PROJECT TITLE

Compose Input : A Demonstration Of Text Input And Validation With Android Compose

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1 INTRODUCTION

1.1 OVERVIEW:

The app is a sample project that demonstrates how to use the Android compose UI toolkit to build a survey app. The app allows the user. To answer a series of questions and view their results. It showcases some of the key features of the compose UI toolkit, including layouts, animations, data management, and user interactions.

Compose is a modern declarative UI. Toolkit for Android.

Compose makes it easier to write and maintain your app UI by providing a declarative API that allows you to render your app UI without the imperatively mutating frontend views.

The Compose input should allow users to customize their input feed based on their interests, location or input.

1.2PURPOSE:

The purpose of a demonstration of text input and validation with Android Compose is to showcase how to create a user interface that allows the user to input text into a field and validate that input to ensure it meets certain criteria. This is a common feature in many Android applications, especially those that involve forms or user input.

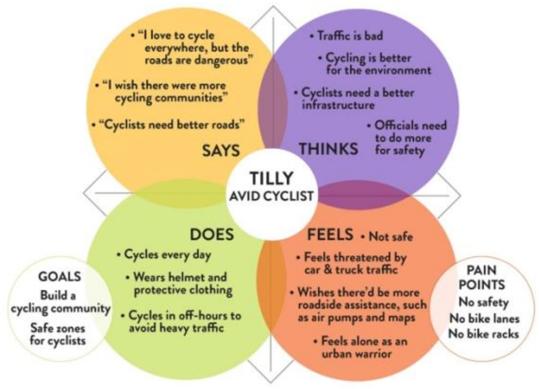
Text is a central piece of any UI, and Jetpack Compose makes it easier to display or write text.

Compose leverages composition of its building blocks meaning you don't need to overwrite properties and methods or extend big classes to have a specific composable design and logic working the way want.

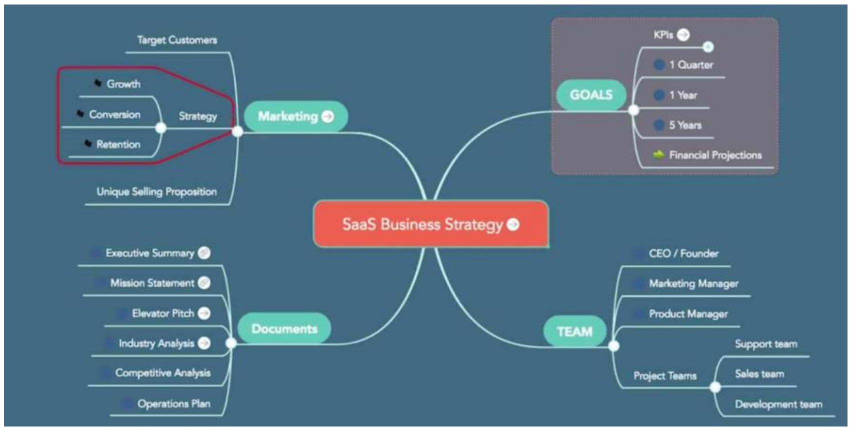
By demonstrating text input and validation with Android Compose, you can show how to create a responsive and intuitive user interface that guides the user through the process of entering data. This can help improve the overall user experience and increase the likelihood that the user will complete the form or task successfully.

<u>2.PROBLEM DEFINITION AND DESIGN THINKING:</u>

2.1 EMPATHY MAP:

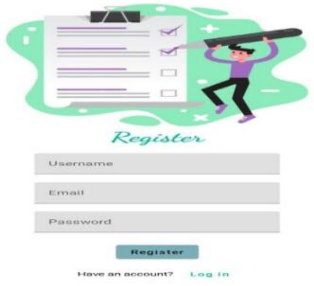

• "I love to cycle everywhere, but the roads are dangerous"
• "I wish there were more cycling communities"
• "Cyclists need better roads"
SAYS
• Traffic is bad
• Cycling is better for the environment
• Cyclists need a better infrastructure
• Officials need to do more for safety
THINKS
TILLY
AVID CYCLIST
DOES
• Cycles every day
• Wears helmet and protective clothing
• Cycles in off-hours to avoid heavy traffic
FEELS
• Not safe
• Feels threatened by car & truck traffic
• Wishes there'd be more roadside assistance, such as air pumps and maps
• Feels alone as an urban warrior
GOALS
Build a cycling community
Safe zones for cyclists
PAIN POINTS
No safety
No bike lanes
No bike racks

IDEATION & BRAINSTORMING MAP

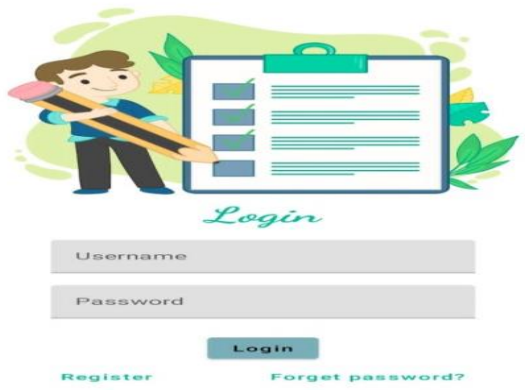


3.RESULT

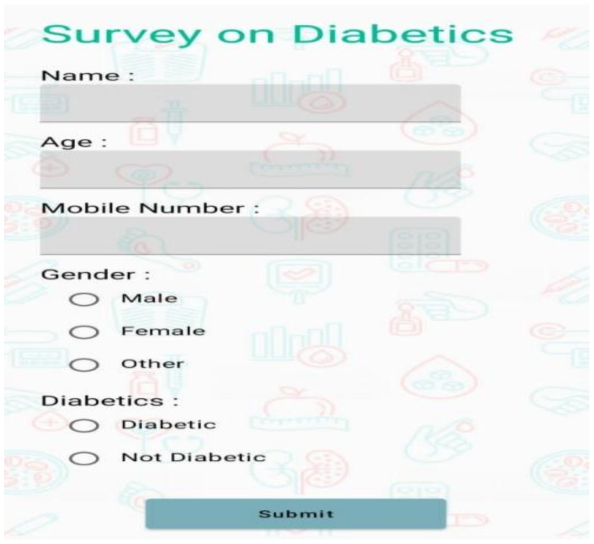
3.1 REGISTER PAGE



3.2 LOGIN PAGE



3.3 SURVEY PAGE



Survey on Diabetics

Name :

Age :

Mobile Number :

Gender :

- ○ Male
- ○ Female
- ○ Other

Diabetics :

- ○ Diabetic
- ○ Not Diabetic

4.ADVANTAGES AND DISADVANTAGES:

4.1 ADVANTAGES:

Compose enables you to create beautiful apps with direct access to the Android platform APIs and built-in support for Material Design, Dark theme, animations, and more: "Compose has also solved more than declarative UI -- accessibility aphis, layout, all kinds of stuff have been improved the input.

4.2 DISADVANTAGES:

Sometimes disadvantage are necessary, for example, to trigger a one-off event such as showing a snack bar or navigate to another screen given a certain state condition. These actions should be called from a controlled environment that is aware of the lifecycle of the composable. In this page, you'll learn about the different side-effect APIs Compose offers.

5.APPLICATIONS:

- Understanding the prevalence of diabetes: Diabetes survey applications can be used to collect data on the prevalence of diabetes among a particular population. This information can help healthcare professionals and policymakers to better understand the scope of the diabetes problem and develop targeted interventions.
- Identifying risk factors: Diabetes survey applications can be used to identify risk factors for diabetes, such as lifestyle behaviors, family history, and demographic factors. This information can be used to develop interventions to prevent or delay the onset of diabetes in high-risk populations.
- Assessing diabetes knowledge and self-management: Diabetes survey applications can be used to assess patients' knowledge of diabetes and their ability to manage the disease. This information can be used to develop patient education materials and support programs that address patients' specific needs.
- Evaluating diabetes treatment and outcomes: Diabetes survey applications can be used to evaluate the effectiveness of diabetes treatments and outcomes. This information can be used to identify areas where improvements can be made and develop strategies to improve patient outcomes.
- Monitoring trends and changes over time: Diabetes survey applications can be used to monitor trends and changes in diabetes prevalence, risk factors, knowledge, self-management, treatment, and outcomes over time. This information can be used to evaluate the impact of interventions and inform future policy and practice decisions.

6.CONCLUSION:

The survey app provides valuable insights into the experiences and concerns of individuals living with diabetes. Through the app, users were able to share their personal experiences and provide feedback on their treatment options, lifestyle changes, and overall quality of life. The data collected from the survey can be used to improve diabetes care and management by healthcare professionals and policymakers. Overall, the survey app serves as an important tool for understanding the needs and challenges faced by people living with diabetes and can help to inform future research and policy decisions.

7.FUTURE SCOPE:

- **Integration with electronic health records (EHR):**
  Diabetes survey applications could be integrated with EHR systems to allow for more efficient and accurate data collection and analysis. This could also facilitate the sharing of data among healthcare providers and improve patient care coordination

- **Use of artificial intelligence (AI):**
  AI could be used to analyze diabetes survey data and identify patterns or trends that may not be immediately apparent. This could help healthcare providers to develop more targeted interventions and improve patient outcomes.

- **Incorporation of wearable technology:**
  Diabetes survey applications could be integrated with wearable technology, such as glucose monitors and fitness trackers, to provide more comprehensive data on patients' health status and behaviors. This could help healthcare providers to develop personalized treatment plans and improve patient outcomes.

- **Gamification:**
  Diabetes survey applications could be gamified to make the survey-taking experience more engaging and motivating for patients. This could improve patient participation and data quality.

- **Mobile app development:**
  Diabetes survey applications could be developed as mobile apps to make them more accessible to patients. This could increase patient participation and improve the accuracy and completeness of data collection.

8.Appendix:

8.1 Source code

User .kt

```
package com.example.surveyapplication


import androidx.room.ColumnInfo

import androidx.room.Entity

import androidx.room.PrimaryKey


@Entity(tableName = "user_table")

data class User(

    @PrimaryKey(autoGenerate = true) val id: Int?,

    @ColumnInfo(name = "first_name") val firstName: String?,

    @ColumnInfo(name = "last_name") val lastName: String?,

    @ColumnInfo(name = "email") val email: String?,

    @ColumnInfo(name = "password") val password: String?,

)
```

UserDao.kt

```
package com.example.surveyapplication


import androidx.room.*
```

```
@Dao
interface UserDao {

    @Query("SELECT * FROM user_table WHERE email = :email")
    suspend fun getUserByEmail(email: String): User?

    @Insert(onConflict = OnConflictStrategy.REPLACE)
    suspend fun insertUser(user: User)

    @Update
    suspend fun updateUser(user: User)

    @Delete
    suspend fun deleteUser(user: User)
}
```

UserDatabase.kt

```
package com.example.surveyapplication

import android.content.Context
import androidx.room.Database
import androidx.room.Room
import androidx.room.RoomDatabase

@Database(entities = [User::class], version = 1)
abstract class UserDatabase : RoomDatabase() {

    abstract fun userDao(): UserDao

    companion object {

        @Volatile
        private var instance: UserDatabase? = null

        fun getDatabase(context: Context): UserDatabase {
            return instance ?: synchronized(this) {
                val newInstance = Room.databaseBuilder(
                    context.applicationContext,
                    UserDatabase::class.java,
                    "user_database"
                ).build()
                instance = newInstance
                newInstance
            }
        }
    }
}
```

UserDatabaseHelper.kt

```
package com.example.surveyapplication

import android.annotation.SuppressLint
import android.content.ContentValues
import android.content.Context
import android.database.Cursor
import android.database.sqlite.SQLiteDatabase
import android.database.sqlite.SQLiteOpenHelper

class UserDatabaseHelper(context: Context) :
    SQLiteOpenHelper(context, DATABASE_NAME, null,
DATABASE_VERSION) {

    companion object {
        private const val DATABASE_VERSION = 1
        private const val DATABASE_NAME = "UserDatabase.db"

        private const val TABLE_NAME = "user_table"
        private const val COLUMN_ID = "id"

        private const val COLUMN_FIRST_NAME = "first_name"

        private const val COLUMN_LAST_NAME = "last_name"

        private const val COLUMN_EMAIL = "email"

        private const val COLUMN_PASSWORD = "password"

    }


    override fun onCreate(db: SQLiteDatabase?) {

        val createTable = "CREATE TABLE $TABLE_NAME (" +

                "$COLUMN_ID INTEGER PRIMARY KEY AUTOINCREMENT, "
+

                "$COLUMN_FIRST_NAME TEXT, " +

                "$COLUMN_LAST_NAME TEXT, " +

                "$COLUMN_EMAIL TEXT, " +

                "$COLUMN_PASSWORD TEXT" +

                ")"


        db?.execSQL(createTable)

    }


    override fun onUpgrade(db: SQLiteDatabase?, oldVersion: Int, newVersion:
Int) {
        db?.execSQL("DROP TABLE IF EXISTS $TABLE_NAME")
        onCreate(db)
    }

    fun insertUser(user: User) {
        val db = writableDatabase
        val values = ContentValues()
        values.put(COLUMN_FIRST_NAME, user.firstName)
        values.put(COLUMN_LAST_NAME, user.lastName)
        values.put(COLUMN_EMAIL, user.email)
        values.put(COLUMN_PASSWORD, user.password)
        db.insert(TABLE_NAME, null, values)
        db.close()
    }

    @SuppressLint("Range")
    fun getUserByUsername(username: String): User? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME
WHERE $COLUMN_FIRST_NAME = ?", arrayOf(username))
        var user: User? = null
        if (cursor.moveToFirst()) {
            user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
                email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
            )
        }
        cursor.close()
        db.close()
        return user
    }
    @SuppressLint("Range")
    fun getUserById(id: Int): User? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME
WHERE $COLUMN_ID = ?", arrayOf(id.toString()))
        var user: User? = null
        if (cursor.moveToFirst()) {
            user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
                email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
            )
        }
        cursor.close()
        db.close()
        return user
    }


    @SuppressLint("Range")
    fun getAllUsers(): List<User> {
        val users = mutableListOf<User>()
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME",
null)
```

```
        if (cursor.moveToFirst()) {
            do {
                val user = User(
                    id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                    firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                    lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
                    email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                    password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
                )
                users.add(user)
            } while (cursor.moveToNext())
        }
        cursor.close()
        db.close()
        return users
    }
}
```

Survey.kt

```
package com.example.surveyapplication
```

```
import androidx.room.ColumnInfo

import androidx.room.Entity

import androidx.room.PrimaryKey


@Entity(tableName = "survey_table")

data class Survey(

    @PrimaryKey(autoGenerate = true) val id: Int?,

    @ColumnInfo(name = "name") val name: String?,

    @ColumnInfo(name = "age") val age: String?,

    @ColumnInfo(name = "mobile_number") val mobileNumber: String?,

    @ColumnInfo(name = "gender") val gender: String?,

    @ColumnInfo(name = "diabetics") val diabetics: String?,

    )
```

SurveyDao.kt

```
package com.example.surveyapplication


import androidx.room.*


@Dao

interface SurveyDao {
    @Query("SELECT * FROM survey_table WHERE age = :age")
    suspend fun getUserByAge(age: String): Survey?


    @Insert(onConflict = OnConflictStrategy.REPLACE)
    suspend fun insertSurvey(survey: Survey)


    @Update
    suspend fun updateSurvey(survey: Survey)
    @Delete
    suspend fun deleteSurvey(survey: Survey)
}
```

SurveyDatabase.kt

```
package com.example.surveyapplication


import android.content.Context
import androidx.room.Database
import androidx.room.Room
import androidx.room.RoomDatabase


@Database(entities = [Survey::class], version = 1)
abstract class SurveyDatabase : RoomDatabase() {
    abstract fun surveyDao(): SurveyDao

    companion object {

        @Volatile
        private var instance: SurveyDatabase? = null

        fun getDatabase(context: Context): SurveyDatabase {
            return instance ?: synchronized(this) {
                val newInstance = Room.databaseBuilder(
                    context.applicationContext,
                    SurveyDatabase::class.java,
                    "user_database"
                ).build()
                instance = newInstance
                newInstance
            }
        }
    }
}
```

SurveyDatabaseHelper.kt

```
package com.example.surveyapplication
```

```
import android.annotation.SuppressLint

import android.content.ContentValues

import android.content.Context

import android.database.Cursor

import android.database.sqlite.SQLiteDatabase

import android.database.sqlite.SQLiteOpenHelper


class SurveyDatabaseHelper(context: Context) :

   SQLiteOpenHelper(context, DATABASE_NAME, null,
DATABASE_VERSION) {


   companion object {

      private const val DATABASE_VERSION = 1

      private const val DATABASE_NAME = "SurveyDatabase.db"


      private const val TABLE_NAME = "survey_table"

      private const val COLUMN_ID = "id"

      private const val COLUMN_NAME = "name"

      private const val COLUMN_AGE = "age"

      private const val COLUMN_MOBILE_NUMBER= "mobile_number"

      private const val COLUMN_GENDER = "gender"
```

```
        private const val COLUMN_DIABETICS = "diabetics"

    }



    override fun onCreate(db: SQLiteDatabase?) {

        val createTable = "CREATE TABLE $TABLE_NAME (" +

                "$COLUMN_ID INTEGER PRIMARY KEY AUTOINCREMENT, "
+

                "$COLUMN_NAME TEXT, " +

                "$COLUMN_AGE TEXT, " +

                "$COLUMN_MOBILE_NUMBER TEXT, " +

                "$COLUMN_GENDER TEXT," +

                "$COLUMN_DIABETICS TEXT" +

                ")"



        db?.execSQL(createTable)

    }



    override fun onUpgrade(db: SQLiteDatabase?, oldVersion: Int, newVersion:
Int) {

        db?.execSQL("DROP TABLE IF EXISTS $TABLE_NAME")

        onCreate(db)

    }
    fun insertSurvey(survey: Survey) {
        val db = writableDatabase
        val values = ContentValues()
        values.put(COLUMN_NAME, survey.name)
        values.put(COLUMN_AGE, survey.age)
        values.put(COLUMN_MOBILE_NUMBER, survey.mobileNumber)
        values.put(COLUMN_GENDER, survey.gender)
        values.put(COLUMN_DIABETICS, survey.diabetics)
        db.insert(TABLE_NAME, null, values)
        db.close()
    }

    @SuppressLint("Range")
    fun getSurveyByAge(age: String): Survey? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME
WHERE $COLUMN_AGE = ?", arrayOf(age))
        var survey: Survey? = null
        if (cursor.moveToFirst()) {
            survey = Survey(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                name =
cursor.getString(cursor.getColumnIndex(COLUMN_NAME)),
                age = cursor.getString(cursor.getColumnIndex(COLUMN_AGE)),
                mobileNumber =
cursor.getString(cursor.getColumnIndex(COLUMN_MOBILE_NUMBER)),
                gender =
cursor.getString(cursor.getColumnIndex(COLUMN_GENDER)),
                diabetics =
cursor.getString(cursor.getColumnIndex(COLUMN_DIABETICS)),
            )
        }
        cursor.close()
        db.close()
        return survey
    }
    @SuppressLint("Range")
    fun getSurveyById(id: Int): Survey? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME
WHERE $COLUMN_ID = ?", arrayOf(id.toString()))
        var survey: Survey? = null
        if (cursor.moveToFirst()) {
            survey = Survey(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                name =
cursor.getString(cursor.getColumnIndex(COLUMN_NAME)),
                age = cursor.getString(cursor.getColumnIndex(COLUMN_AGE)),
                mobileNumber =
cursor.getString(cursor.getColumnIndex(COLUMN_MOBILE_NUMBER)),
                gender =
cursor.getString(cursor.getColumnIndex(COLUMN_GENDER)),
                diabetics =
cursor.getString(cursor.getColumnIndex(COLUMN_DIABETICS)),
            )
        }
        cursor.close()
        db.close()
        return survey
    }

    @SuppressLint("Range")
    fun getAllSurveys(): List<Survey> {
        val surveys = mutableListOf<Survey>()
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME",
null)
```

```
        if (cursor.moveToFirst()) {
            do {
                val survey = Survey(
                    cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                    cursor.getString(cursor.getColumnIndex(COLUMN_NAME)),
                    cursor.getString(cursor.getColumnIndex(COLUMN_AGE)),

cursor.getString(cursor.getColumnIndex(COLUMN_MOBILE_NUMBER)),
                    cursor.getString(cursor.getColumnIndex(COLUMN_GENDER)),

cursor.getString(cursor.getColumnIndex(COLUMN_DIABETICS))
                )
                surveys.add(survey)
            } while (cursor.moveToNext())
        }
        cursor.close()
        db.close()
        return surveys
    }
}
```

LoginActivity.kt

```
package com.example.surveyapplication
```

```
import android.content.Context

import android.content.Intent

import android.os.Bundle

import androidx.activity.ComponentActivity

import androidx.activity.compose.setContent

import androidx.compose.foundation.Image

import androidx.compose.foundation.background

import androidx.compose.foundation.layout.*

import androidx.compose.material.*

import androidx.compose.runtime.*

import androidx.compose.ui.Alignment

import androidx.compose.ui.Modifier

import androidx.compose.ui.graphics.Color

import androidx.compose.ui.layout.ContentScale

import androidx.compose.ui.res.painterResource

import androidx.compose.ui.text.font.FontFamily

import androidx.compose.ui.text.font.FontWeight

import androidx.compose.ui.tooling.preview.Preview

import androidx.compose.ui.unit.dp

import androidx.compose.ui.unit.sp

import androidx.core.content.ContextCompat
import com.example.surveyapplication.ui.theme.SurveyApplicationTheme


class LoginActivity : ComponentActivity() {
    private lateinit var databaseHelper: UserDatabaseHelper
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        databaseHelper = UserDatabaseHelper(this)
        setContent {


                LoginScreen(this, databaseHelper)


        }
    }
}


@Composable
fun LoginScreen(context: Context, databaseHelper: UserDatabaseHelper) {


    var username by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var error by remember { mutableStateOf("") }
    Column(
        modifier = Modifier.fillMaxSize().background(Color.White),
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center
    ) {

        Image(painterResource(id = R.drawable.survey_login), contentDescription
= "")

        Text(
            fontSize = 36.sp,
            fontWeight = FontWeight.ExtraBold,
            fontFamily = FontFamily.Cursive,
            color = Color(0xFF25b897),
            text = "Login"
        )
        Spacer(modifier = Modifier.height(10.dp))

        TextField(
            value = username,
            onValueChange = { username = it },
            label = { Text("Username") },
    modifier = Modifier
        .padding(10.dp)
        .width(280.dp)
)

TextField(
    value = password,
    onValueChange = { password = it },
    label = { Text("Password") },
    visualTransformation = PasswordVisualTransformation(),
    modifier = Modifier
        .padding(10.dp)
        .width(280.dp)
)

if (error.isNotEmpty()) {
    Text(
        text = error,
        color = MaterialTheme.colors.error,
        modifier = Modifier.padding(vertical = 16.dp)
    )
}
```

```
Button(
    onClick = {
        if (username.isNotEmpty() && password.isNotEmpty()) {
            val user = databaseHelper.getUserByUsername(username)
            if (user != null && user.password == password) {
                error = "Successfully log in"
                context.startActivity(
                    Intent(
                        context,
                        MainActivity::class.java
                    )
                )
                //onLoginSuccess()
            }
            if (user != null && user.password == "admin") {
                error = "Successfully log in"
                context.startActivity(
                    Intent(
                        context,
                        AdminActivity::class.java
                    )
                    )
                }
                else {
                    error =  "Invalid username or password"
                }


            } else {
                error = "Please fill all fields"
            }
        },
        colors = ButtonDefaults.buttonColors(backgroundColor =
Color(0xFF84adb8)),
        modifier = Modifier.padding(top = 16.dp)
    ) {
        Text(text = "Login")
    }
    Row {
        TextButton(onClick = {context.startActivity(
            Intent(
                context,
                RegisterActivity::class.java
            )
        )}
        )
        { Text(color = Color(0xFF25b897),text = "Register") }
        TextButton(onClick = {
        })

        {
            Spacer(modifier = Modifier.width(60.dp))
            Text(color = Color(0xFF25b897),text = "Forget password?")
        }
    }
}
}
private fun startMainPage(context: Context) {
val intent = Intent(context, MainActivity::class.java)
ContextCompat.startActivity(context, intent, null)
}
```

RegisterActivity.kt

```
package com.example.surveyapplication


import android.content.Context
import android.content.Intent
import android.os.Bundle

import androidx.activity.ComponentActivity

import androidx.activity.compose.setContent

import androidx.compose.foundation.Image

import androidx.compose.foundation.background

import androidx.compose.foundation.layout.*

import androidx.compose.material.*

import androidx.compose.runtime.*

import androidx.compose.ui.Alignment

import androidx.compose.ui.Modifier

import androidx.compose.ui.graphics.Color

import androidx.compose.ui.layout.ContentScale

import androidx.compose.ui.res.painterResource

import androidx.compose.ui.text.font.FontFamily

import androidx.compose.ui.text.font.FontWeight

import androidx.compose.ui.tooling.preview.Preview

import androidx.compose.ui.unit.dp

import androidx.compose.ui.unit.sp

import androidx.core.content.ContextCompat

import com.example.surveyapplication.ui.theme.SurveyApplicationTheme


class RegisterActivity : ComponentActivity() {
    private lateinit var databaseHelper: UserDatabaseHelper

    override fun onCreate(savedInstanceState: Bundle?) {

        super.onCreate(savedInstanceState)

        databaseHelper = UserDatabaseHelper(this)

        setContent {


                    RegistrationScreen(this,databaseHelper)


        }

    }

}


@Composable

fun RegistrationScreen(context: Context, databaseHelper: UserDatabaseHelper)
{


    var username by remember { mutableStateOf("") }

    var password by remember { mutableStateOf("") }

    var email by remember { mutableStateOf("") }

    var error by remember { mutableStateOf("") }


    Column(
        modifier = Modifier.fillMaxSize().background(Color.White),

        horizontalAlignment = Alignment.CenterHorizontally,

        verticalArrangement = Arrangement.Center

    ) {


        Image(painterResource(id = R.drawable.survey_signup),
contentDescription = "")


        Text(

            fontSize = 36.sp,

            fontWeight = FontWeight.ExtraBold,

            fontFamily = FontFamily.Cursive,

            color = Color(0xFF25b897),

            text = "Register"

        )


        Spacer(modifier = Modifier.height(10.dp))

        TextField(

            value = username,

            onValueChange = { username = it },

            label = { Text("Username") },

            modifier = Modifier
        .padding(10.dp)

        .width(280.dp)


)


TextField(

    value = email,

    onValueChange = { email = it },

    label = { Text("Email") },

    modifier = Modifier

        .padding(10.dp)

        .width(280.dp)

)


TextField(

    value = password,

    onValueChange = { password = it },

    label = { Text("Password") },

    visualTransformation = PasswordVisualTransformation(),

    modifier = Modifier

        .padding(10.dp)

        .width(280.dp)
        )



        if (error.isNotEmpty()) {
            Text(
                text = error,
                color = MaterialTheme.colors.error,
                modifier = Modifier.padding(vertical = 16.dp)
            )
        }

        Button(
            onClick = {
                if (username.isNotEmpty() && password.isNotEmpty() &&
email.isNotEmpty()) {
                    val user = User(
                        id = null,
                        firstName = username,
                        lastName = null,
                        email = email,
                        password = password
                    )
                    databaseHelper.insertUser(user)

                    error = "User registered successfully"

                    // Start LoginActivity using the current context

                    context.startActivity(

                        Intent(

                            context,

                            LoginActivity::class.java

                        )

                    )


                } else {

                    error = "Please fill all fields"

                }

            },

            colors = ButtonDefaults.buttonColors(backgroundColor =
Color(0xFF84adb8)),

            modifier = Modifier.padding(top = 16.dp),


        ) {

            Text(text = "Register")

        }

        Spacer(modifier = Modifier.width(10.dp))
        Spacer(modifier = Modifier.height(10.dp))


        Row() {
            Text(
                modifier = Modifier.padding(top = 14.dp), text = "Have an account?"
            )
            TextButton(onClick = {
                context.startActivity(
                    Intent(
                        context,
                        LoginActivity::class.java
                    )
                )
            })


            {
                Spacer(modifier = Modifier.width(10.dp))
                Text( color = Color(0xFF25b897),text = "Log in")
            }
        }
    }
}
```

```
private fun startLoginActivity(context: Context) {
    val intent = Intent(context, LoginActivity::class.java)
    ContextCompat.startActivity(context, intent, null)
}
```

MainActivity.kt

```
package com.example.surveyapplication


import android.content.Context
import android.content.Intent
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.tooling.preview.Preview

import androidx.compose.ui.unit.dp

import androidx.compose.ui.unit.sp

import com.example.surveyapplication.ui.theme.SurveyApplicationTheme


class MainActivity : ComponentActivity() {

    private lateinit var databaseHelper: SurveyDatabaseHelper

    override fun onCreate(savedInstanceState: Bundle?) {

        super.onCreate(savedInstanceState)

        databaseHelper = SurveyDatabaseHelper(this)

        setContent {

            FormScreen(this, databaseHelper)

        }

    }

}


@Composable

fun FormScreen(context: Context, databaseHelper: SurveyDatabaseHelper) {


    Image(

        painterResource(id = R.drawable.background), contentDescription = "",

        alpha =0.1F,
        contentScale = ContentScale.FillHeight,
        modifier = Modifier.padding(top = 40.dp)
        )




    // Define state for form fields
    var name by remember { mutableStateOf("") }
    var age by remember { mutableStateOf("") }
    var mobileNumber by remember { mutableStateOf("") }
    var genderOptions = listOf("Male", "Female", "Other")
    var selectedGender by remember { mutableStateOf("") }
    var error by remember { mutableStateOf("") }
    var diabeticsOptions = listOf("Diabetic", "Not Diabetic")
    var selectedDiabetics by remember { mutableStateOf("") }

    Column(
        modifier = Modifier.padding(24.dp),
        horizontalAlignment = Alignment.Start,
        verticalArrangement = Arrangement.SpaceEvenly
    ) {
```

```
Text(
    fontSize = 36.sp,
    textAlign = TextAlign.Center,
    text = "Survey on Diabetics",
    color = Color(0xFF25b897)
)

Spacer(modifier = Modifier.height(24.dp))

Text(text = "Name :", fontSize = 20.sp)
TextField(
    value = name,
    onValueChange = { name = it },
)

Spacer(modifier = Modifier.height(14.dp))

Text(text = "Age :", fontSize = 20.sp)
TextField(
    value = age,
    onValueChange = { age = it },
)

Spacer(modifier = Modifier.height(14.dp))

Text(text = "Mobile Number :", fontSize = 20.sp)
TextField(
    value = mobileNumber,
    onValueChange = { mobileNumber = it },
)

Spacer(modifier = Modifier.height(14.dp))

Text(text = "Gender :", fontSize = 20.sp)
RadioGroup(
    options = genderOptions,
    selectedOption = selectedGender,
    onSelectedChange = { selectedGender = it }
)

Spacer(modifier = Modifier.height(14.dp))

Text(text = "Diabetics :", fontSize = 20.sp)
```

```
        RadioGroup(
            options = diabeticsOptions,
            selectedOption = selectedDiabetics,
            onSelectedChange = { selectedDiabetics = it }
        )

        Text(
            text = error,
            textAlign = TextAlign.Center,
            modifier = Modifier.padding(bottom = 16.dp)
        )
        // Display Submit button
        Button(
            onClick = {  if (name.isNotEmpty() && age.isNotEmpty() &&
mobileNumber.isNotEmpty() && genderOptions.isNotEmpty() &&
diabeticsOptions.isNotEmpty()) {
                val survey = Survey(
                    id = null,
                    name = name,
                    age = age,
                    mobileNumber = mobileNumber,
                    gender = selectedGender,
                    diabetics = selectedDiabetics
                )
                databaseHelper.insertSurvey(survey)
                error = "Survey Completed"

            } else {
                error = "Please fill all fields"
            }
            },
            colors = ButtonDefaults.buttonColors(backgroundColor =
Color(0xFF84adb8)),
            modifier = Modifier.padding(start = 70.dp).size(height = 60.dp, width =
200.dp)
        ) {
            Text(text = "Submit")
        }
      }
}
@Composable
fun RadioGroup(
      options: List<String>,
      selectedOption: String?,
    onSelectedChange: (String) -> Unit
) {
    Column {
        options.forEach { option ->
            Row(
                Modifier
                    .fillMaxWidth()
                    .padding(horizontal = 5.dp)
            ) {
                RadioButton(
                    selected = option == selectedOption,
                    onClick = { onSelectedChange(option) }
                )
                Text(
                    text = option,
                    style = MaterialTheme.typography.body1.merge(),
                    modifier = Modifier.padding(top = 10.dp),
                    fontSize = 17.sp
                )
            }
        }
    }
```

```
}
```

AdminActivity.kt

```
package com.example.surveyapplication


import android.os.Bundle

import android.util.Log

import androidx.activity.ComponentActivity

import androidx.activity.compose.setContent

import androidx.compose.foundation.Image

import androidx.compose.foundation.layout.*

import androidx.compose.foundation.lazy.LazyColumn

import androidx.compose.foundation.lazy.LazyRow

import androidx.compose.foundation.lazy.items

import androidx.compose.material.MaterialTheme

import androidx.compose.material.Surface

import androidx.compose.material.Text

import androidx.compose.runtime.Composable

import androidx.compose.ui.Modifier

import androidx.compose.ui.graphics.Color

import androidx.compose.ui.layout.ContentScale

import androidx.compose.ui.res.painterResource

import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp

import androidx.compose.ui.unit.sp

import com.example.surveyapplication.ui.theme.SurveyApplicationTheme


class AdminActivity : ComponentActivity() {

    private lateinit var databaseHelper: SurveyDatabaseHelper

    override fun onCreate(savedInstanceState: Bundle?) {

        super.onCreate(savedInstanceState)

        databaseHelper = SurveyDatabaseHelper(this)

        setContent {

            val data = databaseHelper.getAllSurveys();

            Log.d("swathi", data.toString())

            val survey = databaseHelper.getAllSurveys()

            ListListScopeSample(survey)

        }

    }

}

@Composable

fun ListListScopeSample(survey: List<Survey>) {


    Image(

        painterResource(id = R.drawable.background), contentDescription = "",
        alpha =0.1F,

        contentScale = ContentScale.FillHeight,

        modifier = Modifier.padding(top = 40.dp)

    )


    Text(

        text = "Survey Details",

        modifier = Modifier.padding(top = 24.dp, start = 106.dp, bottom = 24.dp),

        fontSize = 30.sp,

        color = Color(0xFF25b897)

    )

    Spacer(modifier = Modifier.height(30.dp))

    LazyRow(

        modifier = Modifier

            .fillMaxSize()

            .padding(top = 80.dp),


        horizontalArrangement = Arrangement.SpaceBetween

    ) {

        item {

            LazyColumn {

                items(survey) { survey ->
```

```
                    Column(
                        modifier = Modifier.padding(
                            top = 16.dp,
                            start = 48.dp,
                            bottom = 20.dp
                        )
                    ) {
                        Text("Name: ${survey.name}")
                        Text("Age: ${survey.age}")
                        Text("Mobile_Number: ${survey.mobileNumber}")
                        Text("Gender: ${survey.gender}")
                        Text("Diabetics: ${survey.diabetics}")
                    }
                }
            }
        }
    }
}
```