays the UI on the emulator
Implementation	01 – 17 May 2024	The final result is a Flutter prototype, maximizing functions, features and also making adjustments to the IoT Flutter device in Visual Studio Code
Implementation	20 – 27 May 2024	Ensure that IoT devices in the form of sensors and lollin node mcu are connected to the Arduino IDE, so that they can display results
Implementation	28 May – 05 June 2024	Trying to connect flutter to IoT device. Try weighing light items up to under 10 kilograms using a sensor connected to the ARDUINO IDE application
Implementation	10 – 13 June 2024	Hold a meeting with a mobile device programming

		lecturer. Namely discussing solutions on how to connect Flutter to IoT devices directly
Implementation	14 – 22 June 2024	Made a series of iterative improvements in connecting flutter to IoT devices. Try various trial error approaches until you succeed in connecting it. We also test integration on smartphones to ensure optimal compatibility
Implementation	24 – 26 June 2024	Combining application files, creates a way to install applications without going through Google Play so that they are easy to access and download

1. PROJECT-BASED LEARNING PRODUCT

1.1 Product Description

The mobile scale application is an application designed to help users measure various types of kitchen spices precisely and accurately using their smartphone. This application allows users to measure the weight of kitchen spices such as salt, sugar, spices, flour, and so on. These apps usually have user interfaces that are intuitive and easy to use, with clear buttons and controls so users can easily access the features they need.

Mobile scale is a simple application targeted at housewives. By removing the login step, users can immediately use the application without having to remember or enter login information every time they want to use it. As an application aimed at housewives, simplicity and ease of use are priorities. Removing the login feature will strengthen the impression that the application is user-friendly and easy to use for those who may not be very familiar with technology.

With a combination of user-friendly UI design and the right use of colors and patterns, it is hoped that the "Great Scale" application will provide a pleasant and effective experience for users without the need to involve a login or database.

1.2 Product Design

Product design for a mobile application project should have the following design:

1. General system description.

The mobile scale application is software designed as a portable weight measuring tool. Various types of mobile scale applications exist, including those used to measure the weight of small objects such as kitchen spices that weigh under 10 kilograms.

In this general design, the sustainability and maintenance of the system is also taken into account. Application development and firmware updates on IoT Systems must be well organized to ensure the availability of the latest features and performance improvements. Additionally, integration with cloud services enables efficient data storage and analysis. The overall design aims to create a solution that is easy to use, secure and responsive, providing users with an up-to-date and connected weight measurement experience.

2. Functional system requirements.

Functional system requirements for mobile scale applications can include various aspects that ensure the application can operate well and meet user needs.

- The application is able to provide accurate weight measurements for spice types, with minimal margin of error.
- The user UI/UX should be well designed and easy for the user to understand.
- The application must respond quickly to user commands and provide real-time weight readings.
- The application must be compatible with various types of smartphones and commonly used operating systems such as Android.
- Applications must be accompanied by clear documentation and adequate user guidance.

❖ Functional Requirement

Functional requirements are the basic requirements needed by the system to receive and process actions from its users. The following are the functional requirements of a mobile scale application system.

Table 3 Function Requirement

FR-01	The application does not require a login feature for user efficiency
FR-02	The application displays a list of functions according to the access rights of each user
FR-03	Users should be able to select the unit of measurement (e.g., grams, kilograms, ounces, pounds) according to their preference or requirement.
FR-04	The application displays something about the scales
FR-05	Users should have the ability to adjust the zero point of the scale for precise measurements.
FR-06	The application should be available on major mobile platforms such as iOS and Android to cater to a broader user base.
FR-07	The application is able to provide information on each material that is being weighed

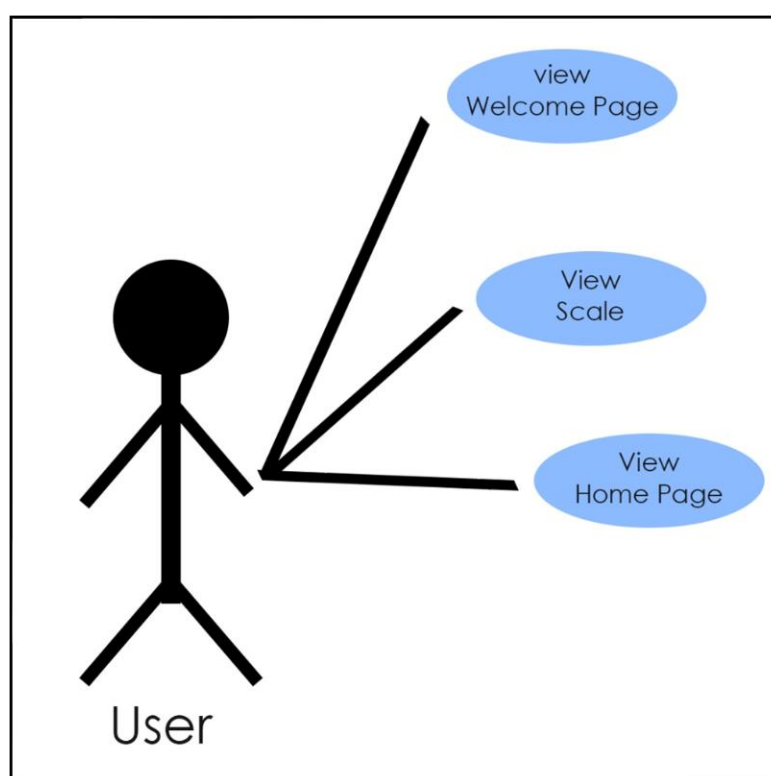
❖ Non-Functional Requirement

Non-Functional Requirements specify quantitative measures that must be met by mobile scale applications. Following are several Non-Functional requirements based on the criteria and parameters.

Table 4 Non-Function Requirement

Criteria	Parameter
Avaibility	The system is capable of running 24 hours non-stop, unless there is system maintenance or system updates.
Ergonomy	The system can be accessed easily or is user friendly.
Language	Using Indonesian (optional English)
Safety	The browser must accept the SSL certificate from the system.
Product	Website and desktop based applications.
Visual	Designed with a simple appearance that can attract the attention of website users.

3. Use case.



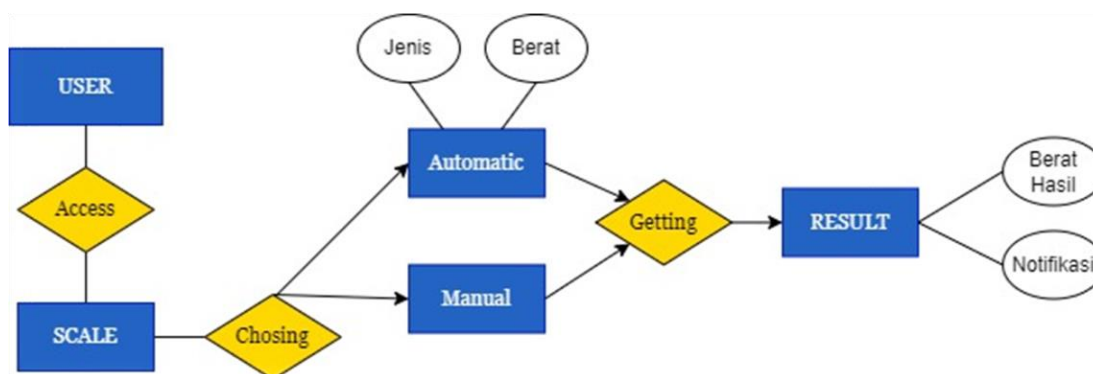
Picture 1 Use Case

In the use case image above, it explains that the user (actor) interacts with a system to achieve a goal to explain the functionality between users and the mobile scale application in the context of weighing spices.

This mobile application has one user actor, namely, housewives. The scenario of this use case is that the user can open the application page, view the application and run the dashboard.

4. ER Diagram.

ER Diagram is a form of diagram that includes relationships between data objects and relationships. ER Diagram functions as a structure and relationship between data and so on.



Picture 2 Er Diagram

In the ERD above you can see that the application diagram has 5 entities and each entity has several attributes. When users can manage the welcome page, start page, dashboard and automatic scale page features. Product interface/architecture design.

5. Programming language.

The programming language we use in this mobile scale application is as follows:

1.) Phyton

In the context of scaled mobile applications, Python may not be the first choice for live application development. However, Python can still play a role in various aspects of scalable mobile application development. Data processing, Backend Services, Machine Learning and Artificial Intelligence, Automation and Automation, Development of Tools.

2.) C++

C++ has a significant role in the development of scaled mobile applications, especially in several contexts, one of which is full Control of Devices and Hardware: Large-scale mobile application development may require full control of devices and hardware, such as accessing sensors, cameras, or other specialized hardware.

The following is the code for the Arduino IDE:

```
#include <WiFi.h>
#include <WebServer.h>
#include "HX711.h"

const char* ssid = "SKSD";
const char* password = "19910011";

const int LOADCELL_DOUT_PIN = 4; // DOUT pin of HX711 connected to ESP32
GPIO 4
const int LOADCELL_SCK_PIN = 2; // SCK pin of HX711 connected to ESP32
GPIO 2

HX711 scale;

WebServer server(80);

void handleRoot() {
    server.send(200, "text/plain", "ESP32 Scale with HX711 initialized");
}

void handleData() {
    float weight = scale.get_units(10); // Get weight in grams
    if (weight < 1) {
        weight = 0;
    }
    String data = String(weight, 1); // Convert float to String with 1
    decimal place
    server.send(200, "text/plain", data); // Respond with weight data
}

void setup() {
    Serial.begin(115200);
    delay(100);

    // Initialize the scale
    scale.begin(LOADCELL_DOUT_PIN, LOADCELL_SCK_PIN);
    scale.set_scale(2280.f); // Set calibration factor
    scale.tare(); // Reset scale to 0

    Serial.println("HX711 initialized");

    // Connect to Wi-Fi
    Serial.print("Connecting to ");
    Serial.println(ssid);
    WiFi.begin(ssid, password);

    while (WiFi.status() != WL_CONNECTED) {
        delay(1000);
        Serial.println("Connecting to WiFi...");
    }
}
```



```
Serial.println("WiFi connected");
Serial.print("IP address: ");
Serial.println(WiFi.localIP());

// Configure web server routes
server.on("/", handleRoot);
server.on("/data", handleData);

// Start server
server.begin();
Serial.println("HTTP server started");
}

void loop() {
  server.handleClient(); // Handle client requests

  // Get the weight in grams
  float weight = scale.get_units(10);
  if (weight < 1) {
    weight = 0;
  }

  // Display the weight on Serial Monitor
  Serial.print("Weight: ");
  Serial.print(weight, 1); // Print weight with 1 decimal place
  Serial.println(" g");

  delay(2000); // Update every 500ms
}
```

2. PRODUCT IMPLEMENTATION

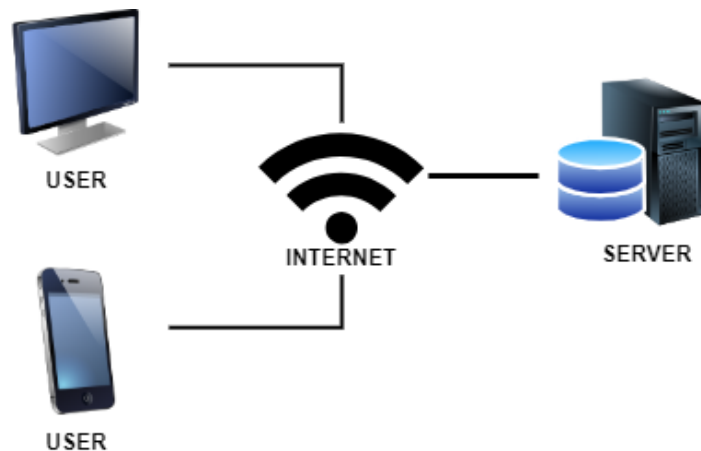
2.1 Product Implementation

Product implementation for mobile application projects:

1. Implementation for user interface / product design.

Product implementation for application projects:

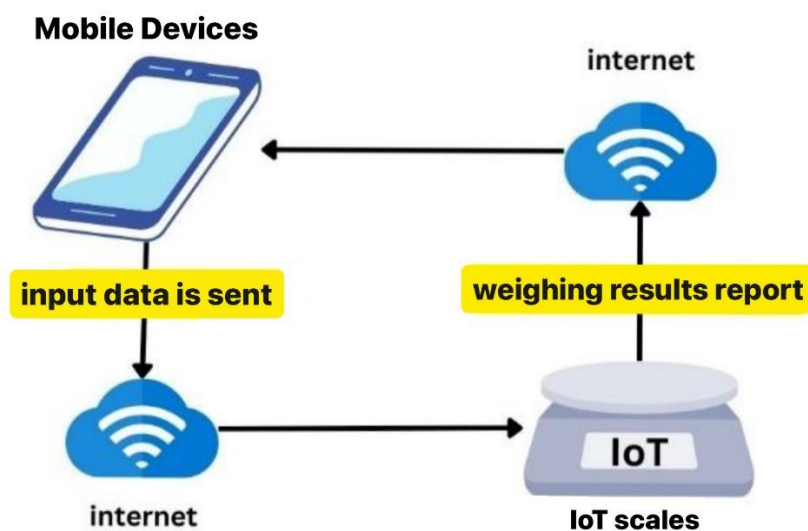
❖ Application Architecture



Picture 3 Interface Design

The image above is the application architecture design for a mobile scale application. Where users can access websites using the internet network so they will be connected to this mobile scale (great scale) server.

❖ Application Scheme



Picture 4 Scheme Design

2. Product testing result.

2.1 Implemented features

❖ Logo Implementation



Picture 5 Logo

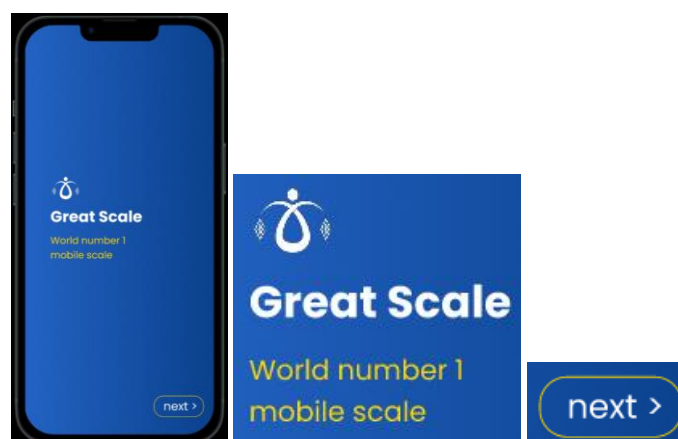
The logo display for this mobile scale application has a design with a concept on the curve that resembles a scale. And the left and right sides of this logo are inspired by Indonesian batik cloth, namely rangrang batik. The blue and yellow colors were chosen to provide a bright and attractive appearance without being too flashy. The batik pattern inserted provides a touch of local culture that can attract the user's attention. The harmony of colors and patterns helps create a consistent visual identity for the “Scale”.

Previous logo display:



Picture 6 Previous Logo

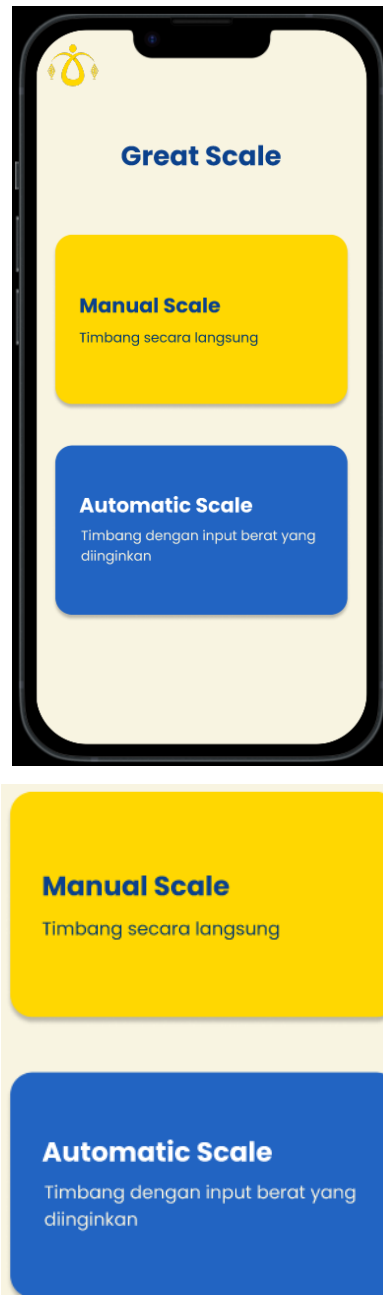
❖ Main Page Implementation



Picture 7 Welcome Page

This part of the main page makes it easier for users to use the application without having to log in first, just press the next button in the bottom right corner "next".

❖ Dashboard Page Implementation



Picture 8 Dashboard

The dashboard design is very simple and simple, so that users are not confused when they want to use this application. We have two features on this page namely "Manual Scale" and "Automatic Scale".

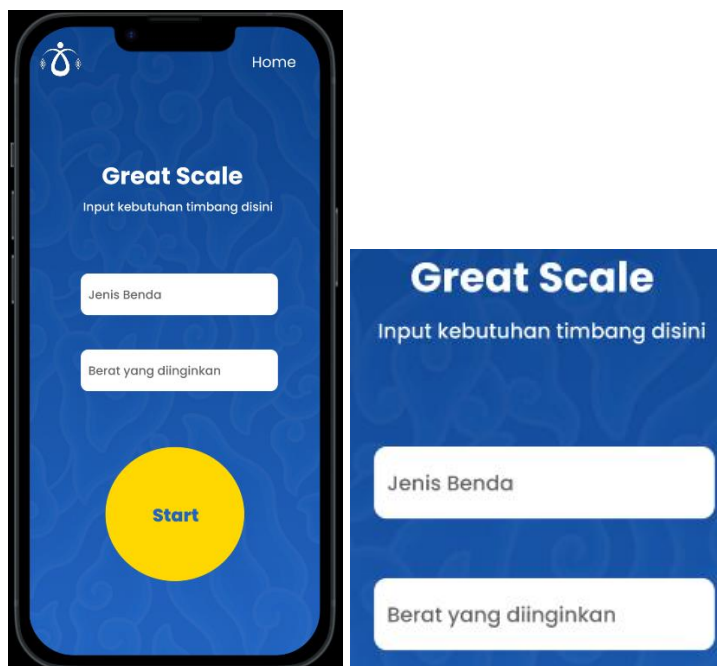
❖ Start page implementation (manual scale)



Picture 9 Start Scale

On the manual scale, users can directly weigh any material, with a maximum weighing of 10 kilograms. This page is where users can start the assessment or measurement process directly without inputting anything. The start button is used to start weighing.

❖ Autoscale Page implementation

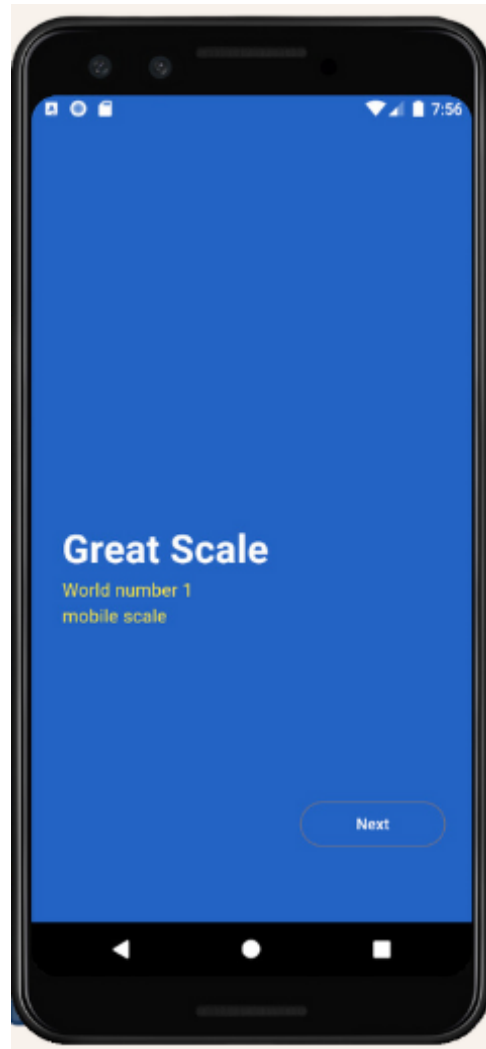


Picture 10 Automatic Scale Page

And in the automatic scale section there is a feature where the user can enter the desired product and weight, the start button starts weighing and there will be a notification if the scale exceeds or is less than the specified weight.

3. Functional testing of the system by the user

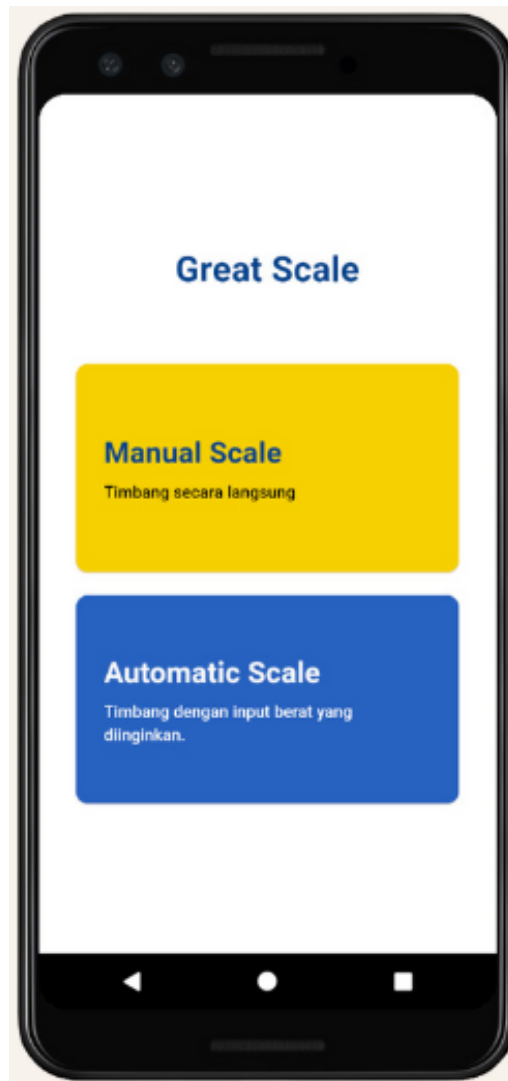
a) Welcome Page



Picture 11 Welcome Page

On the main screen of this application is designed minimally, similar to the interface we created, the only difference being the absence of a logo. There is the application title and a brief explanation as its characteristic. This application does not use a login feature because it facilitates users to use the application without having to register first.

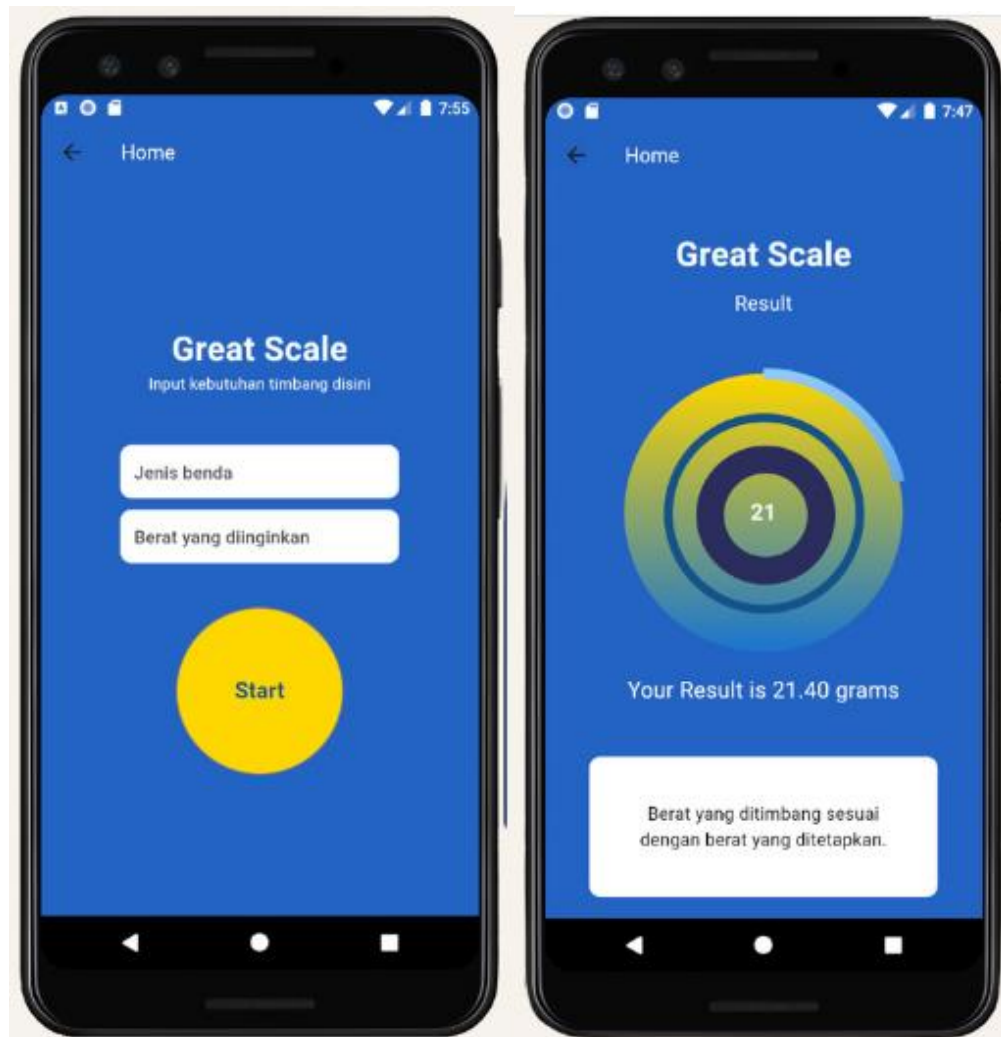
b) Dashboard



Picture 12 Dashboard

On the second page of this application, there are 2 interesting features for users to use. The first feature is manual scale, which is useful for directly weighing basic ingredients without entering data beforehand. In the second feature, automatic scale functions to weigh according to the user's desire by entering the required numbers.

c) Automatic scale



Picture 13 Automatic Scale

On this page displays two buttons that must be filled according to user needs and press the star button if you want to start weighing. After pressing the star button, a circle will appear, which is useful for displaying the weight of the desired need by explaining that the weight being weighed is in accordance with what is filled in the type of object and the desired weight button. This page displays the weight of the object being weighed in a circle already shown on the screen. If you want to weigh other materials, users simply click the reset button.

4. System Implementation Method

The system implementation method used to create this application is the Agile Development Approach method, namely an iterative development approach. The development methods we use to achieve our goals include:

1. Planning (planning)
2. Analysis (analysis)
3. Design (design)
4. Implementation (application)
5. Maintenance (application maintenance)
6. Testing and integration (testing and integration)

3. CONCLUSION

3.1 Obstacle

There were several obstacles that we encountered when working on this PBL project, including:











- a) At the start of the we experienced problems with a lack of tools such as breadboards and sensor support equipment.
- b) Arduino cannot be connected to the laptop.
- c) Create coding for scale applications.

3.2 Learning Process

The process for working on this PBL is as follows:

- a) In the first week we were still learning the tools and their functions.
- b) There are several logo image references that we took from the internet.
- c) Solution to the Arduino problem that is not connected, we looked for information on YouTube, from the same PBL team and used reason.

APPENDIX I – LOGBOOK

ID	Tahapan	Detail Pengerjaan	Ouput	Mulai	Selesai	Progress	#
1	Planning	Melakukan pertemuan pertama bersama manpro, melakukan perencanaan anggaran, produk, alat, serta mengisi RPP	dokumen RPP	2024-02-15	2024-02-22	5%	
2	Planning	Meakukan pertemuan antar kelompok. Membahas dan melakukan list perispana alat yang akan dibeli dan digunakan	list alat	2024-02-22	2024-02-23	8%	
3	Design	Medesign user interface, logo, warna dan nama aplikasi dari mobile scale berdasarkan kewarganegaraan	design, logo dan nama aplikasi	2024-02-26	2024-02-28	15%	
4	analysis	pertemuan dengan manpro. membahas serta melakukan praktik secara langsung, alat yang akan digunakan nantinya. untuk mobile scale kami menggunakan Arduino-MCU Loli V3	percobaan alat	2024-02-29	2024-03-02	25%	
5	Design	Membuat serta merancang Design UI. halaman welcome page, halaman star, dashboard, automatic scale page. Menyesuaikan design dengan aplikasi yang ingin digunakan. menjalankan UX design.	Design UI dan UX	2024-03-04	2024-03-08	32%	
6	Implementasi	Merakit perangkat IoT, memastikan terhubungnya sensor dan bekrijanya lolin, melakukan proses pengimplementasian ui ke flutter	Proses mobile app dan IoT	2024-03-11	2024-03-16	40%	
7	Implementasi	Melakukan penyempurnaan pada bagian sensor, dengan membuat alas sensor (nampun/wadah) pada bagian atas. Dimana wadah akan dibuat menggunakan karton yang bisa menahan berat suatu benda +/- 10 Kg.	wadah sensor timbangan	2024-03-18	2024-03-21	52%	
8	Implementasi	Melakukan proses pembuatan UI aplikasi menggunakan android studio dan juga visual studio. menampilkan UI pada emulator.	Proses prototype aplikasi UI mobile scale	2024-04-15	2024-04-26	57%	
9	Implementasi	Hasil akhir prorotype flutter, memaksimalkan fungsi, fitur dan juga melakukan penyesuaian dengan perangkat IoT flutter pada visual studio code.	Hasil akhir prototype aplikasi flutter mobile scale	2024-05-01	2024-05-17	66%	
10	Implementasi	Memastikan terhubungnya perangkat IoT berupa sensor dan lolin node mcu dengan Arduino IDE, hingga dapat menampilkan hasil	menampilkan hasil sensor timbangan	2024-05-20	2024-05-27	73%	

Politeknik Negeri Batam
Batam Centre, Jl. Ahmad Yani, Tik. Tering, Kec. Batam Kota,
Kota Batam, Kepulauan Riau 29461



PROJECT STATUS REPORT

PROJECT SUMMARY

PROJECT NAME	MANAGER PROJECT	CLIENT PROJECT	TEAM PROJECT
Aplikasi Mobile Scale TRM409	Agung Riyadi, S.Si. M.Kom	Agung Riyadi, S.Si. M.Kom	4312211009 [Azahra Nouvanda Guzka] 4312211002 [Dendra Dara Lucky] 4312211017 [Lidiya Khairani Kisan] 4312211022 [Muhammad Rifai] 4312211024 [Luiz Gonzalez]

PROJECT OVERVIEW

ID	STAGES	WORK DETAILS	OUTPUT	INITIAL DATE	DATE DUE	PROGRESS
1	Planning	Conduct the first meeting with the manpro, plan the budget, products, tools, and fill out the RPP	Dokumen RPP	2024-02-15	2024-02-22	5%
2	Planning	Hold meetings between groups. Discuss and make a comprehensive list of tools to be purchased and used	Tool list	2024-02-22	2024-02-23	8%
3	Design	Designing user interfaces, logos, colors and application names for mobile scales based on nationality	Design, logo and application name	2024-02-26	2024-02-28	15%
4	Analysis	meeting with manpro, discuss and practice directly, the tools that will be used later: for mobile scale we use Arduino-MCU Loli V3	Tool testing	2024-02-29	2024-03-02	25%
5	Design	Create and design UI Design, welcome page, star page, dashboard, automatic scale page. Adapt the design to the application you want to use, carry out UX design.	UI and UX design	2024-03-04	2024-03-08	32%
6	Implementation	Assembling IoT devices, ensuring sensors are connected and lolin works, carrying out the process of implementing UI into Flutter	Mobile app and IoT processes	2024-03-11	2024-03-16	40%
7	Implementation	Make improvements to the sensor section, by making a sensor base (tray/container) at the top. Where the container will be made using cardboard which can support the weight of an object +/- 10 kg.	Weighing sensor housing	2024-03-18	2024-03-21	52%
8	Implementation	Carrying out the process of creating application UI using Android Studio and Visual Studio Code, displays the UI on the emulator.	Mobile scale UI application prototyping process	2024-04-15	2024-04-26	57%
9	Implementation	The final result is a Flutter prototype, maximizing functions, features and also making adjustments to the IoT Flutter device in Visual Studio Code.	The final result of the flutter mobile scale application prototype	2024-05-01	2024-05-17	66%
10	Implementation	Ensure that IoT devices in the form of sensors and lolin node mcu are connected to the Arduino IDE, so that they can display results	Displays the results of the weighing sensor	2024-05-20	2024-05-27	73%
11	Implementation	Trying to connect flutter to IoT device, Try weighing light items up to under 10 kilograms using a sensor connected to the ARDUINO IDE application	Connecting flutter to IoT	2024-05-28	2024-06-05	78%
12	Implementation	Hold a meeting with a mobile device programming lecturer: Namely discussing solutions on how to connect Flutter to IoT devices directly.	Solution connecting Flutter to IoT	2024-06-10	2024-06-13	80%
13	Implementation	Made a series of iterative improvements in connecting flutter to IoT devices. Try various trial error approaches until you succeed in connecting it. We also test integration on smartphones to ensure optimal compatibility.	Successfully connected flutter to IoT devices, as well as smartphones	2024-06-10	2024-06-22	95%
14	Implementation	Combining application files, creates a way to install applications without going through Google Play so that they are easy to access and download.	Merge application files	2024-06-24	2024-06-22	100%

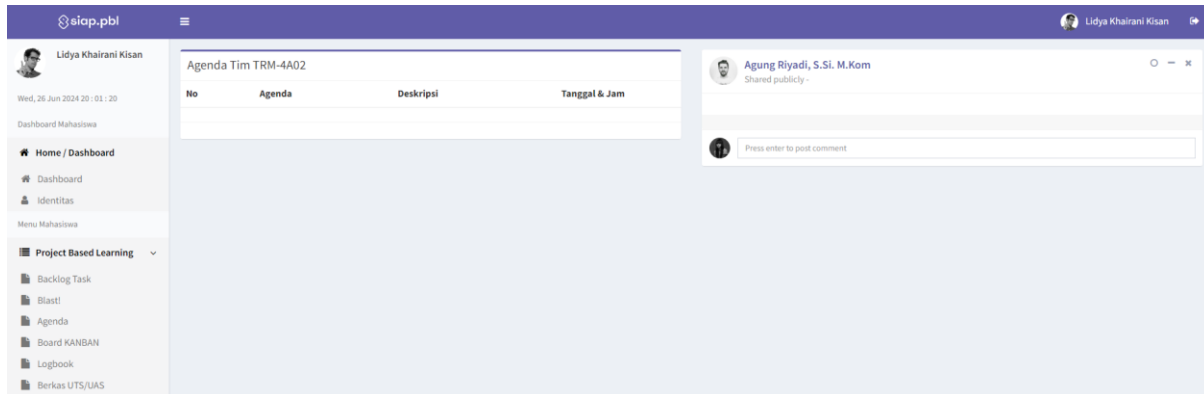
STUDY PROGRAMS – DEPARTMENTS

Teknologi Rekayasa Multimedia – Teknik Informatika

Picture 14 Logbook History

https://drive.google.com/file/d/1MpD6Acl5Cn_SOQ6Zd85PdElsdBhrtT7j/view?usp=sharing

APPENDIX II – TEAM SCHEDULE



siap.pbl

Lidya Khairani Kisan

Wed, 26 Jun 2024 20 : 01 : 20

Dashboard Mahasiswa

Home / Dashboard

Dashboard

Identitas

Menu Mahasiswa

Project Based Learning

Backlog Task

Blast!

Agenda

Board KANBAN

Logbook

Berkas UTS/UAS

Agenda Tim TRM-4A02

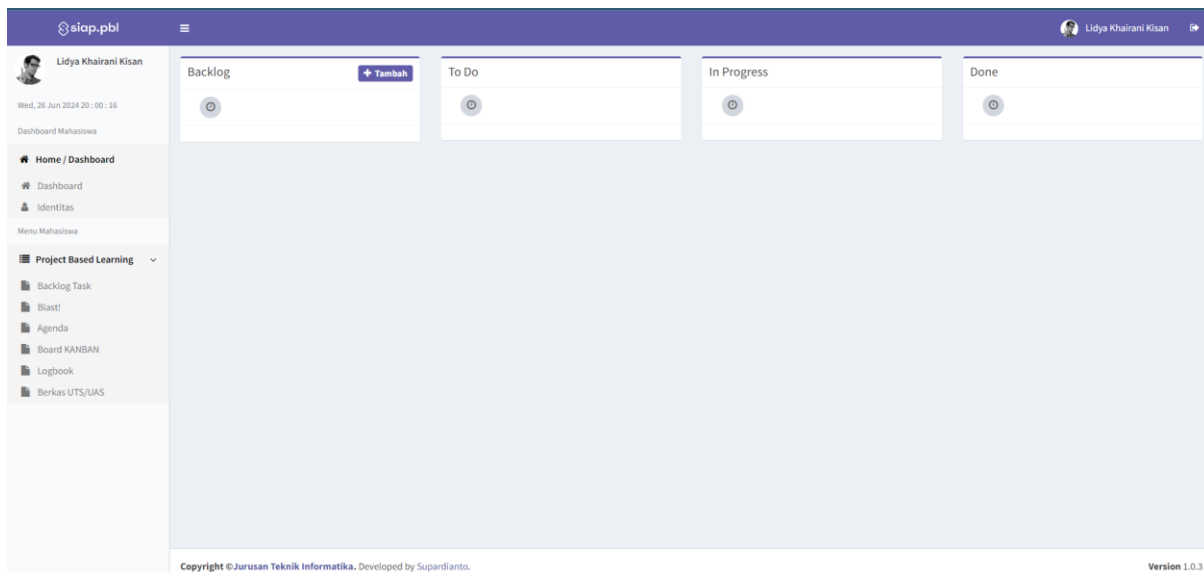
No	Agenda	Deskripsi	Tanggal & Jam

Agung Riyadi, S.Si. M.Kom

Shared publicly -

Press enter to post comment

APPENDIX III – PROJECT BOARD



siap.pbl

Lidya Khairani Kisan

Wed, 26 Jun 2024 20 : 00 : 16

Dashboard Mahasiswa

Home / Dashboard

Dashboard

Identitas

Menu Mahasiswa

Project Based Learning

Backlog Task

Blast!

Agenda

Board KANBAN

Logbook

Berkas UTS/UAS

Backlog

+ Tambah

To Do

In Progress

Done

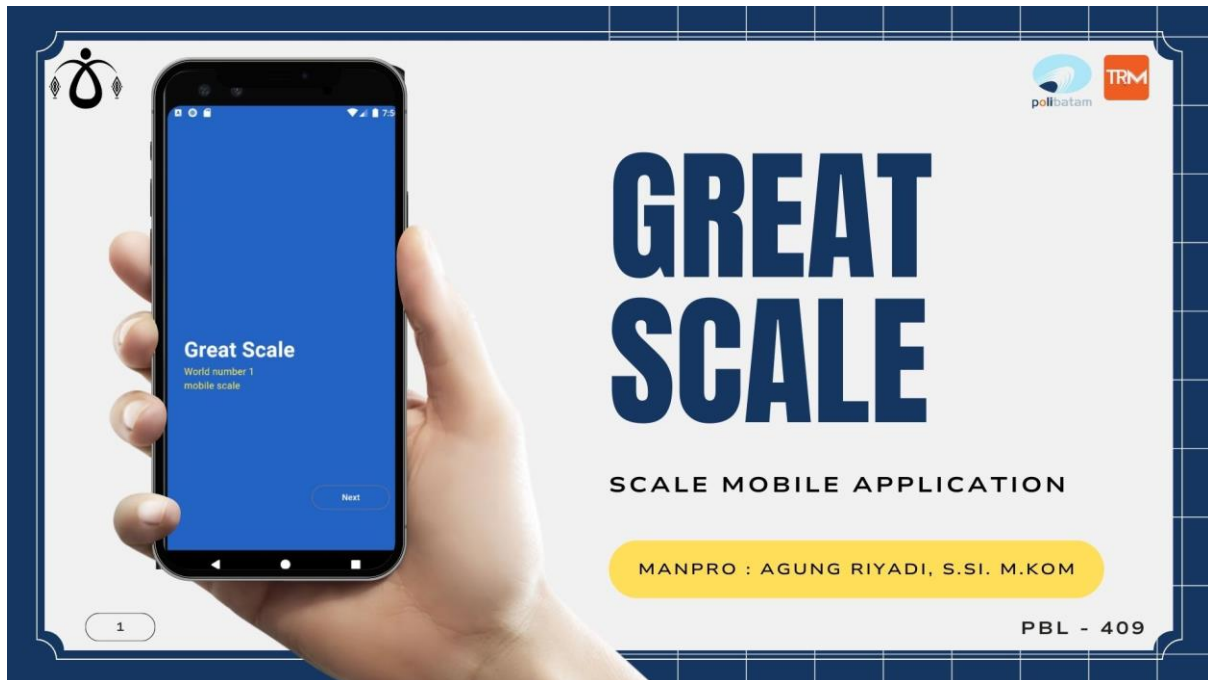
Copyright © Jurusan Teknik Informatika, Developed by Supandianto.

Version 1.0.3

APPENDIX IV – PRESENTATION SLIDES

<https://drive.google.com/file/d/1flp7RuCH8TDDrNFaHiKuEo6fZKYHbPkR/view?usp=sharing>

Picture 15 ppt presentation





INTRODUCTION

4312211009 - 4312211017 - 4312211022 - 4312211002 - 4312211024



Azahra Nouvanda
Guzka
[Leader]



Lidya Khairani
Kisan



Muhammad Rifai



Luiz Gonzalez



Dendra Dara Lucky

3

PBL - 409



GREAT SCALE

DESCRIPTION

Mobile scale applications based on cellular and IoT technology offer a convenient solution for measuring and monitoring various parameters via mobile devices connected to the Internet of Things (IoT). These applications facilitate accurate weight measurements and scale monitoring, such as weighing kitchen ingredients, which can be easily monitored through a mobile app.

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PBL - 409

COURSE CONTRIBUTIONS

MULTIMEDIA IOT SYSTEM
Integrate IoT sensors with multimedia devices to produce innovative solutions

OBJECT PROGRAMMING
Design and implement software using the OOP modularity concept.

MOBILE DEVICE PROGRAMMING
Implement data management in mobile applications, managing resources such as battery and memory.

COMPUTER SYSTEM ADMINISTRATION
Understand computer resource management concepts, including CPU, memory, and storage

STATISTICS
Interpret the results of statistical analysis correctly and relate them to the research question or problem at hand

CIVIC EDUCATION
Participate in simulations or projects that encourage active participation in the democratic process

GENERAL ENGLISH
Understand technical vocabulary and special terms in English related to the project area

5

PBL - 409

FIGMA DISPLAY DESIGN

week 1 -
<https://www.figma.com/file/ZKkLXwo2mUKz6Nw1l0SacZ/Mobile-Scale?type=design&node-id=0-1&mode=design&t=W0cluJQ4ekrjNU3P-0>

6

PBL - 409

LOGBOOK HISTORY

week 1 - 14

<https://drive.google.com/file/d/1DZi5HfJPAwx8hyGs78j4ghVlgThMfv2P/view?usp=sharing>

ID	Tahapan	Detail Pengerjaan
1	Planning	Melakukan pertemuan pertama bersama alat, serta mengisi RPP
2	Planning	Meakukan pertemuan antar kelompok, akan dibeli dan digunakan
3	Design	Medesign user interface, logo, warna dan kewarganegaraan

7

PBL - 409

OUTPUT

The output we produced from this project is a mobile application for weighing various kinds of cooking spices to help users weigh them in detail

8

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CONTRIBUTION OF EACH MEMBER



AZAHRA
Mobile application programming, determine the User Interface design.



LUIZ
IOT device programming



LIDYA
Managing UX application design prototypes, compiling and writing project reports

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CONTRIBUTION OF EACH MEMBER



RIFAI
IOT device connector, IoT needs, creation of logbook history.



DENDRA
Creation of application logos and case diagrams, presentation of data.

10

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OBSTACLES AND SOLUTIONS



Obstacles

Our problem with this PBL was that when connecting the Arduino it didn't connect and when we asked the project manager we didn't understand either.

11



Solutions

solution to the Arduino problem that is not connected, we looked for information on YouTube, from the same PBL team and used reason.

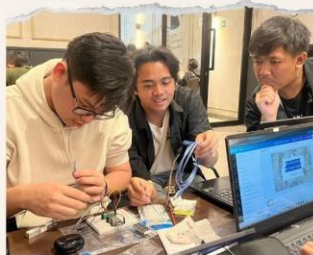
PBL - 409



DOCUMENTATION



UI / UX Design &
Mobile Scale
Backed



IoT sensors device



meeting with the
project manager

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PROJECT OUTPUT



The project has been successfully created by applying the design, building the application according to the desired functions, and displaying it on an Android device.

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PBL - 409



THANK YOU

MOBILE APPLICATION SCALE

- GREAT SCALE -

TRM-4A02

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APPENDIX V

You can add appendices as needed such as:

1. Link of product : [Produk](#)
2. Link of presentation : [Presentation](#)
3. Link of demo video /teaser : [Demo](#)
4. Link of scientific poster : [Poster](#)
5. Link of Intellectual Property Rights Document: [Property Rights Document](#)
6. Link of handover document scan : [Handover Document](#)
7. Link Figma : [Figma Design](#)
8. Link of contest proposal (optional) : -
9. Link PPT : [PPT Great Scale \[Mobile Scale\]](#)
10. Link Logbook : [Logbook](#)
11. Link Manual Book : [Manualbook](#)

Make sure the link provided is set up to be accessible to the **public**.



**Kampus
Merdeka**
INDONESIA JAYA



trm.polibatam



<https://if.polibatam.ac.id/teknologi-rekayasa-multimedia/index.html>



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