# JAWAHARLAL NEHRU ENGINEERING COLLEGE

## Department of Computer Science and Engineering

(Mahatma Gandhi Mission University, Chhatrapati Sambhaji Nagar)

## MAD PROJECT REPORT

ON

**"Donation App"**

Submitted by:

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# Github link:

# Code:

## 1. Login



```java
DatabaseReference reference = FirebaseDatabase.getInstance().getReference("users");
Query checkUser = reference.orderByChild("email").equalTo(userEmail);

checkUser.addListenerForSingleValueEvent(new ValueEventListener() {
    @Override
    public void onDataChange(@NonNull DataSnapshot snapshot) {
        if (snapshot.exists()) {
            for (DataSnapshot userSnapshot : snapshot.getChildren()) {
                String passwordFromDB = userSnapshot.child("password").getValue(String.class);
                String role = userSnapshot.child("role").getValue(String.class);
                String name = userSnapshot.child("name").getValue(String.class); // in case you want to use it later
                String userId = userSnapshot.getKey(); // key from db

                if (Objects.equals(passwordFromDB, userPassword)) {
                    // Navigate based on role
                    Intent intent;
                    if ("ngo".equalsIgnoreCase(role)) {
                        intent = new Intent(LoginActivity.this, NGOActivity.class);
                    } else if ("donor".equalsIgnoreCase(role)) {
                        intent = new Intent(LoginActivity.this, DonorDashboardActivity.class);
                    } else {
                        Toast.makeText(LoginActivity.this, "Unknown role: " + role, Toast.LENGTH_SHORT).show();
                        return;
                    }

                    intent.putExtra("userId", userId); // pass user ID
                    startActivity(intent);
                    finish();
                    return;
                } else {
                    passwordInput.setError("Invalid password!");
                    passwordInput.requestFocus();
                    return;
                }
            }
        } else {
            emailInput.setError("User does not exist");
            emailInput.requestFocus();
        }
    }

    @Override
    public void onCancelled(@NonNull DatabaseError error) {
        Toast.makeText(LoginActivity.this, "Database error: " + error.getMessage(), Toast.LENGTH_SHORT).show();
    }
});
```
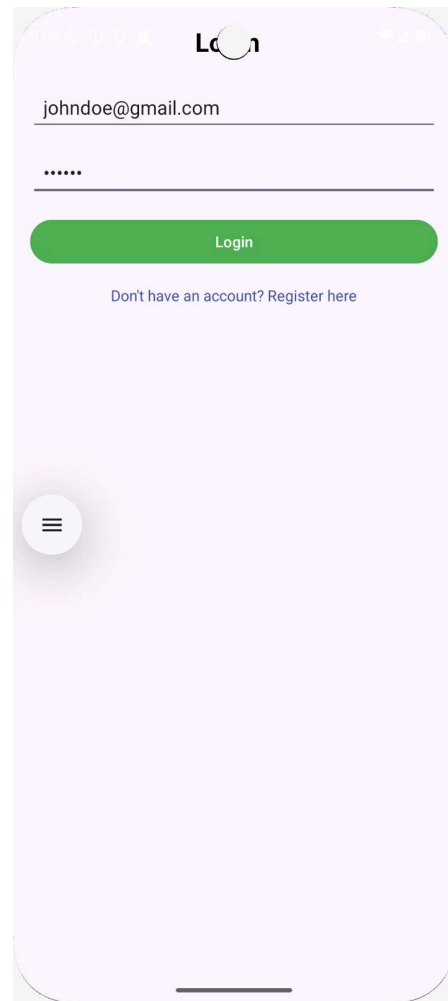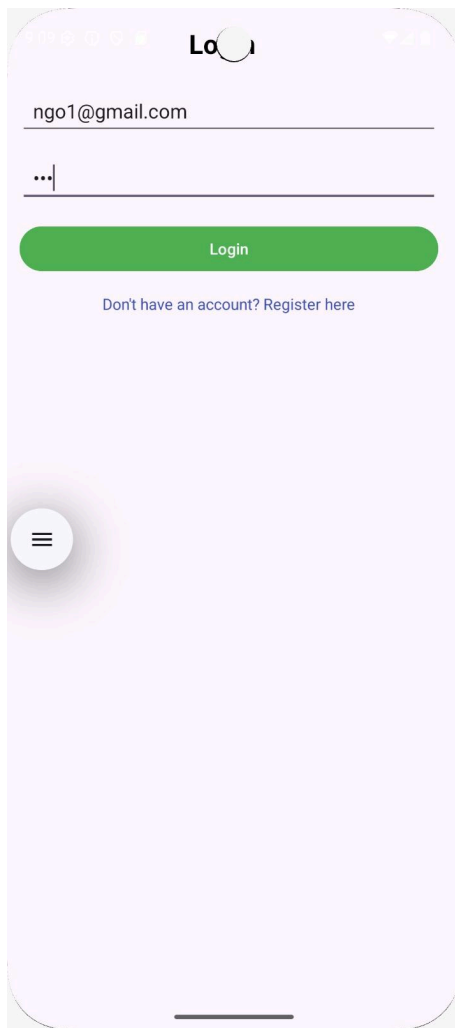
## 2.DonarDashboard:

```java
    private DatabaseReference itemRef;
    private String donorId;

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

        etName = findViewById(R.id.etItemName);
        etDescription = findViewById(R.id.etItemDescription);
        etQuantity = findViewById(R.id.etItemQuantity);
        btnUpload = findViewById(R.id.btnSubmitItem);

        donorId = getIntent().getStringExtra("userId");
        itemRef = FirebaseDatabase.getInstance().getReference("items");

        btnUpload.setOnClickListener(v -> {
            String name = etName.getText().toString().trim();
            String description = etDescription.getText().toString().trim();
            String quantityStr = etQuantity.getText().toString().trim();

            if (name.isEmpty() || description.isEmpty() || quantityStr.isEmpty()) {
                Toast.makeText(this, "All fields are required", Toast.LENGTH_SHORT).show();
                return;
            }

            int quantity;
            try {
                quantity = Integer.parseInt(quantityStr);
            } catch (NumberFormatException e) {
                Toast.makeText(this, "Quantity must be a number", Toast.LENGTH_SHORT).show();
                return;
            }

            String itemId = itemRef.push().getKey();
            Item item = new Item(itemId, name, description, donorId, quantity, "");

            itemRef.child(itemId).setValue(item)
                    .addOnSuccessListener(unused -> {
                        Toast.makeText(this, "Item uploaded!", Toast.LENGTH_SHORT).show();
                        finish();
                    })
                    .addOnFailureListener(e ->
                            Toast.makeText(this, "Upload failed: " + e.getMessage(), Toast.LENGTH_SHORT).show());
        });
    }
```

Puzzles and toys

Snake and Ladder, Ludo and cars

5

**Upload Item**

Blankets

Winter Blankets

10

**Upload Item**

Item uploaded!

# 3.DonorDashboard:



```java
package com.example.donation_app.view;

import android.content.Intent;
import android.os.Bundle;
import android.widget.Button;
import android.widget.Toast;

import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;

import com.example.donation_app.R;
import com.example.donation_app.adapter.ItemAdapter;
import com.example.donation_app.model.Item;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

import java.util.ArrayList;
import java.util.List;
import androidx.swiperefreshlayout.widget.SwipeRefreshLayout;

public class DonorDashboardActivity extends AppCompatActivity {

    private RecyclerView recyclerView;
    private ItemAdapter itemAdapter;
    private List<Item> itemList;
    private Button btnLogout, btnUploadItem;
    private String userId;

    private SwipeRefreshLayout swipeRefreshLayout;

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

        swipeRefreshLayout = findViewById(R.id.swipeRefreshLayout);
        recyclerView = findViewById(R.id.recyclerViewDonations);
        btnLogout = findViewById(R.id.btnLogout);
        btnUploadItem = findViewById(R.id.btnUploadItem);

        recyclerView.setLayoutManager(new LinearLayoutManager(this));
        itemList = new ArrayList<>();
```
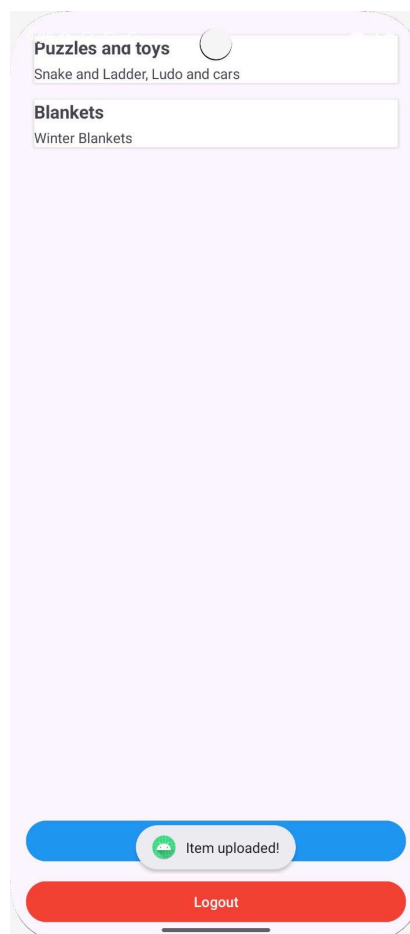


**Puzzles and toys**
Snake and Ladder, Ludo and cars

**Blankets**
Winter Blankets

Item uploaded!

Logout

# 4.NGOActivity:

```java
package com.example.donation_app.view;

import android.os.Bundle;
import android.view.View;
import android.widget.ProgressBar;
import android.widget.Toast;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;

import com.example.donation_app.R;
import com.example.donation_app.adapter.ItemAdapter;
import com.example.donation_app.model.Item;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

import java.util.ArrayList;
import java.util.List;

public class NGOActivity extends AppCompatActivity {

    private RecyclerView recyclerView;
    private ProgressBar progressBar;
    private ItemAdapter itemAdapter;
    private List<Item> itemList;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_ngo); // Ensure this layout exists

        recyclerView = findViewById(R.id.recyclerViewItems); // Add this ID in your layout XML
        progressBar = findViewById(R.id.progressBar);        // Add this ID in your layout XML
        itemList = new ArrayList<>();
        itemAdapter = new ItemAdapter(this, itemList);

        recyclerView.setLayoutManager(new LinearLayoutManager(this));
        recyclerView.setAdapter(itemAdapter);

        loadDonationItems();
    }

    private void loadDonationItems() {
```
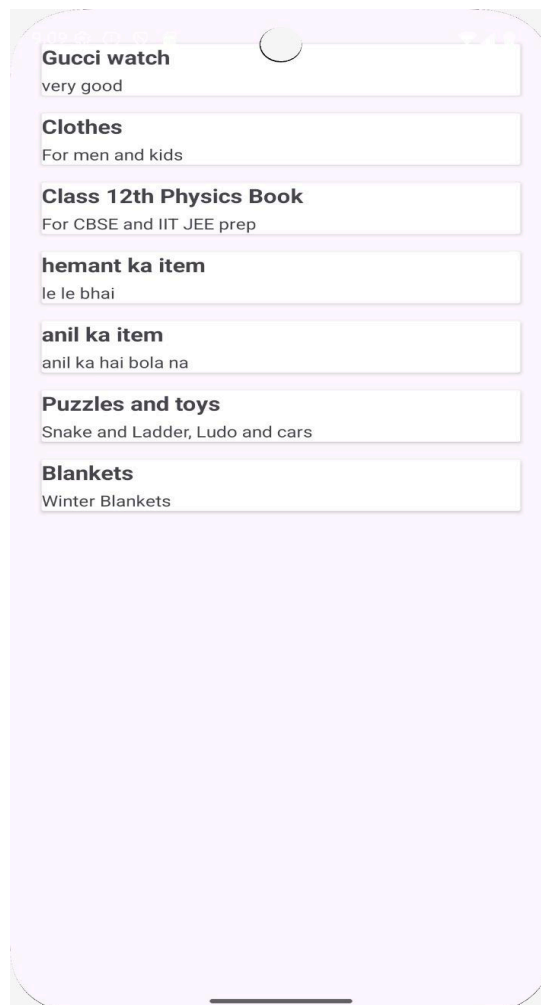
**Gucci watch**
very good

**Clothes**
For men and kids

**Class 12th Physics Book**
For CBSE and IIT JEE prep

**hemant ka item**
le le bhai

**anil ka item**
anil ka hai bola na

**Puzzles and toys**
Snake and Ladder, Ludo and cars

**Blankets**
Winter Blankets

# 5.Database:

https://donationapp-65492-default-rtdb.firebaseio.com

⚠ Your security rules are defined as public, so anyone can steal, modify, or delete data in your database    Learn more ☑    Dismiss

https://donationapp-65492-default-rtdb.firebaseio.com/
▼ items
  ▼ -OORCJ1xlsIo_M7qUeNH
      description: "very good"
      donorId: "anil"
      id: "-OORCJ1xlsIo_M7qUeNH"
      name: "Gucci watch"
  ▶ -OORWtN7Dn0l-qm2tzAs
  ▶ -OORaOkP2MrD1eg2kaov
  ▼ -OOResRihxfyxQvI2kJe
      description: "le le bhai"
      donorId: "hemant"
      id: "-OOResRihxfyxQvI2kJe"
      imageUrl: ""
      name: "hemant ka item"
      quantity: 15
  ▶ -OORsZc8144Af0VwSTbS
▼ users
  ▶ anil
  ▼ hemant
      email: "hemant@gmail.com"
      isVolunteer: true
      name: "hemant"
      password: "1234"
      role: "donor"
  ▼ ngo1
      email: "ngo1@gmail.com"
      isVolunteer: false
      name: "ngo1"
      password: "123"
      role: "ngo"