Ex No: 12
Date:

MOBILE APPLICATION TO SEND EMAIL

AIM:

To design and develop a front-end Android application that allows users to compose and send emails by collecting user input for recipient address, subject, and message, and providing a user-friendly interface with validation and interaction handling.

ALGORITHM:

1. **Setup UI:**
    1. Add `EditText` for **To**, **Subject**, and **Body**.
    2. Add a **Send** button.
2. **Button Click Logic:**
    1. On button click, validate inputs (check empty fields & email format).
3. **Send Email via Intent:**
    1. Create an `Intent(Intent.ACTION_SEND)`.
    2. Set type to `"message/rfc822"`.
    3. Add extras:
        1. `Intent.EXTRA_EMAIL` → Recipient(s)
        2. `Intent.EXTRA_SUBJECT` → Subject
        3. `Intent.EXTRA_TEXT` → Body
    4. Launch intent with `startActivity(Intent.createChooser())`.
4. **Error Handling:**
    1. Catch `ActivityNotFoundException` (if no email app is installed).
    2. Show Toast on success/failure.

5. **Testing:**

    1. Test with valid/invalid emails.
    2. Check offline/online behavior.
    3. Verify on different Android versions.

CODE:

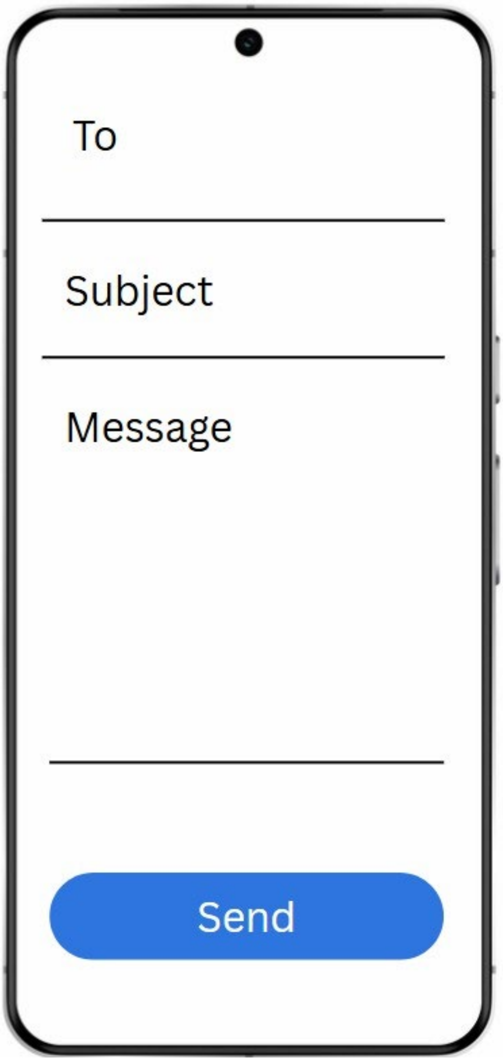
KOTLIN:

```
//Main Activity
package com.example.emailsender

import android.content.Intent
import android.net.Uri
import android.os.Bundle
import androidx.appcompat.app.AppCompatActivity
import android.widget.Button
import com.example.emailsender.R
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val sendEmailBtn =
findViewById<Button>(R.id.sendEmailBtn)
sendEmailBtn.setOnClickListener {
            val recipient = arrayOf("recipient@example.com") //
Replace with actual email
            val subject = "Hello from my app"
            val body = "This is a test email sent from my
Android app."

            val intent = Intent(Intent.ACTION_SENDTO).apply {
                data = Uri.parse("mailto:") // Only email apps
should handle this
                putExtra(Intent.EXTRA_EMAIL, recipient)
                putExtra(Intent.EXTRA_SUBJECT, subject)
                putExtra(Intent.EXTRA_TEXT, body)
            }

            if (intent.resolveActivity(packageManager) != null)
{
                startActivity(intent)
            }
        }
    }
}
```

XML:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    android:padding="16dp">

    <Button
        android:id="@+id/sendEmailBtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Send Email" />
</LinearLayout>
```

OUTPUT:



RESULT:

Thus, the above experiment for designing the front-end of an Email Sending App using Android Studio has been successfully created and implemented.