

IT2010 – Mobile Application Development BSc (Hons) in Information Technology 2nd Year Faculty of Computing SLIIT

2023 – Assessment 01 Phase 1 Report

Description	Student ID	Name
Group Leader	Bandara K.M.V.T	IT21266300
Member 2	Bandara R.M.D.L	IT21266096
Member 3	Chandrasena H.M.K.G.J.K	IT21268830
Member 4	Kiriwaththuduwa K.C.N	IT21298158

Application Topic	Promote Fair Pricing for Farmers and Customers in Sri Lanka's Wholesale Fruit and Vegetable Markets
Group Name	Quad Squad

Project Declaration

We, the members of Quad Squad, hereby declare that our group project is entirely authentic and original. We have conducted thorough research and analysis to ensure that our work is not plagiarized or copied from any other sources.

We have followed all guidelines provided by our LIC and have complied with all ethical and academic standards.

We take full responsibility for the authenticity of our work and understand the implications of academic dishonesty. We have worked collaboratively to produce this project, and each member has contributed to the best of their abilities.

We hereby affirm that our project represents our honest effort and commitment to academic integrity, and we take pride in presenting it as our own.

Group Leader (Signature)

Visites

Bandara K.M.V.T

Description about the overall project

This project aims to tackle the issue of unfair pricing in Sri Lanka's wholesale fruit and vegetable markets by introducing a mobile application that calculates transport costs using the distance traveled and promotes fair and reasonable profits for all stakeholders involved. The current system sees farmers receiving low prices for their produce while sellers make significant profits, leading to high customer prices.

The proposed solution involves developing a mobile application that provides real-time market information to farmers and sellers, including pricing and demand data, promoting transparency and equitable pricing. The app will also integrate a feature that calculates transport costs based on the distance traveled, ensuring that all stakeholders receive fair compensation for their contributions.

The impact of the proposed solution is significant, as it not only promotes fair pricing and improved livelihoods for farmers but also ensures that customers receive better value for their money. Moreover, the solution will promote a more efficient and transparent market system, encouraging sustainable economic growth and development.

The project will involve extensive stakeholder engagement, including farmers, sellers, and customers, to ensure the solution is tailored to their needs and aspirations. The proposed solution represents a significant step towards addressing unfair pricing in Sri Lanka's wholesale fruit and vegetable markets, promoting equitable economic development.



Member-wise description

IT21266300 – Sign-Up, Dashboard poster

IT21266300 - Farmer Profit Calculator and set price

This function provides farmers with a stable price and fair price for farmers. Farmers can input the weight of the vegetable or fruit and add how much they spend to get it. The application calculates the profit or loss that they make. The administration will decide on vegetable and fruit buying prices according to availability and demand, and they can update using the application. When the farmer once calculates, details will be saved in the farmer profit calculation history. Farmers can delete history cads. This function helps the farmer to get good value for their work.

IT21266096 — Dashboard, App Bar, and Menu

IT21266096- Agricultural Transport Cost Calculation.

The transport function aids farmers, transporters, and sellers in fruit and vegetable delivery. Users can input weight, pickup location, delivery location, and distance into the system to calculate the transport cost for each item. Furthermore, the method includes fuel costs and driver wages to estimate overall transportation costs accurately. The system's calculations are recorded in a history that users can edit or remove as necessary. Furthermore, the administrator can change fuel prices and driver wages to reflect market or economic changes. Overall, this system is valuable for those involved in agricultural goods transportation in Sri Lanka.

IT21268830 -LogIn, Userprofile

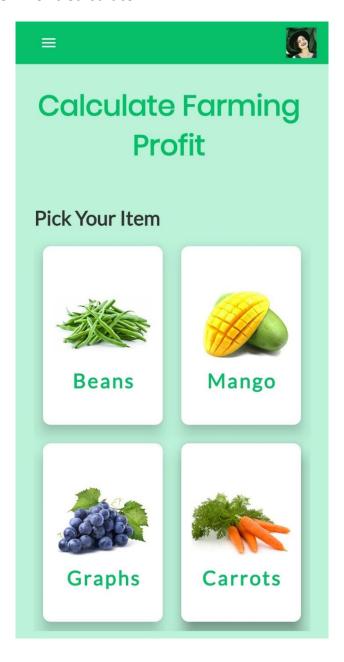
The login function and user profile function are functions of the MARKET MEVEN mobile application. Registered users can log in to the application using their valid user credentials. If users forget their password for the application, they can reset it using the forget password option. For new users, there is a sign-up option on the login page.

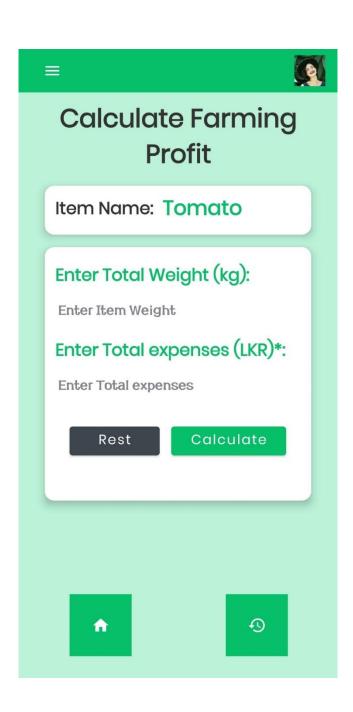
The user profile function allows users to customize their profile information and view their details. It includes options for users to update their profile details(name, address, phone number, email), delete the user profile, and reset their current password.

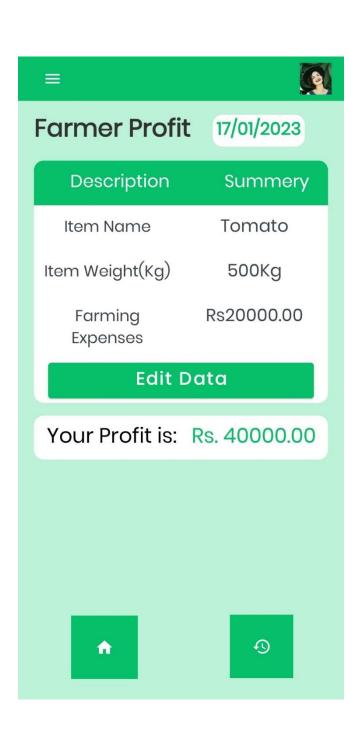
IT21298158 - Selling Cost Manage, Selling Item Price Calculation
This platform helps to reduce the cost of transport when delivering vegetables and fruits. Sellers can reduce costs, and buyers also can buy without wasting money.
Seller/merchant can add Item type, weight, and Transport distance. Then it adds some percentage of profit and will calculate and give the selling price. The seller can add the Item name, Weight, distance, buying price, and selling price for each item. Each data is recorded as history, and users can update or delete those data as they want. The value of this is sellers can get a direct idea about their selling prices. It reduces costs when delivering items from farmers to sellers. This is more beneficial for customers.

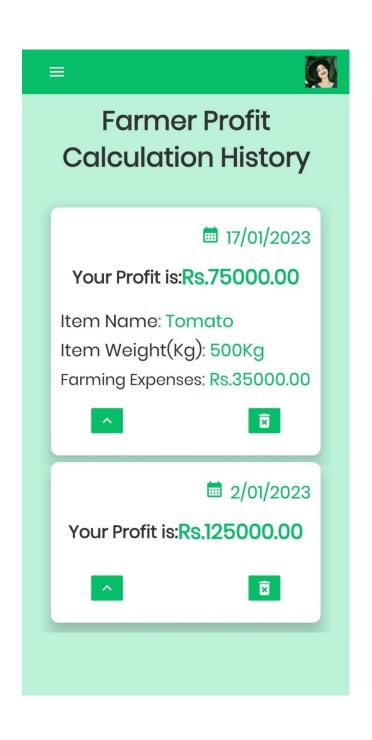
Screenshots of the all-user interfaces. (Member wise)

IT21266300- Farmer Profit Calculator

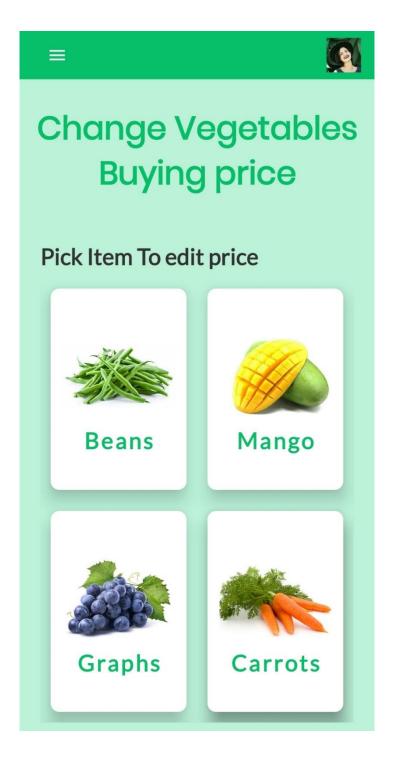








IT21266300- Update Item Price (Select)



IT21266300- SignUp

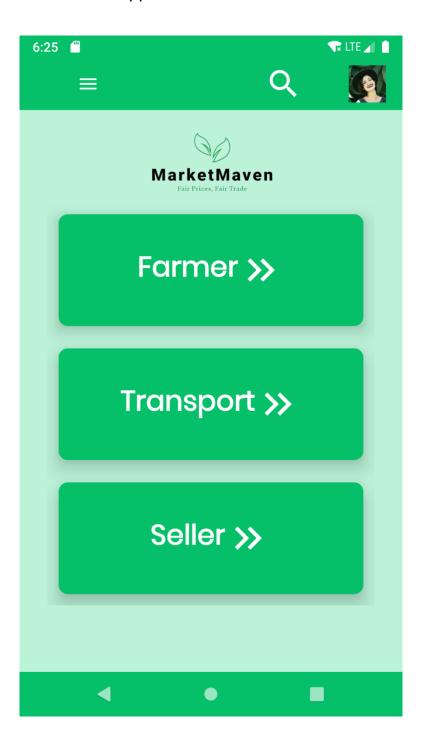
Sign-Up
Name
Address
No.
Lane
City
District
User Type
○ Farmer ○ Transport ○ Seller
Contact No.
Password

No.
Lane
City
District
User Type
○ Farmer ○ Transport ○ Seller
Contact No.
Password
Confirm Password
SUBMIT
CANCEL

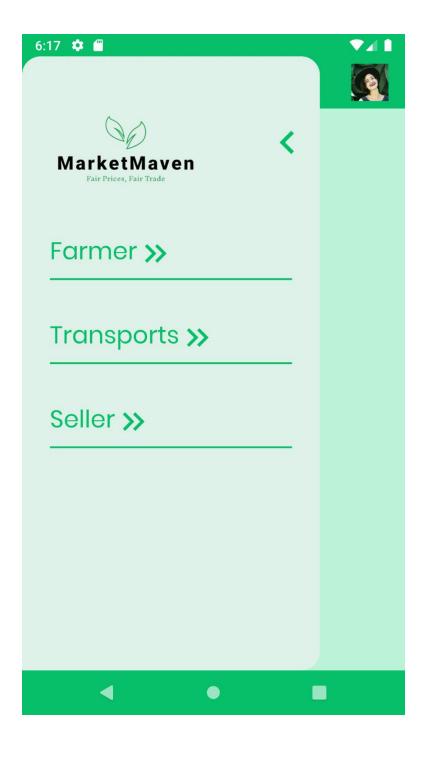
IT21266300- Dashboard Poster



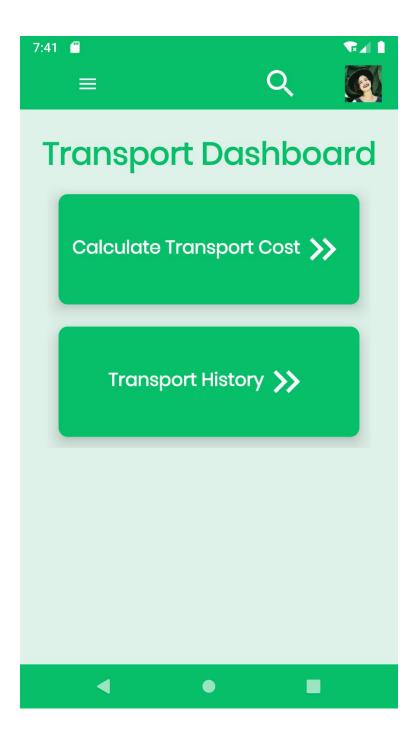
IT21266096- Dashboard and App Bar



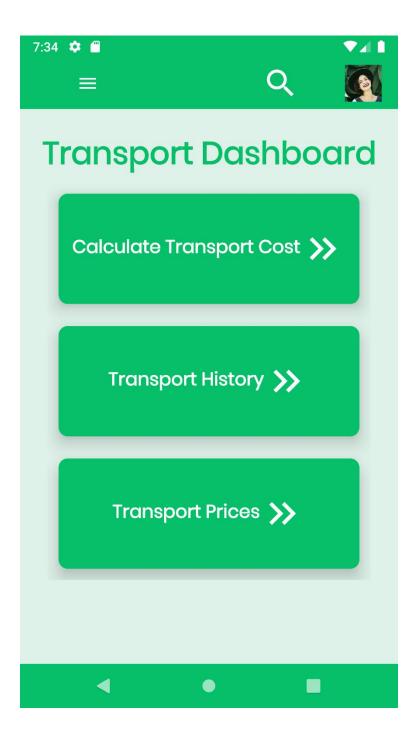
IT21266096- Menu



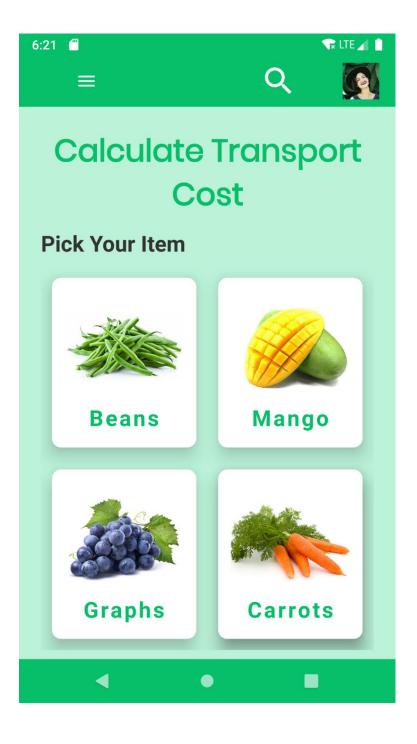
IT21266096- Transport Dashboard



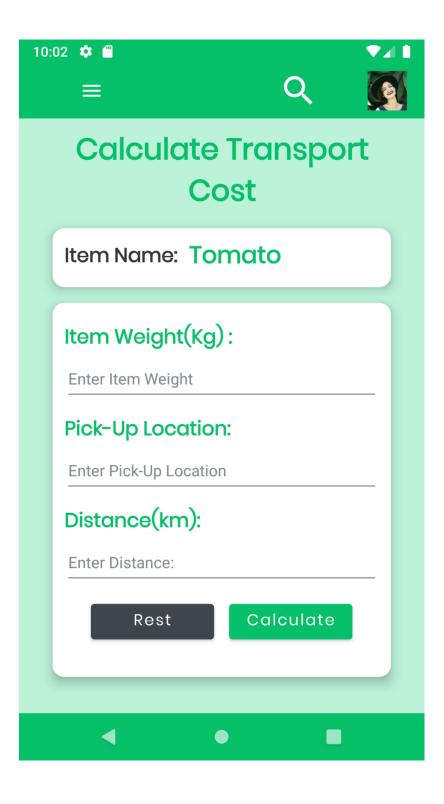
IT21266096- Transport Dashboard (Admin)



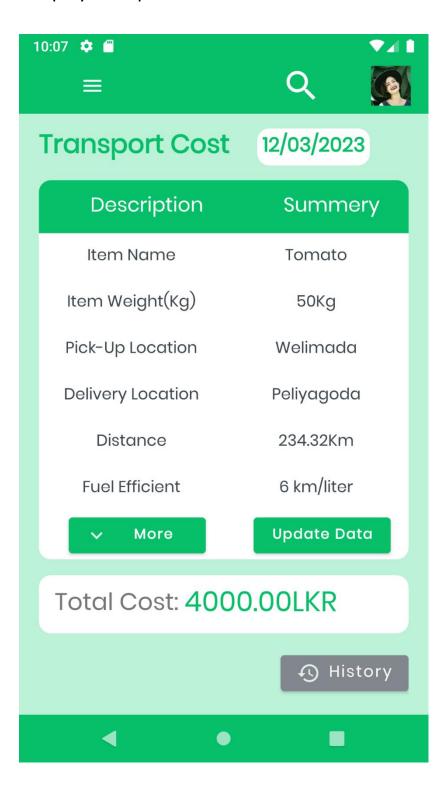
IT21266096- Items Menu Page



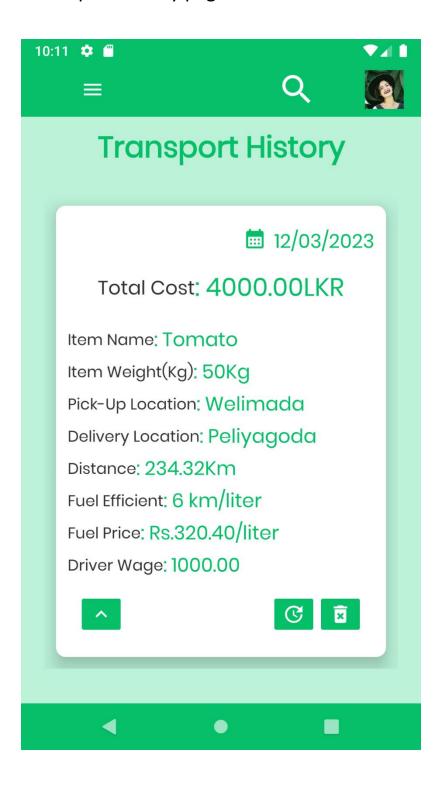
IT21266096- Transport cost calculation page



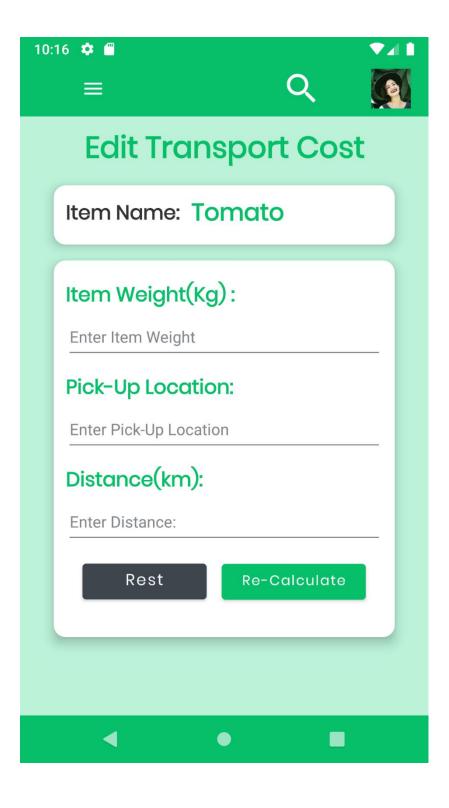
IT21266096- Display transport cost details



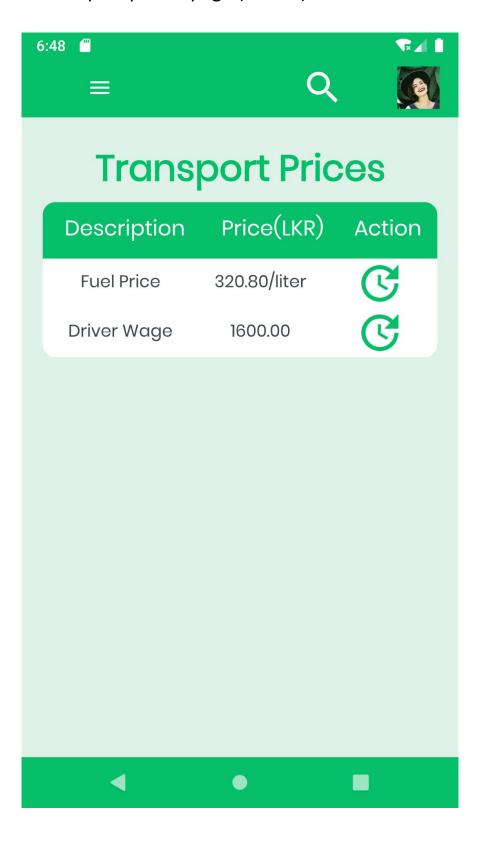
IT21266096- Transport history page



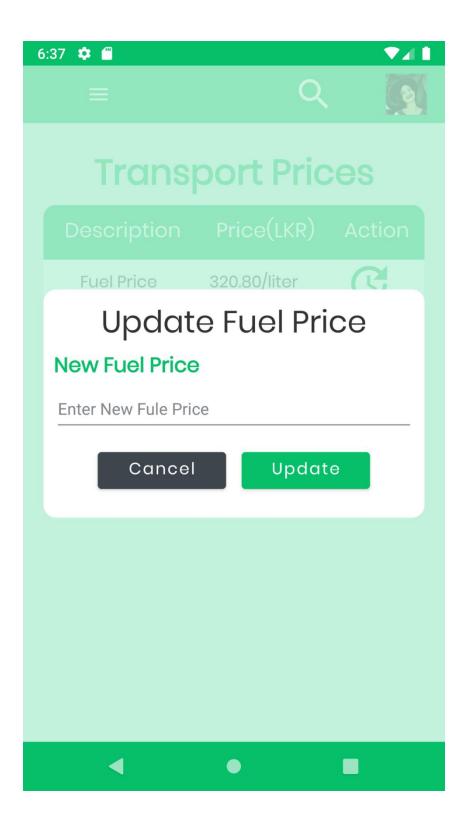
IT21266096- Edit Transport Cost

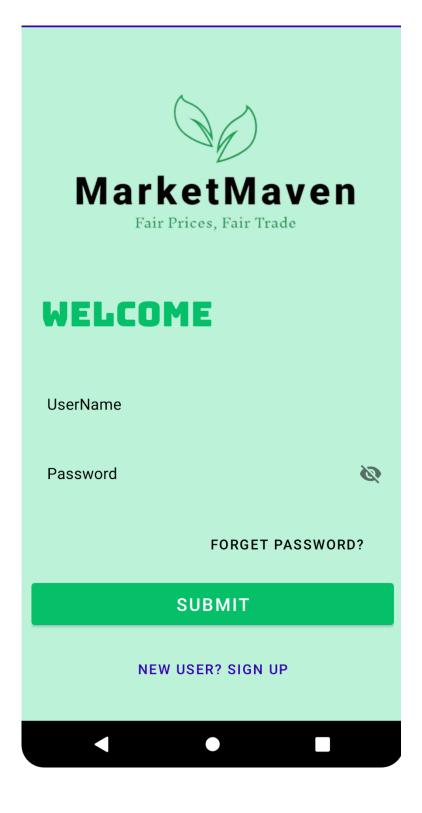


T21266096- Transport prices page (Admin)

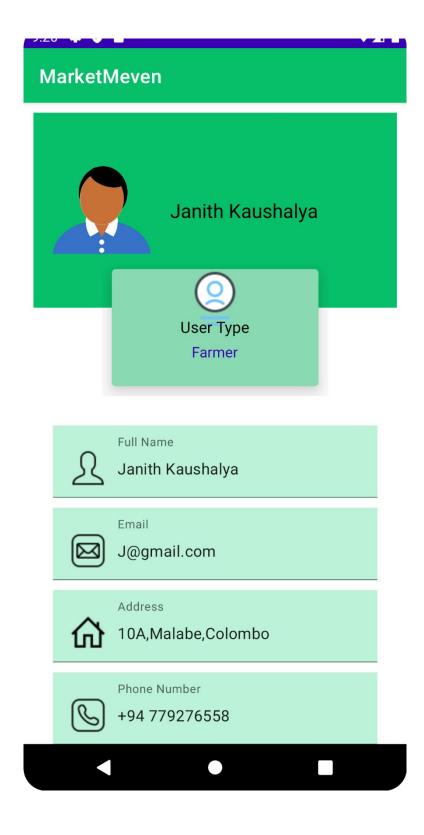


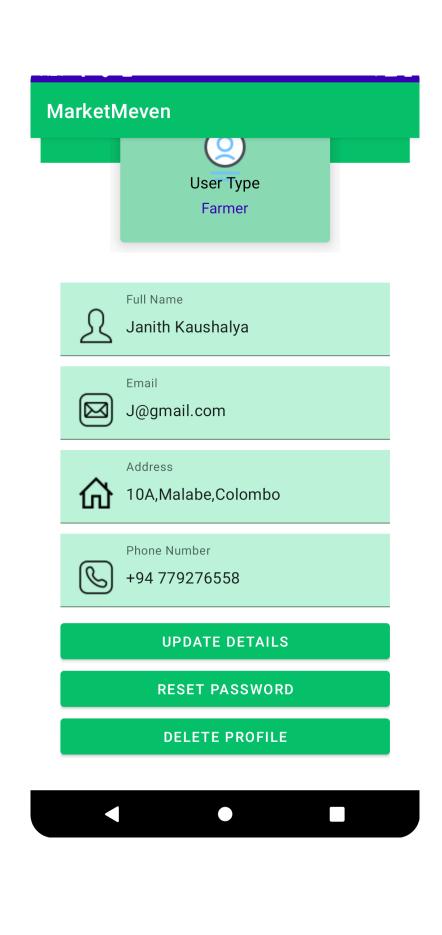
IT21266096- Update Transport Prices (Admin)



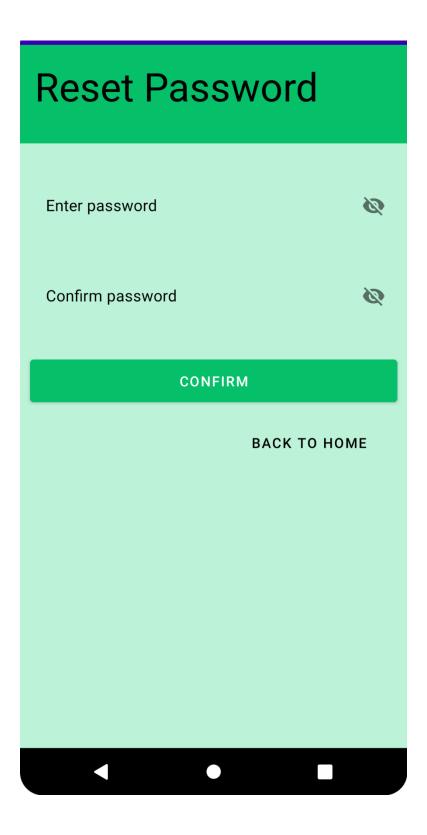


IT21268830 – User Profile





IT21268830 - Reset Password





Calculate Selling Price

Pick Your Item



Beans



Mango



Graphs



Carrots

Calculate Selling Price	
Item Name:	
Item Weight(Kg):	
Transport Distance:	
CALCULATE	
Selling Price:	

Item Name:		
tomato		
Item Weight(Kg):	
10		
Transport Dista	nce:	
10km		
Buying Price:		
1000		
Selling Price:		
1500		
	INSERT	
	INSERT	

Item Price History
Item Name:
Item Weight(Kg):
Transport Distance:
Buying Price:
Selling Price:
UPDATE
DELETE

Update Buying Price Item Name: New Price UPDATE

Screenshots of the usages of resources (String, colors, dimensions, ...)

IT21266300 – Farmer calculator, sign up, common

String

```
<resources>
    <string name="app_name">MarketMaven</string>
            farm calculator -->
   <string name="farmer_cal_heading">Calculate Farming Profit/string>
   <string name="farmer_cal_fun_text1">Enter Total Weight (kg):</string>
   <string name="farmer_cal_fun_text2">Enter Total expenses (LKR)*:</string>
   <string name="farmer_cal_fun_text2_hint">Enter Total expenses</string>
   <string name="farmer_cal_fun_text4">Item Name:</string>
   <string name="farmer_cal_fun_text2.1">(*Not Mandatory)</string>
    <string name="farmer_cal_fun_text3">Your Profit is:</string>
    <string name="farmer_cal_display_Profit">Farmer Profit</string>
    <string name="signup_head">Sign Up</string>
   <string name="signup_name">Name</string>
   <string name="signup_address">Address</string>
    <string name="signup_address_no">No</string>
    <string name="signup_address_lane">Lane</string>
    <string name="signup_address_city">City</string>
    <string name="signup_address_district">District</string>
    <string name="signup_User_type">User Type</string>
    <string name="signup_User_type_Farmer">Farmer</string>
    <string name="signup_User_type_transport">Transport</string>
    <string name="signup_User_type_seller">Seller</string>
    <string name="signup_User_contact">Contact No</string>
    <string name="signup_User_pass">Password</string>
```

```
<string name="signup_User_pass">Password</string>
<string name="signup_User_com_pass">Confirm Password</string>
<string name="transport_head">Transport</string>
<string name="add_transport">Calculate Transport Cost and profit</string>
<string name="transport_list">Transport List</string>
<string name="calculate_header">Calculate Transport Cost</string>
<string name="display_trans_calculation">Transport Cost/string>
<string name="trans_history">Transport History</string>
<!-- vegetables-->
<string name="beans">Beans</string>
<string name="carrots">Carrots</string>
<string name="potato">Potato</string>
<string name="tomato">Tomato</string>
<string name="beet">Beet</string>
<string name="leeks">Leeks</string>
<string name="cabbage">Cabbage</string>
<string name="cron">Cron</string>
```

```
<!-- display_costs-->
<string name="trans_date">Date: </string>
<string name="trans_fuel_efficiency">Fuel Efficient</string>
<string name="trans_fuel_efficiency">Fuel Efficient</string>
<string name="trans_delver_wage">Diver Wage</string>
<string name="trans_distance">Distance</string>
<string name="trans_distance">Distance</string>
<string name="trans_delivery_location">Delivery Location</string>
<string name="trans_pickup_location">Pick-Up Location</string>
<string name="trans_item_name">Item Name</string>
<string name="trans_item_weight">Item Weight(Kg)</string>
<!-- select_farmer_items-->
<string name="farm_item_select">Pick Your Item</string>
<string name="farm_item_price_edit">Pick Your Item</string>
<string name="farm_item_price_edit_heading">Change Vegetables Buying price</string>
<!-- farmer_history-->
<string name="farm_item_history_expenses">Farming Expenses</string>
<string name="farm_item_history_expenses">Farming Expenses</string>
<string name="farm_item_history_heading">Farmer Profit Calculation History</string>
```

```
<string name="mango">Mango</string>
<string name="graphs">Graphs</string>
<string name="avocado">Avocado</string>
<string name="banana">Banana</string>
<string name="waterMellon">Water Mellon</string>
<string name="guava">Guava</string>
<string name="papaya">Papaya</string>
       transport calculation form-->
<string name="item_name">Item Name: </string>
<string name="item_weight">Item Weight(Kg) : </string>
<string name="pickup_location">Pick-Up Location: </string>
<string name="delivery_location">Delivery Location: </string>
<!-- placeholders-->
<string name="hint_delivery_location">Enter Delivery Location/string>
<string name="hint_pickup_location">Enter Pick-Up Location/string>
<string name="hint_item_name">Enter Item Name</string>
<string name="hint_item_weight">Enter Item Weight/string>
<string name="btn_calculate">Calculate</string>
<string name="btn_rest_calculate">Rest</string>
```

```
<?xml version="1.0" encoding="utf-8"?>
    <resources>
        <color name="purple_200">#FFBB86FC</color>
<color name="purple_500">#FF6200EE</color>
        <color name="purple_700">#FF3700B3</color>
<color name="teal_200">#FF03DAC5</color>
        <color name="teal_700">#FF018786</color>
        <color name="black">#FF000000</color>
П
        <color name="white">#FFFFFFF</color>
<color name="bg_green">#BBF2D8</color>
        <color name="text_header">#06BF69</color>
<color name="text">#FF000000</color>
<color name="backgroundMain">#BBF2D8</color>
        <color name="background0pt1">#DFF2E9</color>
<color name="background0pt2">#06BF69</color>
<color name="headingMain">#06BF69</color>
        <color name="heading0pt1">#81878c</color>
<color name="heading0pt2">#333333</color>
        <color name="para_text">#3D464D</color>
    </resources>
```

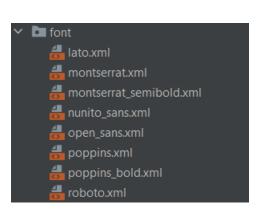
Dimensions

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <dimen name="padding_default">16dp</dimen>
 <dimen name="text_size_large">24sp</dimen>
    <dimen name="text_size_medium">22sp</dimen>
    <dimen name="text_size_small">20sp</dimen>
    <dimen name="margin_small">8dp</dimen>
    <dimen name="margin_medium">16dp</dimen>
    <dimen name="margin_large">24dp</dimen>
    <dimen name="padding_small">8dp</dimen>
    <dimen name="padding_medium">16dp</dimen>
    <dimen name="padding_large">24dp</dimen>
    <dimen name="icon_small">24dp</dimen>
    <dimen name="icon_medium">36dp</dimen>
    <dimen name="icon_large">48dp</dimen>
    <dimen name="button_height">48dp</dimen>
    <dimen name="button_width">200dp</dimen>
    <dimen name="card_height">200dp</dimen>
    <dimen name="card_width">300dp</dimen>
```

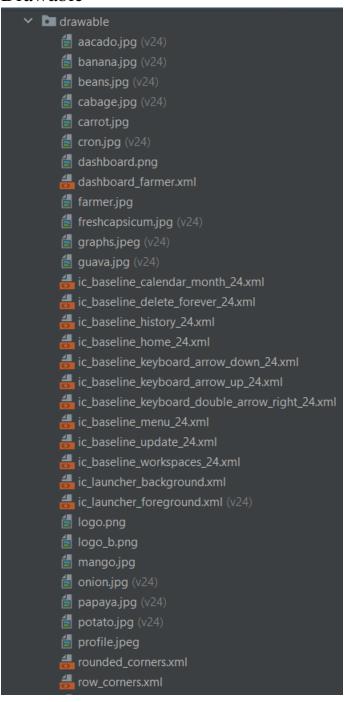
Themes

```
<
```

Fonts



Drawable



Strings

```
<resources>
   <string name="app_name">MAD</string>
   <string name="transport_head">Transport</string>
   <string name="add_transport">Calculate Transport Cost</string>
   <string name="transport_list">Transport List</string>
   <string name="calculate_header">Calculate Transport Cost</string>
   <string name="update_calculate_header">Edit Transport Cost</string>
   <string name="display trans calculation">Transport Cost</string>
   <string name="trans_history">Transport History</string>
   <string name="trans prices">Transport Prices</string>
   <string name="trans_dashboard">Transport Dashboard</string>
   <string name="trans_pick">Calculate Transport Cost</string>
    <string name="beans">Beans</string>
    <string name="carrots">Carrots</string>
    <string name="potato">Potato</string>
    <string name="tomato">Tomato</string>
    <string name="beet">Beet</string>
    <string name="leeks">Leeks</string>
    <string name="cabbage">Cabbage</string>
    <string name="cron">Cron</string>
            fruits-->
    <string name="mango">Mango</string>
    <string name="graphs">Graphs</string>
    <string name="avocado">Avocado</string>
    <string name="banana">Banana</string>
    <string name="waterMellon">Water Mellon</string>
    <string name="guava">Guava</string>
    <string name="papaya">Papaya</string>
```

```
<string name="item name">Item Name: </string>
 <string name="item weight">Item Weight(Kg) : </string>
 <string name="pickup_location">Pick-Up Location: </string>
 <string name="delivery_location">Delivery Location: </string>
 <string name="distance">Distance(km): </string>
 <string name="hint delivery location">Enter Delivery Location</string>
 <string name="hint_pickup_location">Enter Pick-Up Location</string>
 <string name="hint item name">Enter Item Name</string>
 <string name="hint item weight">Enter Item Weight</string>
 <string name="hint distance">Enter Distance: </string>
<string name="btn_calculate">Calculate</string>
<string name="btn rest calculate">Rest</string>
<string name="update_btn_calculate">Re-Calculate</string>
<string name="trans date">Date: </string>
<string name="trans_fuel_efficiency">Fuel Efficient</string>
<string name="trans_driver_wage">Driver Wage</string>
<string name="trans fuel price">Fuel Price</string>
<string name="trans_distance">Distance</string>
<string name="trans_total_cost">Total Cost</string>
<string name="trans_delivery_location">Delivery Location/string>
<string name="trans pickup location">Pick-Up Location</string>
<string name="trans_item_name">Item Name</string>
<string name="trans_item_weight">Item Weight(Kg)</string>
    <!-- edit prices-->
    <string name="edit_fuel_price">Fuel Price</string>
    <string name="new_fuel_price">New Fuel Price</string>
    <string name="edit_fuel_efficiency">Fuel Efficient</string>
    <string name="edit_driver_wage">Driver Wage</string>
∳resources>
```

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="purple 200">#FFBB86FC</color>
    <color name="purple_500">#FF6200EE</color>
    <color name="purple_700">#FF3700B3</color>
    <color name="teal 200">#FF03DAC5</color>
    <color name="teal 700">#FF018786</color>
    <color name="black">#FF000000</color>
    <color name="white">#FFFFFFF</color>
    <color name="backgroundMain">#BBF2D8</color>
    <color name="backgroundOpt1">#DFF2E9</color>
    <color name="background0pt2">#06BF69</color>
    <color name="backgroundOpt3">#C6BBF2D8</color>
    <color name="headingMain">#06BF69</color>
    <color name="heading0pt1">#81878c</color>
    <color name="headingOpt2">#333333</color>
    <color name="para text">#3D464D</color>
</resources>
```

Dimensions

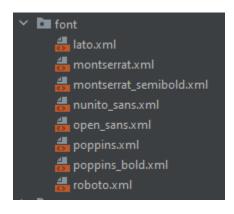
```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <dimen name="padding_default">16dp</dimen>
 <dimen name="text_size_large">24sp</dimen>
    <dimen name="text_size_medium">22sp</dimen>
    <dimen name="text_size_small">20sp</dimen>
    <dimen name="margin_small">8dp</dimen>
    <dimen name="margin_medium">16dp</dimen>
    <dimen name="margin_large">24dp</dimen>
    <dimen name="padding_small">8dp</dimen>
    <dimen name="padding_medium">16dp</dimen>
    <dimen name="padding_large">24dp</dimen>
    <dimen name="icon_small">24dp</dimen>
    <dimen name="icon_medium">36dp</dimen>
    <dimen name="icon_large">48dp</dimen>
    <dimen name="button_height">48dp</dimen>
    <dimen name="button_width">200dp</dimen>
    <dimen name="card_height">200dp</dimen>
    <dimen name="card_width">300dp</dimen>
```

Themes

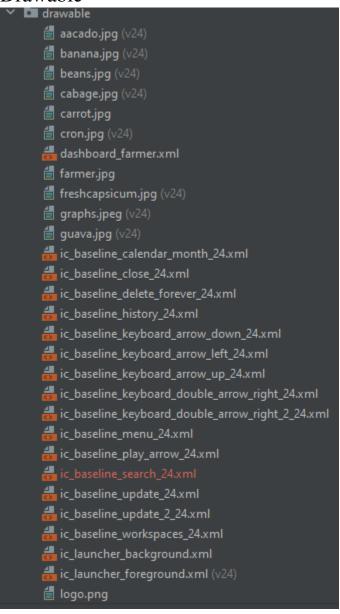
Light Theme

Dark Theme

Fonts



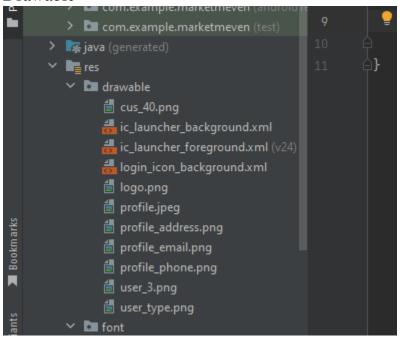
Drawable

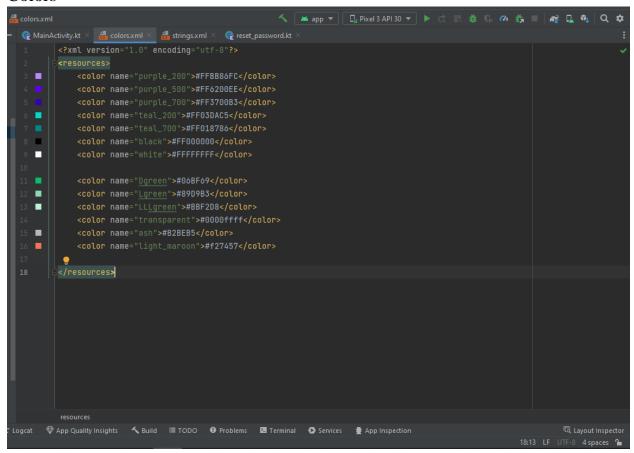


IT21268830 - LogIn, User profile

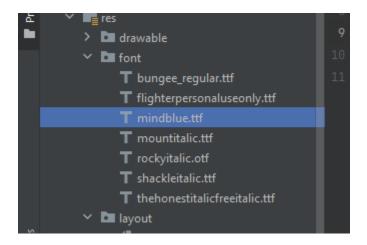
Strings

Drawable





Fonts



Dimensions

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <dimen name="padding_default">16dp</dimen>
  <dimen name="text_size_large">24sp</dimen>
    <dimen name="text_size_medium">22sp</dimen>
    <dimen name="text_size_small">20sp</dimen>
    <dimen name="margin_small">8dp</dimen>
    <dimen name="margin_medium">16dp</dimen>
    <dimen name="margin_large">24dp</dimen>
    <dimen name="padding_small">8dp</dimen>
    <dimen name="padding_medium">16dp</dimen>
    <dimen name="padding_large">24dp</dimen>
    <dimen name="icon_small">24dp</dimen>
    <dimen name="icon_medium">36dp</dimen>
    <dimen name="icon_large">48dp</dimen>
    <dimen name="button_height">48dp</dimen>
    <dimen name="button_width">200dp</dimen>
```

Strings

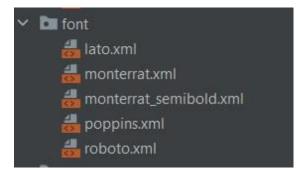
```
🚜 fonts.xml × 🍶 dimension.xml × 🚜 colors.xml
<resources>
    <string name="app_name">MadProject1</string>
    <string name="cal_selling_cost">Calculate Selling Cost </string>
   <string name="item_name">Item Name: </string>
    <string name="item_weight">Item Weight(Kg) : </string>
    <string name="transport_distance">Transport Distance: </string>
    <string name="hint_item_name">Enter Name</string>
    <string name="hint_item_weight">Enter Weight</string>
    <string name="hint_transport_distance">Enter Distance/string>
    <string name="btn_calculate">Calculate</string>
    <string name="selling_price">Selling Price: </string>
 <string name="hint_selling_price">2500</string>
    <string name="item_weight1">Item Weight(Kg) : </string>
    <string name="transport_distance1">Transport Distance: </string>
    <string name="buying_price1">Buying Price: </string>
    <string name="selling_price1">Selling Price: </string>
```

```
🏭 strings.xml 🛚 🕹
           🚜 fonts.xml 🗡
                          dimension.xml × duction colors.xml dimension.xml
       <?xml version="1.0" encoding="utf-8"?>
       <resources>
  <color name="purple_700">#FF3700B3</color>
  <color name="teal_700">#FF018786</color>
           <color name="black">#FF000000</color>
  П
           <color name="backgroundMain">#BBF2D8</color>
  <color name="backgroundOpt1">#DFF2E9</color>
           <color name="background0pt2">#06BF69</color>
14
           <color name="headingMain">#06BF69</color>
  <color name="headingOpt2">#333333</color>
       </resources>
```

Dimensions

```
dimension.xml  colors.xml  col
```

Fonts



Drawable

