MainActivity.java

```java
package com.example.loginapp; // Update with your package name

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;

import java.util.regex.Pattern;

public class MainActivity extends AppCompatActivity {

    private EditText usernameEditText;
    private EditText passwordEditText;
    private TextView messageTextView;
    private Button loginButton;

    // Hardcoded credentials (for demonstration purposes)
    private static final String CORRECT_USERNAME = "Karthi";
    private static final String CORRECT_PASSWORD = "Password123!";

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

        // Initialize views
        usernameEditText = findViewById(R.id.username);
        passwordEditText = findViewById(R.id.password);
        messageTextView = findViewById(R.id.message);
        loginButton = findViewById(R.id.login_button);

        // Set up the login button click listener
        loginButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                // Get user input
                String username = usernameEditText.getText().toString().trim();
                String password = passwordEditText.getText().toString().trim();

                // Validate username and password
                if (isValidUsername(username) && isValidPassword(password)) {
                    // Check if the credentials are correct
                    if (username.equals(CORRECT_USERNAME) && password.equals(CORRECT_PASSWORD)) {
                        messageTextView.setText("Login successful!");
                    } else {
                        messageTextView.setText("Invalid username or password.");
                    }
                }
            }
        });
    }

    private boolean isValidUsername(String username) {
        if (username.isEmpty()) {
            messageTextView.setText("Username cannot be empty.");
            return false;
        } else if (!Character.isUpperCase(username.charAt(0))) {
            messageTextView.setText("Username must start with an uppercase letter.");
            return false;
        }
        return true;
    }

    private boolean isValidPassword(String password) {
        if (password.isEmpty()) {
            messageTextView.setText("Password cannot be empty.");
            return false;
        } else if (password.length() < 8) {
            messageTextView.setText("Password must be at least 8 characters long.");
            return false;
        } else if (!Pattern.compile("[A-Z]").matcher(password).find()) {
            messageTextView.setText("Password must contain at least one uppercase letter.");
            return false;
        } else if (!Pattern.compile("[0-9]").matcher(password).find()) {
            messageTextView.setText("Password must contain at least one number.");
            return false;
        } else if (!Pattern.compile("[!@#$%^&*(),.?\":{}|<>]").mat
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cher(password).find()) {
        messageTextView.setText("Password must contain at least one special character.");
        return false;
    }
    return true;
  }
}
```

Androidmanifest.java

```java
package com.example.loginapp; // Update with your package name

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;

import java.util.regex.Pattern;

public class MainActivity extends AppCompatActivity {

    private EditText usernameEditText;
    private EditText passwordEditText;
    private TextView messageTextView;
    private Button loginButton;

    // Hardcoded credentials (for demonstration purposes)
    private static final String CORRECT_USERNAME = "Karthi";
    private static final String CORRECT_PASSWORD = "Password123!";

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

        // Initialize views
        usernameEditText = findViewById(R.id.username);
        passwordEditText = findViewById(R.id.password);
        messageTextView = findViewById(R.id.message);
        loginButton = findViewById(R.id.login_button);

        // Set up the login button click listener
        loginButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                // Get user input
                String username = usernameEditText.getText().toString().trim();
                String password = passwordEditText.getText().toString().trim();

                // Validate username and password
                if (isValidUsername(username) && isValidPassword(password)) {
                    // Check if the credentials are correct
                    if (username.equals(CORRECT_USERNAME) && password.equals(CORRECT_PASSWORD)) {
                        messageTextView.setText("Login successful!");
                    } else {
                        messageTextView.setText("Invalid username or password.");
                    }
                }
            }
        });
    }
    private boolean isValidUsername(String username) {
        if (username.isEmpty()) {
            messageTextView.setText("Username cannot be empty.");
            return false;
        } else if (!Character.isUpperCase(username.charAt(0))) {
            messageTextView.setText("Username must start with an uppercase letter.");
            return false;
        }
        return true;
    }

    private boolean isValidPassword(String password) {
        if (password.isEmpty()) {
            messageTextView.setText("Password cannot be empty.");
            return false;
        } else if (password.length() < 8) {
            messageTextView.setText("Password must be at least 8 characters long.");
            return false;
        } else if (!Pattern.compile("[A-Z]").matcher(password).find()) {
            messageTextView.setText("Password must
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```
contain at least one uppercase letter.");
        return false;
    } else if (!Pattern.compile("[0-
9]").matcher(password).find()) {
        messageTextView.setText("Password must
contain at least one number.");
        return false;
    } else if
(!Pattern.compile("[!@#$%^&*(),.?\":{}|<>]").mat
cher(password).find()) {
        messageTextView.setText("Password must
contain at least one special character.");
        return false;
    }
    return true;
}
```

Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>

<RelativeLayout
xmlns:android="http://schemas.android.com/apk/re
s/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <TextView
        android:id="@+id/textViewTitle"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Login"
        android:textSize="30sp"
        android:textColor="#FFFFFF"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="80dp" />

    <EditText
        android:id="@+id/username"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/textViewTitle"
        android:layout_margin="16dp"
        android:hint="Username"
        android:padding="10dp"

android:background="@drawable/edit_text_backgr
ound" />

    <EditText
        android:id="@+id/password"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/username"
        android:layout_margin="16dp"
        android:hint="Password"
        android:padding="10dp"

android:background="@drawable/edit_text_backgr
ound"
        android:inputType="textPassword" />

    <Button
        android:id="@+id/login_button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/password"
        android:layout_margin="16dp"
        android:background="@color/colorPrimary"
        android:padding="10dp"
        android:text="Login"
        android:textColor="#FFFFFF" />

    <TextView
        android:id="@+id/message"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@id/login_button"
        android:layout_margin="16dp"
        android:textColor="#FF0000"
        android:textSize="16sp" />

</RelativeLayout>
```