



RAMAIAH
Institute of Technology

“Mobile Shop Stock Management”

Submitted to the
Department of Master of Computer Applications
in partial fulfilment of the requirements for
5th semester the Project (Mobile Application Development - MCAE08)

by

Vishal Sinha
1MY18MCA29

Navdeep Rajpurohit
1MS18MCA20

Abhishek KL
Assistant Professor

Ramaiah Institute of Technology
(Autonomous Institute, Affiliated to VTU)
Bangalore – 54

2020

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

CERTIFICATE

This is to certify that the project entitled “**Mobile Shop Stock Management**” is carried out by

Student Name

USN

1) Vishal Sinha

1MY18MCA29

2) Navdeep Rajpurohit

1MS18MCA20

students of 5th semester, in partial fulfillment for the Project (MCAE08), during the academic year 2020-2021.

Guide

Abhishek KL

Head of the Department

Dr. Yogish H K

Name of Examiners

1.

2.

Signature with Date

DECLARATION

I hereby declare that the project report entitle “**Mobile Shop Stock Management**” based on study undertaken by me, towards the partial fulfilment for the Project (MCAE08) carried out during the 5th semester, has been compiled purely from the academic point of view and is, therefore, presented in a true and sincere academic spirit. Contents of this report are based on my original study and findings in relation there to are neither copied nor manipulated from other reports or similar documents, either in part or in full, and it has not been submitted earlier to any University/College/Academic institution for the award of any Degree/Diploma/Fellowship or similar titles or prizes and that the work has not been published in any specific or popular magazines.

Place: Bangalore

Date:

Vishal Sinha

1MY18MCA29

Navdeep Rajpurohit

1MS18MCA20

ACKNOWLEDGEMENT

A project work is a product of experience and it goes a long way in shaping a person in one aspect. With great gratitude I would like to acknowledge the immense help of all those who contributed with their valuable suggestions and timely assistance to complete this work. All that I have done is only due to such supervision and assistance and I would not forget to thank them.

I thank **Abhishek KL, Assistant Professor** for providing me an opportunity to do the project giving all support and guidance which made me complete the project duly. I am extremely thankful to him for providing such a nice support and guidance, taking keen interest in my project work and guiding me all along, till the completion of my project work by providing all the necessary information for developing a good system. We are eager and glad to express our gratitude to **Dr Yogish H K, Head of Dept.** for his approval of this project.

ABSTRACT

Project titled “**Mobile Shop Stock Management**” project is an application designed to manage sundry types of works included in showrooms like sales, adding stock, adding product details, purchase records for monthly, weekly and yearly, profit/loss encountered. In present trend most of the showrooms like cloth stores, mobile stores, and music stores are utilizing software applications for managing daily activities to reduce manual work and amend standards for data management. In this project we designed application for mobile show rooms for handling customers purchase details for every purchase, maxima transaction details, updating latest stock details to database, and analyzing monthly reports. This application also shows the profit or loss encountered. This application can be utilized in any music, mobile stores, predicated on show room requisites users can integrate more modules.

Table of contents

S. No	Description	Page No.
1	Introduction	7
1.1	Problem Definition	7
2	Functional Requirement	8
3	Modules Description	9
3.1	Module Functions	9
4	Design Model	10
4.1	Flow diagram of the project	10
5	Implementation	11
6	User Interface/Screenshot with Description	28
7	Conclusion and Scope for Future Enhancement	33
	Bibliography	35

List of Figure

S. No.	Description	Page No.
1	Flow chart of the Application	10
2	Welcome Screen Snapshot	28
3	Signup Screen Snapshot	29
4	Login Screen Snapshot	30
5	Dashboard Screen Snapshot	31
6	Add Product Screen Snapshot	32

1. Introduction

Mobile Inventory management systems are central to how outlets track and control inventories. Having the ability to measure inventory in a timely and accurate manner is critical for having uninterrupted business operations because inventory is often one of the largest current assets on a shops's balance sheet. For optimal sales and inventory management processes, you need robust functionality for managing your Mobile Shop. Support for inventory management helps you record and mobile materials on the basis of both quantity and value.

Mobile inventory management functions cover shop mobile and accessories movements. Using this application we can track financial and inventory, order fulfillment – while improving customer service. The purpose of this project is to deliver an efficient inventory management system whose main functionality apart from calculating the inventory include predicting the requirement for the next demand and if there is a “Special Occasion” then accordingly the manager selects the particular occasion and extra requirements is added to the next issuing order to the vendors which needs to be approved by the manager.

You can significantly improve inventory turns, optimize the flow of goods, and shorten routes within your shop. Additional benefits of inventory management include improved cash flow, visibility, and decision making. This application is user friendly and hence easy to use. Shopkeepers can plan, enter, and document shop and internal stock movements by managing mobile, accessories stock as well as sale and revenue which gives them monthly analysis of their shop's sale. Application will track incoming and outgoing movement of goods in shop, which makes easy for them to do business.

1.1 Problem Definition

As we know manual system are quite tedious, time consuming and less efficient and accurate in comparison to the computerized system.

So following are some disadvantages of the old system:

- Time consuming
- Less accurate
- Less efficient
- Lot of paper work
- Slow data processing
- Not user friendly

2. Functional Requirements

1. System shall have a form to accept the category, product details.
2. System shall have a form to accept the Sales details.
3. System shall display transaction details.
4. System shall provide facility to get monthly statement.
5. System should automatically generate the sales information.
6. System shall have a Form to validate and login already registered user.
7. System shall have a Form for new user to register themselves on the application.
8. System must have a password protected access system such that only people with authenticated credential are allowed to access the function of the system.

3. Modules Description

3.1 Module Functions

1. Add Category Module

This module is dedicated to enter the categories required to add products in the database. After entering the categories the data will be reflected on the product page.

Examples of basic categories are - Mobile Handsets, accessories, batteries etc.

2. Add Product Module

This module is the base module of the application where the client can add the products which came from distributor or company, it consist of number of handsets and price with details like manufacturer, model number etc.

3. Add Sales Module

The sales module is used to add the sales data of the outlet, the client can enter sales at the same time of sale from outlet, the changes will be reflected in database and the data will be updated from the information added in add product module.

4. Stock List Module

This module fetches the list of stock available in the outlet, this module is very useful for clients as it gives them idea about the customer demand as well as need for supply chain accordingly.

5. Revenue Module

This module generates the revenue of the outlet in a given interval or monthly, which gives idea about the Profit or Loss, client doesn't need to do calculations on a different platform because as they update the sales module the revenue data keep calculating.

4. Design Model

4.1 Flow diagram of the project

As shown in Fig 1, there are four major modules that the user/admin will use they are Add Category, Manage Sales, Generate Revenue, Add Product.

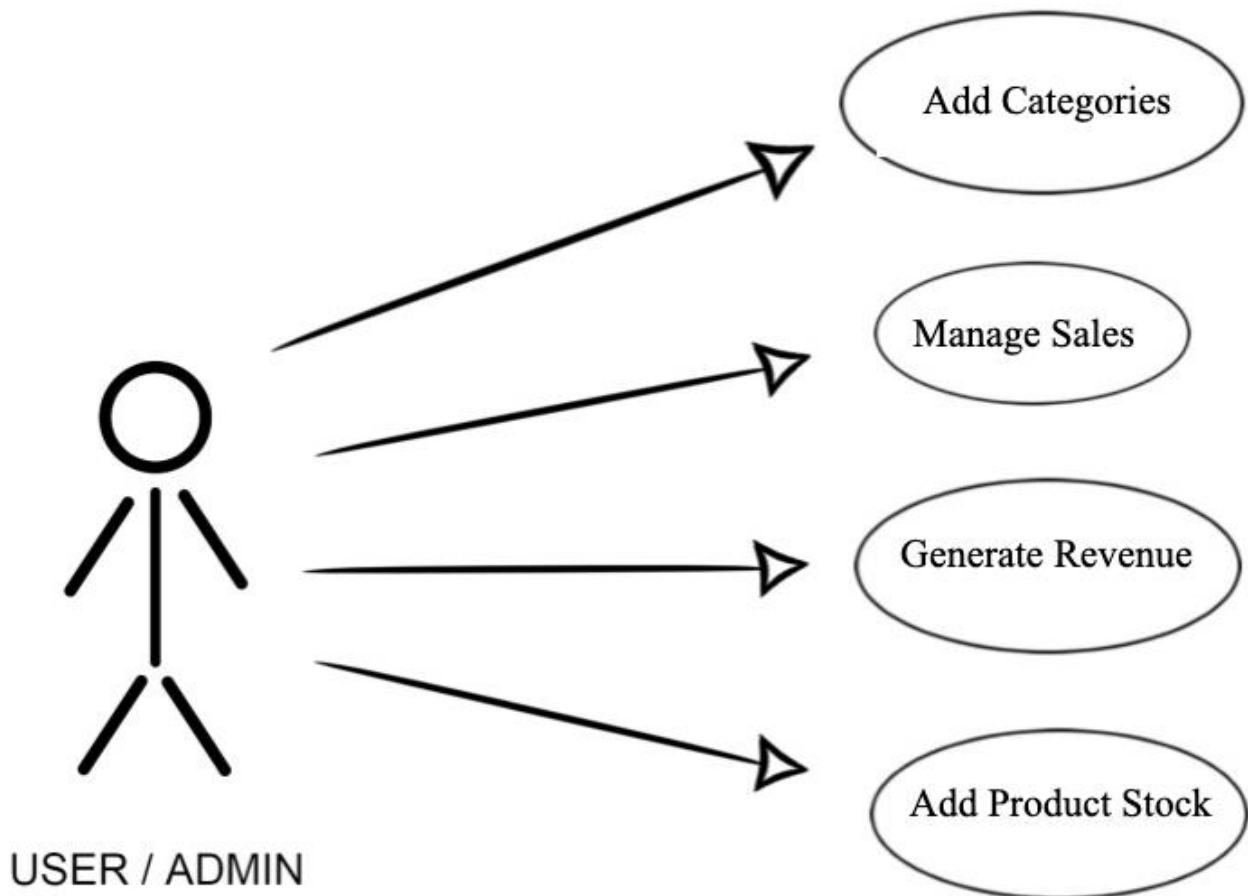


Fig 1: Flowchart of the Application

5. Implementation

5.1 Code snippets of the functional requirements

5.1.1 Main UI XML –

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity"
    android:background="@drawable/background_gradient"
    >

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="137dp"
        android:layout_height="131dp"
        android:layout_marginStart="10dp"
        android:layout_marginTop="136dp"
        android:layout_marginEnd="10dp"
        android:contentDescription="@string/logo"
        android:src="@drawable/mobile_icon"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.429"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/button3"
        android:layout_width="127dp"
        android:layout_height="54dp"
        android:layout_marginStart="10dp"
        android:layout_marginTop="156dp"
        android:layout_marginEnd="10dp"
        android:onClick="loginact"
        android:text="@string/login"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/imageView" />

    <Button
        android:id="@+id/button4"
        android:layout_width="127dp"
        android:layout_height="54dp"
        android:layout_marginStart="10dp"
        android:layout_marginTop="25dp"
        android:layout_marginEnd="10dp"
        android:onClick="signupact"
        android:text="@string/signup"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/button3" />
```

```

<TextView
    android:id="@+id/textView8"
    android:layout_width="158dp"
    android:layout_height="34dp"
    android:layout_marginTop="14dp"
    android:text="Mobiventory"
    android:textAlignment="center"
    android:textColor="#010203"
    android:textSize="25dp"
    android:textStyle="bold"
    app:layout_constraintBottom_toTopOf="@+id/button3"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/imageView"
    app:layout_constraintVertical_bias="0.0" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

5.1.2 Main Activity.java -

```

package com.example.mobiventory;

import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    public void loginact(View view) {
        Intent intent = new Intent(this, login.class);
        startActivity(intent);
    }

    public void signupact(View view) {
        Intent intent = new Intent(this, signup.class);
        startActivity(intent);
    }

}

```

5.1.3 Add Category XML

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"

```

```

xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:background="@drawable/background_gradient"
tools:context=".add_catagory">

<EditText
    android:id="@+id/editText1"
    android:layout_width="346dp"
    android:layout_height="44dp"
    android:layout_marginTop="44dp"
    android:ems="10"
    android:hint="Enter catagory"
    android:inputType="textPersonName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.497"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<Button
    android:id="@+id/button1"
    android:layout_width="346dp"
    android:layout_height="38dp"
    android:layout_marginTop="16dp"
    android:text="ADD"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.492"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/editText1" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

5.1.4 Add Category.java

```

package com.example.mobinventory;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class add_catagory extends AppCompatActivity {

    EditText catagory;
    Button add;
    DBHelper DB;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_add_catagory);

        catagory=findViewById(R.id.editText1);

        add=findViewById(R.id.button1);
        DB = new DBHelper(this);
    }
}

```

```

add.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String catagoryTXT =catagory.getText().toString();

        Boolean checkaddcatagory = DB.addcatagory(catagoryTXT);
        if(checkaddcatagory==true)
            Toast.makeText(add_catagory.this, "New catagory inserted",
Toast.LENGTH_SHORT).show();
        else
            Toast.makeText(add_catagory.this, "Not inserted",
Toast.LENGTH_SHORT).show();

    }
});
}
}

```

5.1.5 Add Product.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:background="@drawable/background_gradient"
tools:context=".add_product">

    <TextView
        android:id="@+id/textView15"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="38dp"
        android:text="Product Name"
        android:textColor="#010203"
        android:textSize="20sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.102"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/pname"
        android:layout_width="210dp"
        android:layout_height="37dp"
        android:layout_marginStart="28dp"
        android:layout_marginTop="38dp"
        android:ems="10"
        android:inputType="textPersonName"
        app:layout_constraintStart_toEndOf="@+id/textView15"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/textView16"

```

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="34dp"
        android:text="Product ID"
        android:textColor="#010203"
        android:textSize="20sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.102"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView15" />

```

<TextView

```

        android:id="@+id/textView21"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="36dp"
        android:text="Quantity"
        android:textColor="#010203"
        android:textSize="20sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.097"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView16" />

```

<TextView

```

        android:id="@+id/textView22"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="28dp"
        android:text="Cost price"
        android:textColor="#010203"
        android:textSize="20sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.102"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView21" />

```

<TextView

```

        android:id="@+id/textView23"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="28dp"
        android:text="Selling price"
        android:textColor="#010203"
        android:textSize="20sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.102"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView22" />

```

<EditText

```

        android:id="@+id/pid"
        android:layout_width="210dp"
        android:layout_height="37dp"
        android:layout_marginTop="24dp"
        android:ems="10"
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.8"
        app:layout_constraintStart_toEndOf="@+id/textView16"

```

```

        app:layout_constraintTop_toBottomOf="@+id/pname" />

<EditText
    android:id="@+id/quantity"
    android:layout_width="210dp"
    android:layout_height="37dp"
    android:layout_marginStart="76dp"
    android:layout_marginTop="24dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintStart_toEndOf="@+id/textView21"
    app:layout_constraintTop_toBottomOf="@+id/pid" />

<EditText
    android:id="@+id/cost_price"
    android:layout_width="210dp"
    android:layout_height="37dp"
    android:layout_marginStart="60dp"
    android:layout_marginTop="16dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintStart_toEndOf="@+id/textView22"
    app:layout_constraintTop_toBottomOf="@+id/quantity" />

<EditText
    android:id="@+id/sell_price"
    android:layout_width="210dp"
    android:layout_height="37dp"
    android:layout_marginStart="44dp"
    android:layout_marginTop="20dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintStart_toEndOf="@+id/textView23"
    app:layout_constraintTop_toBottomOf="@+id/cost_price" />

<Button
    android:id="@+id/Add"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="28dp"
    android:text="ADD"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/sell_price" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

5.1.6 Add Product.java

```

package com.example.mobinventory;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

```



```

public class add_product extends AppCompatActivity {
    EditText pname, pid, quantity, cost_price, sell_price;
    Button Add;
    DBHelper DB;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_add_product);

        pname =findViewById(R.id.pname);
        pid =findViewById(R.id.pid);
        quantity =findViewById(R.id.quantity);
        cost_price =findViewById(R.id.cost_price);
        sell_price =findViewById(R.id.sell_price);

        Add=findViewById(R.id.Add);
        DB = new DBHelper(this);

        Add.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String pnameTXT =pname.getText().toString();
                String pidTXT =pid.getText().toString();
                String quantityTXT =quantity.getText().toString();
                String cost_priceTXT =cost_price.getText().toString();
                String sell_priceTXT =sell_price.getText().toString();

                Boolean checkaddproduct = DB.addproduct(pnameTXT,
pidTXT,quantityTXT,cost_priceTXT,sell_priceTXT);
                if (checkaddproduct==true)
                    Toast.makeText(add_product.this, "New Product Added",
Toast.LENGTH_SHORT).show();
                else
                    Toast.makeText(add_product.this, "Not Added",
Toast.LENGTH_SHORT).show();

            }
        });
    }
}

```

5.1.7 Add Sales.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:background="@drawable/background_gradient"
tools:context=".add_sales">

```

```

<TextView
    android:id="@+id/textView17"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="60dp"
    android:text="Customer Name"
    android:textColor="#010203"
    android:textSize="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.138"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<EditText
    android:id="@+id/editTextTextPersonName3"
    android:layout_width="210dp"
    android:layout_height="37dp"
    android:layout_marginTop="60dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="1.0"
    app:layout_constraintStart_toEndOf="@+id/textView17"
    app:layout_constraintTop_toTopOf="parent" />

<TextView
    android:id="@+id/textView24"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Product Name"
    android:textColor="#010203"
    android:textSize="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.139"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView17" />

<EditText
    android:id="@+id/editTextTextPersonName4"
    android:layout_width="210dp"
    android:layout_height="37dp"
    android:layout_marginStart="34dp"
    android:layout_marginTop="28dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView24"
    app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName3" />

<TextView
    android:id="@+id/textView25"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Quantity"
    android:textColor="#010203"
    android:textSize="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.109"

```

```

        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView24" />

<EditText
    android:id="@+id/editTextTextPersonName9"
    android:layout_width="210dp"
    android:layout_height="37dp"
    android:layout_marginStart="90dp"
    android:layout_marginTop="28dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView25"
    app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName4" />

<TextView
    android:id="@+id/textView26"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Cost Price"
    android:textColor="#010203"
    android:textSize="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.109"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView25" />

<TextView
    android:id="@+id/textView27"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="40dp"
    android:text="Selling Price"
    android:textColor="#010203"
    android:textSize="20sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.109"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView26" />

<EditText
    android:id="@+id/editTextTextPersonName11"
    android:layout_width="210dp"
    android:layout_height="37dp"
    android:layout_marginStart="74dp"
    android:layout_marginTop="28dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/textView26"
    app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName9" />

<EditText
    android:id="@+id/editTextTextPersonName12"
    android:layout_width="210dp"
    android:layout_height="37dp"
    android:layout_marginTop="28dp"
    android:ems="10"
    android:inputType="textPersonName"

```

```

        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toEndOf="@+id/textView27"
        app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName11" />

<Button
    android:id="@+id/button5"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="32dp"
    android:text="Done"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName12" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

5.1.8 Dashboard XML

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/background_gradient"
    tools:context=".dashboard">

    <include
        android:id="@+id/toolbar"
        layout="@layout/toolbar"/>

    <LinearLayout
        android:id="@+id/linearLayout"
        android:layout_width="0dp"
        android:layout_height="175dp"
        android:orientation="horizontal"
        android:padding="10dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/toolbar">

        <androidx.cardview.widget.CardView
            android:id="@+id/c1"
            android:layout_width="0dp"
            android:layout_height="match_parent"
            android:layout_margin="10dp"
            android:layout_weight="1">

            <RelativeLayout
                android:layout_width="match_parent"
                android:layout_height="match_parent">

                <TextView
                    android:id="@+id/textView10"
                    android:layout_width="128dp"
                    android:layout_height="wrap_content"
                    android:layout_below="@id/imageView4"

```

```

        android:layout_alignParentStart="true"
        android:layout_alignParentEnd="true"
        android:layout_centerHorizontal="true"
        android:layout_marginStart="20dp"
        android:layout_marginTop="1dp"
        android:layout_marginEnd="28dp"
        android:fontFamily="sans-serif-condensed-medium"
        android:text="Add Category"
        android:textAlignment="center"
        android:textColor="#010203"
        android:textSize="20sp" />

<ImageView
    android:id="@+id/imageView4"
    android:layout_width="75dp"
    android:layout_height="75dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_centerHorizontal="true"
    android:layout_marginStart="30dp"
    android:layout_marginTop="15dp"
    android:layout_marginEnd="46dp"
    app:srcCompat="@drawable/add_catagory_ico_100px" />

</RelativeLayout>
</androidx.cardview.widget.CardView>

<androidx.cardview.widget.CardView
    android:id="@+id/c2"
    android:layout_width="0dp"
    android:layout_height="match_parent"
    android:layout_margin="10dp"
    android:layout_weight="1">

    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <TextView
            android:id="@+id/textView11"
            android:layout_width="109dp"
            android:layout_height="wrap_content"
            android:layout_below="@id/imageView5"
            android:layout_centerHorizontal="true"
            android:layout_marginStart="20dp"
            android:layout_marginTop="1dp"
            android:layout_marginEnd="28dp"
            android:fontFamily="sans-serif-condensed-medium"
            android:text="Add Product"
            android:textAlignment="center"
            android:textColor="#010203"
            android:textSize="20sp" />

        <ImageView
            android:id="@+id/imageView5"
            android:layout_width="75dp"
            android:layout_height="75dp"
            android:layout_alignParentTop="true"
            android:layout_centerHorizontal="true"

```

```

        android:layout_marginStart="30dp"
        android:layout_marginTop="15dp"
        android:layout_marginEnd="46dp"
        app:srcCompat="@drawable/add_product_icon_100px" />

    </RelativeLayout>
</androidx.cardview.widget.CardView>
</LinearLayout>

<LinearLayout
    android:id="@+id/linearLayout2"
    android:layout_width="409dp"
    android:layout_height="175dp"
    android:orientation="horizontal"
    android:padding="10dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/linearLayout">

    <androidx.cardview.widget.CardView
        android:id="@+id/c3"
        android:layout_width="0dp"
        android:layout_height="match_parent"
        android:layout_margin="10dp"
        android:layout_weight="1">

        <RelativeLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent">

            <TextView
                android:id="@+id/textView9"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_below="@id/imageView2"
                android:layout_centerHorizontal="true"
                android:layout_marginStart="20dp"
                android:layout_marginTop="1dp"
                android:layout_marginEnd="28dp"
                android:fontFamily="sans-serif-condensed-medium"
                android:text="Add Sales"
                android:textColor="#010203"
                android:textSize="20sp" />

            <ImageView
                android:id="@+id/imageView2"
                android:layout_width="75dp"
                android:layout_height="75dp"
                android:layout_centerHorizontal="true"
                android:layout_marginStart="30dp"
                android:layout_marginTop="15dp"
                android:layout_marginEnd="46dp"
                app:srcCompat="@drawable/sales_icon_100px" />
        </RelativeLayout>
    </androidx.cardview.widget.CardView>

    <androidx.cardview.widget.CardView
        android:id="@+id/c4"
        android:layout_width="0dp"
        android:layout_height="match_parent"

```

```

        android:layout_margin="10dp"
        android:layout_weight="1">

        <RelativeLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent">

            <TextView
                android:id="@+id/textView12"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_below="@id/imageView3"
                android:layout_centerHorizontal="true"
                android:layout_marginStart="20dp"
                android:layout_marginTop="1dp"
                android:layout_marginEnd="28dp"
                android:fontFamily="sans-serif-condensed-medium"
                android:text="History"
                android:textColor="#010203"
                android:textSize="20sp" />

            <ImageView
                android:id="@+id/imageView3"
                android:layout_width="75dp"
                android:layout_height="75dp"
                android:layout_centerHorizontal="true"
                android:layout_marginStart="30dp"
                android:layout_marginTop="15dp"
                android:layout_marginEnd="46dp"
                app:srcCompat="@drawable/payment_history_icon_100px" />
        </RelativeLayout>
    </androidx.cardview.widget.CardView>
</LinearLayout>

<LinearLayout
    android:layout_width="0dp"
    android:layout_height="175dp"
    android:orientation="horizontal"
    android:padding="10dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/linearLayout2">

    <androidx.cardview.widget.CardView
        android:id="@+id/c5"
        android:layout_width="0dp"
        android:layout_height="match_parent"
        android:layout_margin="10dp"
        android:layout_weight="1" >

        <RelativeLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent">

            <TextView
                android:id="@+id/textView13"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_below="@id/imageView6"
                android:layout_centerHorizontal="true"

```

```

        android:layout_marginStart="20dp"
        android:layout_marginTop="1dp"
        android:layout_marginEnd="28dp"
        android:fontFamily="sans-serif-condensed-medium"
        android:text="Profit/Loss"
        android:textColor="#010203"
        android:textSize="20sp" />

    <ImageView
        android:id="@+id/imageView6"
        android:layout_width="75dp"
        android:layout_height="75dp"
        android:layout_centerHorizontal="true"
        android:layout_marginStart="30dp"
        android:layout_marginTop="15dp"
        android:layout_marginEnd="46dp"
        app:srcCompat="@drawable/profit_loss_icon_100px" />
</RelativeLayout>
</androidx.cardview.widget.CardView>

<androidx.cardview.widget.CardView
    android:id="@+id/c6"
    android:layout_width="0dp"
    android:layout_height="match_parent"
    android:layout_margin="10dp"
    android:layout_weight="1" >

    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <TextView
            android:id="@+id/textView14"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@id/imageView7"
            android:layout_centerHorizontal="true"
            android:layout_marginStart="20dp"
            android:layout_marginTop="1dp"
            android:layout_marginEnd="28dp"
            android:fontFamily="sans-serif-condensed-medium"
            android:text="Search"
            android:textColor="#010203"
            android:textSize="20sp" />

        <ImageView
            android:id="@+id/imageView7"
            android:layout_width="75dp"
            android:layout_height="75dp"
            android:layout_centerHorizontal="true"
            android:layout_marginStart="30dp"
            android:layout_marginTop="15dp"
            android:layout_marginEnd="46dp"
            app:srcCompat="@drawable/search_icon_100px" />
    </RelativeLayout>
</androidx.cardview.widget.CardView>
</LinearLayout>

</androidx.constraintlayout.widget.ConstraintLayout>

```


5.1.9 Dashboard.java

```
package com.example.mobinventory;

import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.widget.Toolbar;
import androidx.cardview.widget.CardView;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;

public class dashboard extends AppCompatActivity implements View.OnClickListener {
    public CardView card1,card2,card3,card4,card5,card6;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_dashboard);
        //code for toolbar
        Toolbar toolbar= findViewById(R.id.toolbar);
        setSupportActionBar(toolbar);
        //code for "using intent in cardview"
        card1 =(CardView) findViewById(R.id.c1);
        card2 =(CardView) findViewById(R.id.c2);
        card3 =(CardView) findViewById(R.id.c3);
        card4 =(CardView) findViewById(R.id.c4);
        card5 =(CardView) findViewById(R.id.c5);
        card6 =(CardView) findViewById(R.id.c6);

        card1.setOnClickListener(this);
        card2.setOnClickListener(this);
        card3.setOnClickListener(this);
        card4.setOnClickListener(this);
        card5.setOnClickListener(this);
        card6.setOnClickListener(this);

    }

    @Override
    public void onClick(View v) {
        Intent i;

        switch (v.getId()) {
            case R.id.c1:
                i=new Intent(this,add_catagory.class);
                startActivity(i);
                break;
            case R.id.c2:
                i=new Intent(this,add_product.class);
                startActivity(i);
                break;
            case R.id.c3:
                i=new Intent(this,add_sales.class);
                startActivity(i);
                break;
            case R.id.c4:
```

```

        i=new Intent(this,history.class);
        startActivity(i);
        break;
    case R.id.c5:
        i=new Intent(this,profit_loss.class);
        startActivity(i);
        break;
    case R.id.c6:
        i=new Intent(this,search.class);
        startActivity(i);
        break;
    }
}
}

```

5.1.10 DBHelper.java

```

package com.example.mobiventory;

import android.content.ContentValues;
import android.content.Context;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

import androidx.annotation.Nullable;

public class DBHelper extends SQLiteOpenHelper {
    public DBHelper(Context context) {
        super(context, "Userdata.db", null, 1);
    }

    @Override
    public void onCreate(SQLiteDatabase DB) {
        DB.execSQL("create table Catagory(catagory TEXT)");
        DB.execSQL("create table Product(pname TEXT primary key, pid TEXT,quantity TEXT ,cost_price TEXT,sell_price TEXT)");
    }

    @Override
    public void onUpgrade(SQLiteDatabase DB, int i, int i1) {
        DB.execSQL("drop table if exists Catagory");
        DB.execSQL("drop table if exists Product");
    }

    public Boolean addcatagory(String catagory)
    {
        SQLiteDatabase DB = this.getWritableDatabase();
        ContentValues contentValues= new ContentValues();
        contentValues.put("catagory",catagory);
        long result=DB.insert("Catagory",null,contentValues);
        if (result==-1){
            return false;
        }else {

```

```

        return true;
    }

}

public Boolean addproduct(String pname, String pid, String quantity, String
cost_price, String sell_price)
{
    SQLiteDatabase DB = this.getWritableDatabase();
    ContentValues contentValues= new ContentValues();
    contentValues.put("pname",pname);
    contentValues.put("pid",pid);
    contentValues.put("quantity",quantity);
    contentValues.put("cost_price",cost_price);
    contentValues.put("sell_price",sell_price);
    long result=DB.insert("Product",null,contentValues);
    if (result==-1){
        return false;
    }else {
        return true;
    }
}
}

```

6. User Interfaces/Screenshots with Descriptions

6.1 Welcome Screen

Description – As shown in fig:2, first screen which appears at launch of app, having two buttons for Login and Signup.

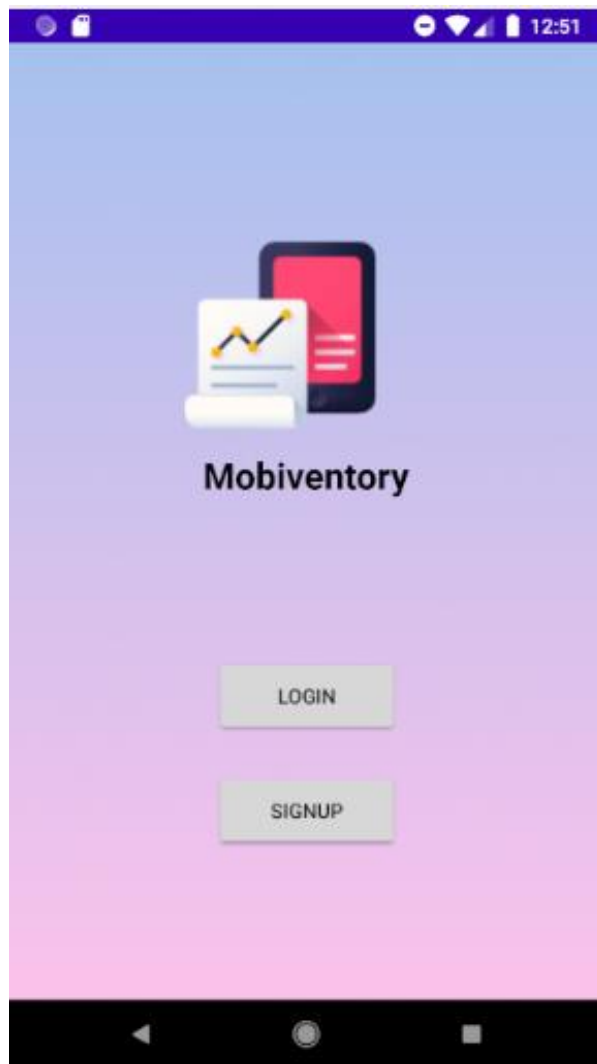


Fig 2: Welcome Screen Snapshot

6.2 Signup Screen

Description – As shown in fig:3, Signup screen used by first time user to register himself. Data is stored on database using the user authentication technique.

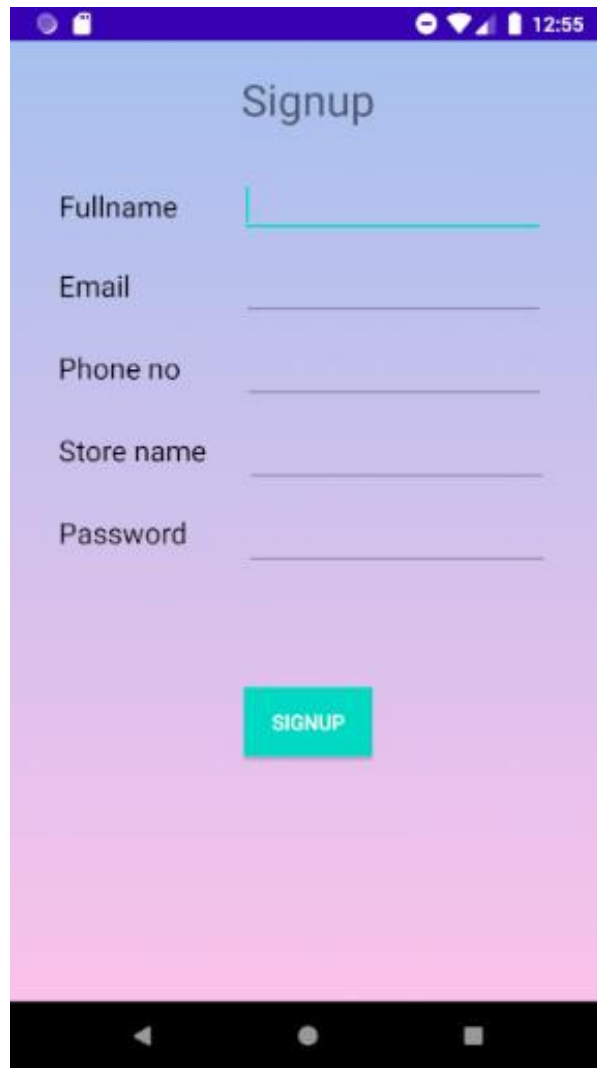


Fig 3: Signup Screen Snapshot

6.3 Login Screen

Description –As shown in fig:4, Login screen where user can use email id and password if user is already registered.

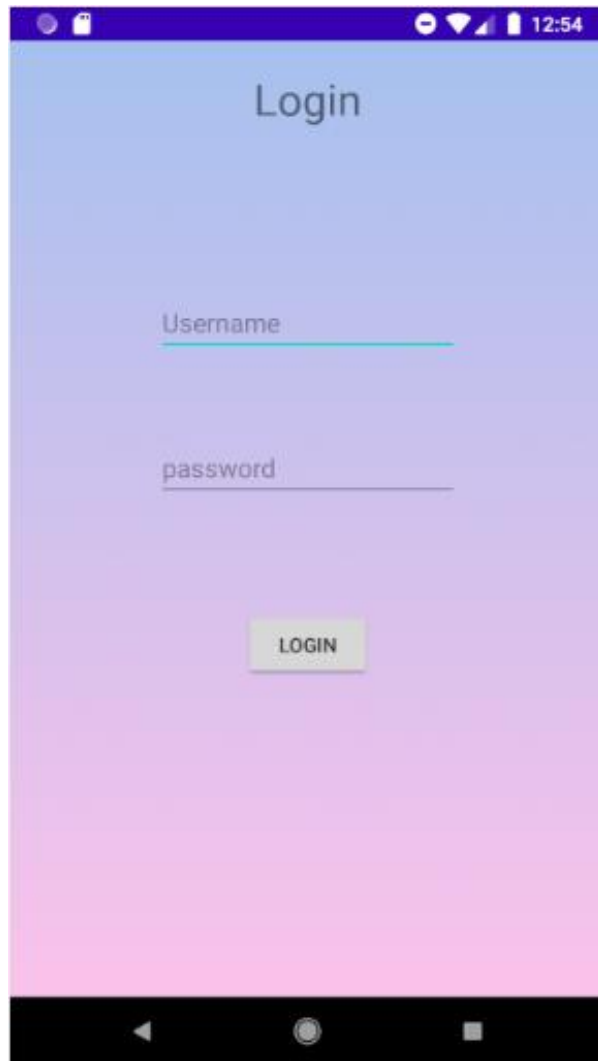


Fig 4: Login Screen Snapshot

6.4 Dashboard

Description – As shown in fig:5, Screen which appears to user after successful login. Give access to all sections of application like Add Category, Add Product etc. Gives easy User Experience to user.

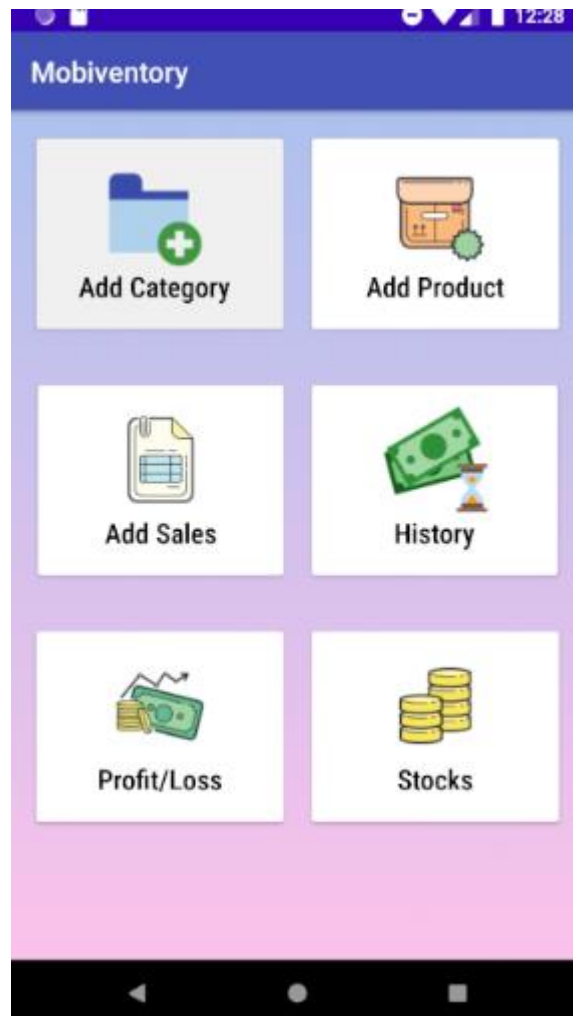


Fig 5: Dashboard Screen Snapshot

6.5 Add Product

Description – As shown in fig:6, Add Product page to store entered information in database

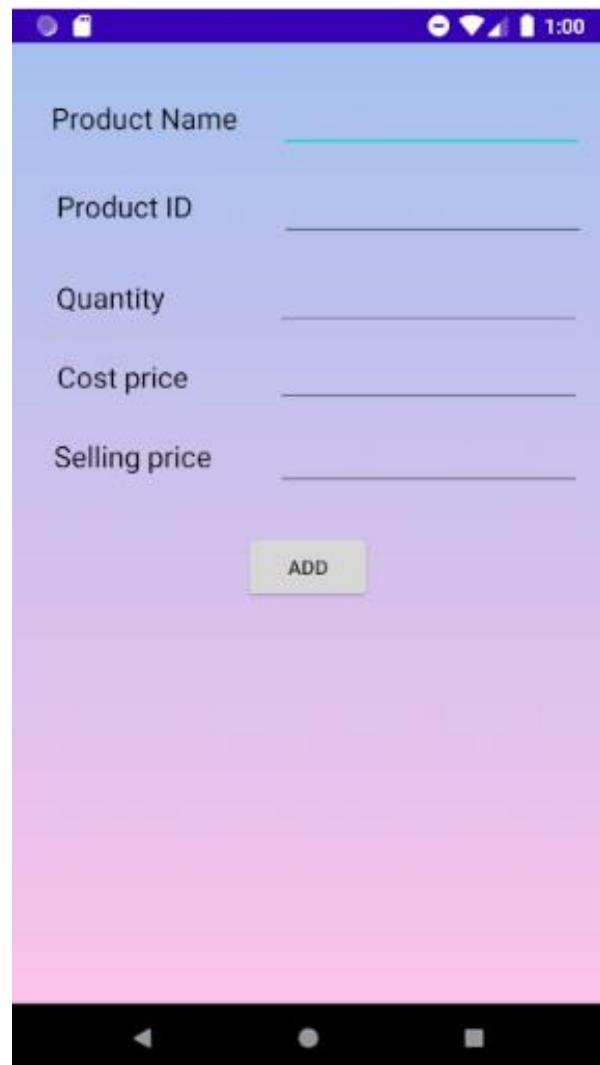
The image is a screenshot of a mobile application's 'Add Product' screen. The screen has a light blue header bar at the top with a status bar above it showing icons for signal, Wi-Fi, battery, and the time 1:00. The main content area has a light blue background. It contains five text input fields, each with a label to its left: 'Product Name', 'Product ID', 'Quantity', 'Cost price', and 'Selling price'. Below these fields is a yellow button with the text 'ADD' in black. At the bottom of the screen is a black navigation bar with three white icons: a back arrow, a home circle, and a recent apps square.

Fig 6: Add Product Screen Snapshot

7. Conclusion and Scope for Further Enhancement

The project “Mobile Shop Stock Management System” mainly as the name suggests deals with the calculation of the available and processed resources for an accurate inventory control and process management for a Mobile Shop client who are related to the subject of Telecom Industry. This enables the inventory to be applied at every level in the hierarchy of the products and its complex combinations of recipes. A application that accurately tracks the stock and sales related information of a shop and then automatically performs the back end operation pertaining to a database of many relational tables onto which the changes are being made with each and every operation performed on the front end and which also shows up if at the time of retrieval.

Today's market is a customer oriented market and customer satisfaction is the most important goal of every organization therefore it is inevitable to adopt integrated Inventory Management approach for new product development strategy. Financial – Material management for any product is a dynamic decision making process involving a series of inter-related activities. INVENTORY system is an extremely important problem area in the management of materials handling. Buying the optimal quantity can result only from a sound inventory control system that is achieved by judicious reconciliation of conflicting costs and departmental objectives. However, inventory is only an indicator of performance of materials management function and to cut down inventories we use not only scientific inventory management principles but also models along with it also take long-term measures to reduce inventories through strategies such as variety reduction and standardization, source development and optimization, and vendor rating, lead-time reduction through improvement in the systems and procedures of procurement.

There is a scope of lot of improvement given that the application of this project which is now limited to only Mobile Shops / outlets can be applied to other branches also given that it is subjected to appropriate changes. The prediction algorithm can be used, but that is possible with years of data analysis and would then might also be changed to an artificially intelligent system. Also considering the large technological movement, access to the program through a web application would be ideal for remote access to the program and database. This would require a dedicated server to host the database and therefore has been considered as an optional enhancement.

To list, the future development may include the following

- Improved Prediction.
- Use of AI to learn user behavior and responses.
- Expansion of software domain.
- Expansion to web domain.
- Allowing remote access.
- Allowing orders to be sent electronically.
- Using Firebase Real Time Database

To be able to simplify the user friendliness even more the concept of 'prediction 'can be added which enables the client to see the past years prediction of the ingredients usage and then based on the informational analysis done on the data a prediction is then generated which would suit the requirements of the current year and then accordingly an appropriate order form is generated and then passed on to the distributor as the requirements for replenishing the stock.

8. Bibliography

- [1] <https://developer.android.com/>
- [2] <https://firebase.google.com/docs/auth>
- [3] <https://developer.android.com/training/data-storage/sqlite>
- [4] <https://firebase.google.com/docs/database/android/read-and-write>
- [5] <http://www.managementstudyguide.com/inventory-management.htm>