Dharmsinh Desai University

Academic Year: 2023-24

Department: Institute of Management &

Information Science

Topic: Hardik Computer's

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Submitted to Prof. Purvi mam

MCA DEPARTMENT

Professor Sign:

HARDIK COMPUTER’S

INDEX:

Introduction

In In a world driven by technology, Hardik Computer brings you a revolutionary ecommerce app designed to meet all your computing needs. Our app is a gateway to a world of digital possibilities, offering a vast range of computers, laptops, peripherals, and accessories, carefully curated to cater to your tech desires. At Hardik Computer, we understand the importance of technology in today's world, and our app is dedicated to providing you with top-quality products, unbeatable prices, and a seamless shopping experience. This documentation serves as your guide to navigating our app and making the most of your technology shopping journey.

Problem Statement:

Hardik Computer recognizes that in an increasingly competitive marketplace, effective marketing and customer management are paramount for sustained success. The challenge we face is two-fold: First, to devise and execute marketing strategies that elevate the visibility and desirability of our ecommerce app, attracting a broader customer base. Second, to develop a customer relationship management system that ensures each interaction with our customers is personalized, efficient, and leaves them with a positive impression. This problem statement underscores our commitment to enhancing our marketing efforts and elevating the customer experience, ultimately driving growth.

Project Overview

- In an era where technology is at the forefront of our lives, the Hardik Computers Ecommerce App is designed to bring you a hassle-free and enjoyable shopping experience. Our app allows customers to register accounts, log in securely, and select from a comprehensive range of tech products. From powerful computers to cutting-edge accessories, we've got you covered. With a user-friendly shopping cart system and secure transactions, we ensure that your purchase journey is both convenient and safe. Our order management feature allows you to track your purchases and view your order history, enhancing your overall shopping experience. Welcome to a world of tech solutions and digital convenience, courtesy of the Hardik Computers Ecommerce App."

- **User Registration:** The app allows new customers to register an account by providing essential information, ensuring a personalized shopping experience.

- **User Login:** Once registered, customers can log in securely with their credentials, granting them access to their accounts and saved preferences.

- **Diverse Product Range:** Hardik Computers Ecommerce App boasts a comprehensive catalog featuring an extensive range of products, catering to both individual consumers and businesses.

- **Ad-Free Experience:** At Hardik Computer's App, we understand the importance of a seamless and uninterrupted user experience. That's why we provide an ad-free environment, ensuring that you can browse and shop for your favorite tech products without any disruptive

System Architecture

The Hardik Computers Ecommerce App's system architecture is meticulously crafted to deliver efficiency, scalability, and a user-friendly interface. It comprises three fundamental components:

- **User Interface (UI):** Our app's front-end is thoughtfully designed with an intuitive and visually appealing interface. Users can seamlessly explore a diverse range of tech products, easily add items to their cart, and navigate through various sections. The UI is optimized for different screen sizes and orientations, ensuring a uniform and user-friendly experience across devices.

- **Backend Services:** The backend is responsible for the data storage, retrieval,and the core logic of the application. Manages real-time product inventory, ensuring accurate stock availability to prevent overselling.

Source Code

- ## Android_Manifest.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.MyApplication"
        tools:targetApi="31">
        <activity
            android:name=".AnimationActivity"
            android:exported="false" />
        <activity
            android:name=".DetailActivity"
            android:exported="false" />
        <activity
            android:name=".ProductActivity"
            android:exported="false" />
        <activity
            android:name=".LoginActivity"
            android:exported="false" />
        <activity
            android:name=".slashactivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity
            android:name=".MainActivity"
            android:exported="false" />
    </application>

</manifest>
```

- ## Activity_splash.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=".slashactivity">
    <LinearLayout
```

```
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    android:background="@android:color/white">
    <ImageView
      android:layout_width="150dp"
      android:layout_height="150dp"
      android:src="@drawable/logo1"
      android:contentDescription="Splash Image"
      />
  </LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

- **SpalshActivity.java:**

```
package com.example.myapplication;
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.os.Handler;

public class slashactivity extends Activity {
  private static int SPLASH_TIMEOUT = 2000;

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

    new Handler().postDelayed(new Runnable() {
      @Override
      public void run() {
        Intent intent = new Intent(slashactivity.this, LoginActivity.class);
        startActivity(intent);
        finish();
      }
    }, SPLASH_TIMEOUT);
  }
}
```

Activity_main.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="@color/MidnightBlue"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="8dp"
        android:layout_marginTop="8dp"
        android:textColor="@color/white"
        android:text="Welcome, "
        android:textStyle="bold"
        android:textSize="35sp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/txName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="6dp"
        android:text="To Hardik Computers"
        android:textColor="@color/white"
        android:textSize="28sp"
        android:textStyle="bold"
        app:layout_constraintStart_toStartOf="@+id/textView3"
        app:layout_constraintTop_toBottomOf="@+id/textView3" />

    <LinearLayout
        android:id="@+id/linearLayout"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_marginTop="62dp"
        android:layout_marginHorizontal="6dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/txName">

        <androidx.cardview.widget.CardView
            android:id="@+id/crMonitor"
            android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
    android:layout_margin="6dp"
    android:layout_weight="1"
    app:cardCornerRadius="10dp"
    app:cardElevation="5dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/txName">

    <LinearLayout
      android:layout_width="match_parent"
      android:layout_height="match_parent"
      android:layout_marginHorizontal="12dp"
      android:layout_marginVertical="8dp"
      android:gravity="center"
      android:orientation="vertical">

      <ImageView
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:src="@drawable/logomonitor" />

      <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="8dp"
        android:text="Monitor"
        android:textSize="22sp"
        android:textStyle="bold" />
    </LinearLayout>
  </androidx.cardview.widget.CardView>

  <androidx.cardview.widget.CardView
    android:id="@+id/crKeyboard"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_margin="6dp"
    android:layout_weight="1"
    app:cardCornerRadius="10dp"
    app:cardElevation="5dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/txName">

    <LinearLayout
      android:layout_width="match_parent"
      android:layout_height="match_parent"
      android:layout_marginHorizontal="12dp"
      android:layout_marginVertical="8dp"
      android:gravity="center"
      android:orientation="vertical">

      <ImageView
```

```
            android:layout_width="100dp"
            android:layout_height="100dp"
            android:src="@drawable/logokeyboard" />

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="8dp"
            android:text="Keyboard"
            android:textSize="22sp"
            android:textStyle="bold" />
      </LinearLayout>
   </androidx.cardview.widget.CardView>
</LinearLayout>

<LinearLayout
   android:layout_width="match_parent"
   android:layout_height="wrap_content"
   android:orientation="horizontal"
   android:layout_marginTop="32dp"
   android:layout_marginHorizontal="6dp"
   app:layout_constraintEnd_toEndOf="parent"
   app:layout_constraintHorizontal_bias="0.5"
   app:layout_constraintStart_toStartOf="parent"
   app:layout_constraintTop_toBottomOf="@+id/linearLayout">

   <androidx.cardview.widget.CardView
      android:id="@+id/crMouse"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_margin="6dp"
      android:layout_weight="1"
      app:cardCornerRadius="10dp"
      app:cardElevation="5dp"
      app:layout_constraintStart_toStartOf="parent"
      app:layout_constraintTop_toBottomOf="@+id/txName">

      <LinearLayout
         android:layout_width="match_parent"
         android:layout_height="match_parent"
         android:layout_marginHorizontal="12dp"
         android:layout_marginVertical="8dp"
         android:gravity="center"
         android:orientation="vertical">

         <ImageView
            android:layout_width="100dp"
            android:layout_height="100dp"
            android:src="@drawable/logomouse" />

         <TextView
```

```
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="8dp"
            android:text="Mouse"
            android:textSize="22sp"
            android:textStyle="bold" />
        </LinearLayout>
    </androidx.cardview.widget.CardView>

    <androidx.cardview.widget.CardView
        android:id="@+id/crLaptop"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="6dp"
        android:layout_weight="1"
        app:cardCornerRadius="10dp"
        app:cardElevation="5dp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/txName">

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:layout_marginHorizontal="12dp"
            android:layout_marginVertical="8dp"
            android:gravity="center"
            android:orientation="vertical">

            <ImageView
                android:layout_width="100dp"
                android:layout_height="100dp"
                android:src="@drawable/logolaptop" />

            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_marginBottom="8dp"
                android:text="Laptop"
                android:textSize="22sp"
                android:textStyle="bold" />
        </LinearLayout>
    </androidx.cardview.widget.CardView>
  </LinearLayout>

</androidx.constraintlayout.widget.ConstraintLayout>
```

- **MainActivity.Java:**

```
package com.example.myapplication;
import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    CardView crLaptop, crMonitor, crKeyboard, crMouse;
    TextView textView;

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

        textView= findViewById(R.id.txName);
        crKeyboard = findViewById(R.id.crKeyboard);
        crLaptop = findViewById(R.id.crLaptop);
        crMouse = findViewById(R.id.crMouse);
        crMonitor = findViewById(R.id.crMonitor);

        crMonitor.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new Intent(MainActivity.this, ProductActivity.class);
                intent.putExtra("product_name", "Monitor");
                startActivity(intent);
                finish();
            }
        });
        crKeyboard.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new Intent(MainActivity.this, ProductActivity.class);
                intent.putExtra("product_name", "Keyboard");
                startActivity(intent);
                finish();
            }
        });
        crLaptop.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new Intent(MainActivity.this, ProductActivity.class);
                intent.putExtra("product_name", "Laptop");
                startActivity(intent);
                finish();
```

```
        }
    });
    crMouse.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Intent intent = new Intent(MainActivity.this, ProductActivity.class);
            intent.putExtra("product_name", "Mouse");
            startActivity(intent);
            finish();
        }
    });
  }
}
```

- **Product adapter.java**

```
package com.example.myapplication;
import android.app.Activity;
import android.content.Context;
import android.content.Intent;
import android.media.Image;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.TextView;

import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;

import java.lang.reflect.Array;
import java.util.ArrayList;

public class RvProductDetailAdapter extends RecyclerView.Adapter<RvProductDetailAdapter.viewHolder> {

  private ArrayList<Model> list;
  private Context context;

  public RvProductDetailAdapter(ArrayList<Model> list, Context context) {
    this.list = list;
    this.context = context;
  }

  @NonNull
  @Override
  public RvProductDetailAdapter.viewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {
    View view = LayoutInflater.from(context).inflate(R.layout.simple_view, parent, false);
    return new viewHolder(view);
  }
```

```
    @Override
    public void onBindViewHolder(@NonNull RvProductDetailAdapter.viewHolder holder, int position) {
        Model model = list.get(position);

        holder.imageView.setImageResource(model.getImage());
        holder.textView.setText(model.getProductName());
        holder.button.setText(String.valueOf("₹" + model.getPrice()));

        holder.itemView.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new Intent(context, DetailActivity.class);
                intent.putExtra("productname", model.getProductName());
                intent.putExtra("productimage", model.getImage());
                intent.putExtra("productprice", model.getPrice());
                intent.putExtra("productdescription", model.getDescription());
                context.startActivity(intent);
                ((Activity)context).finish();
            }
        });
    }

    @Override
    public int getItemCount() {
        return list.size();
    }

    public static class viewHolder extends RecyclerView.ViewHolder{
        private ImageView imageView;
        private TextView textView;
        private Button button;

        public viewHolder(@NonNull View itemView) {
            super(itemView);

            imageView = itemView.findViewById(R.id.igProduct);
            textView = itemView.findViewById(R.id.txProductName);
            button = itemView.findViewById(R.id.btnPrice);
        }
    }
}
```

- **Activity_animation.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=".AnimationActivity">

    <com.airbnb.lottie.LottieAnimationView
        android:id="@+id/starLightning"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:lottie_rawRes="@raw/order"
        app:lottie_autoPlay="true"
        app:lottie_loop="false" />

    <Button
        android:id="@+id/btnGoBack"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Go to Home"
        android:textSize="22sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toStartOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

- **Activity_activity.java**

```
package com.example.myapplication;
import android.animation.Animator;
import android.animation.AnimatorListenerAdapter;
import android.annotation.SuppressLint;
import android.app.ActivityOptions;
import android.content.Intent;
import android.media.MediaPlayer;
import android.os.Build;
import android.os.Bundle;
import android.util.Pair;
import android.view.View;
import android.view.Window;
import android.widget.Button;
```

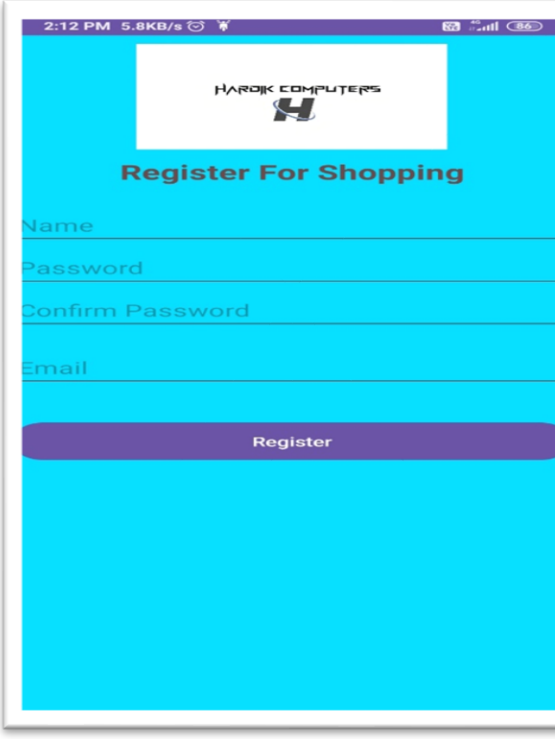
```
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

import com.airbnb.lottie.LottieAnimationView;

public class AnimationActivity extends AppCompatActivity {
    private Button button;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_animation);

        button = findViewById(R.id.btnGoBack);

        // Add a click listener to the "Buy" button
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                startActivity(new Intent(AnimationActivity.this, MainActivity.class));
                finish();
            }
        });
```

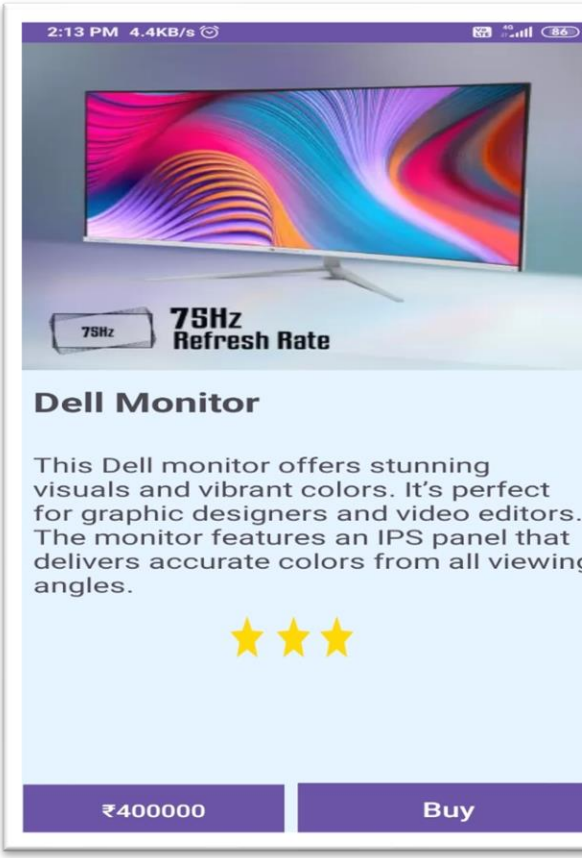
- **Model.java**

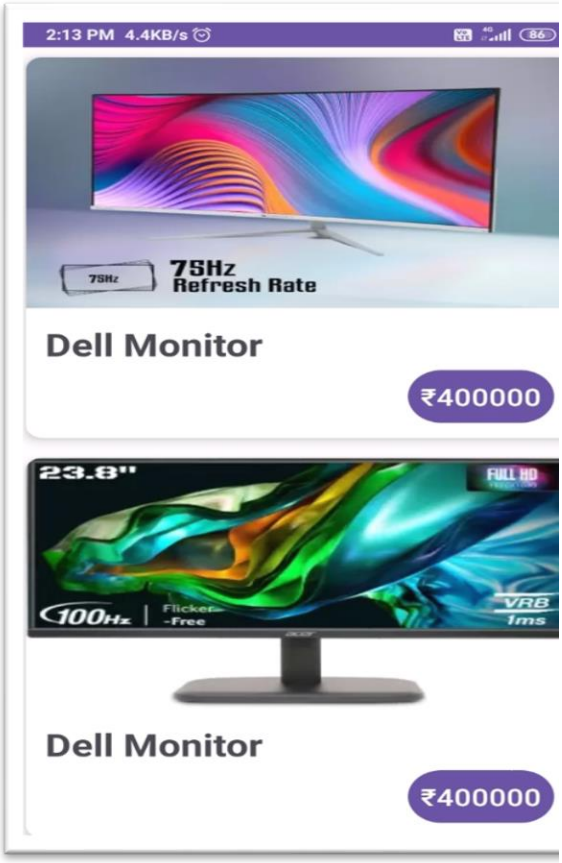
```
package com.example.myapplication;
public class Model {
    private int image;
    private String productName, price, description;

    public Model(int image, String productName, String price, String description) {
        this.image = image;
        this.productName = productName;
        this.price = price;
        this.description = description;
    }

    public int getImage() {
        return image;
    }

    public void setImage(int image) {
        this.image = image;
    }
```

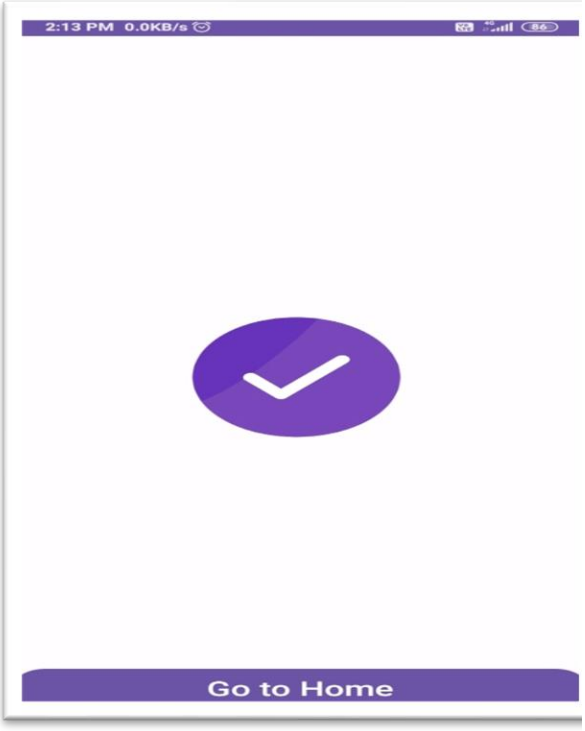
```
    public String getProductName() {
        return productName;
    }

    public void setProductName(String productName) {
        this.productName = productName;
    }

    public String getPrice() {
        return price;
    }

    public void setPrice(String price) {
        this.price = price;
    }

    public String getDescription() {
        return description;
    }

    public void setDescription(String description) {
        this.description = description;
    }
}
```

Screenshots




2:13 PM 4.4KB/s
75Hz
75Hz
Refresh Rate
Dell Monitor
This Dell monitor offers stunning visuals and vibrant colors. It's perfect for graphic designers and video editors. The monitor features an IPS panel that delivers accurate colors from all viewing angles.
₹400000
Buy


2:13 PM 4.4KB/s
75Hz
75Hz
Refresh Rate
Dell Monitor
₹400000
23.8"
FULL HD
100Hz
Flicker-Free
VRB
1ms
Dell Monitor
₹400000


2:13 PM 0.0KB/s
Go to Home

Conclusion

The Hardik Computers Ecommerce App has emerged as a powerful and user-centric solution for tech enthusiasts and businesses seeking seamless access to a wide array of computing products. With a user-friendly interface, secure transactions, and a comprehensive product catalog, it has significantly improved the overall tech shopping experience. This application effectively bridges the gap between customers and their technology needs, simplifying the process of finding, purchasing, and managing tech products.

Future Enhancements:

Hardik Computers Ecommerce App has already made a significant impact, its journey continues to evolve and adapt to the dynamic tech market.

- Expanded Product Range: Diversifying the product range to include additional categories and cutting-edge tech trends will cater to a broader audience.
- Enhanced User Engagement: Implementing features that enhance user engagement, such as product reviews, expert guides, and real-time customer support, will foster a more interactive and informative shopping environment.
- Personalization: Developing a robust personalization engine that tailors product recommendations and user interfaces to individual preferences and purchase history will offer a more personalized and satisfying shopping journey.
- Cross-Platform Accessibility: Extending the app's reach to multiple platforms, including web and iOS, will enable a wider audience to access and benefit from the app's offerings.
- Seamless UPI Transactions: Integrating UPI payment options to facilitate quick and secure transactions, offering customers an additional, widely used payment method for their purchases.