

ANDROID DEVELOPMENT ASSIGNMENT 1

RAJVIR SINGH

21BBS0252

CODE:

```
package com.example.a21bbs0252loginform

import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.layout.Arrangement
import androidx.compose.foundation.layout.Column
import androidx.compose.foundation.layout.fillMaxSize
import androidx.compose.foundation.layout.fillMaxWidth
import androidx.compose.foundation.layout.padding
import androidx.compose.foundation.layout.width
import androidx.compose.foundation.shape.CutCornerShape
import androidx.compose.foundation.text.KeyboardOptions
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.Email
import androidx.compose.material.icons.filled.Lock
import androidx.compose.material3.Button
import androidx.compose.material3.ExperimentalMaterial3Api
import androidx.compose.material3.Icon
import androidx.compose.material3.Text
import androidx.compose.material3.TextField
import androidx.compose.runtime.Composable
import androidx.compose.runtime.getValue
import androidx.compose.runtime.mutableStateOf
import androidx.compose.runtime.remember
import androidx.compose.runtime.setValue
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.clip
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.input.ImeAction
import androidx.compose.ui.text.input.KeyboardType
import androidx.compose.ui.text.input.PasswordVisualTransformation
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import com.example.a21bbs0252loginform.ui.theme._21BBS0252loginformTheme
//21BBS0252 RAJVIR SINGH
class MainActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            Column(modifier = Modifier.fillMaxSize(),
                horizontalAlignment = Alignment.CenterHorizontally) {
```

```

        Column(modifier = Modifier.padding(vertical = 50.dp),
verticalArrangement = Arrangement.spacedBy(15.dp) , horizontalAlignment =
Alignment.CenterHorizontally){
            Login()
        }

        Column (modifier = Modifier.fillMaxWidth(1f),
verticalArrangement = Arrangement.spacedBy(15.dp) , horizontalAlignment =
Alignment.CenterHorizontally) {
            UsernameField()
            PasswordField()
        }

        Column (modifier = Modifier
            .fillMaxSize()
            .padding(vertical = 240.dp) ,verticalArrangement =
Arrangement.spacedBy(30.dp), horizontalAlignment =
Alignment.CenterHorizontally) {
            loginButton()
        }
    }
}
}
}
}

```

```

@Composable
fun Login() {
    Text(
        text = "LOGIN FORM",
        fontFamily = FontFamily.Monospace,
        fontSize = 40.sp,
        fontWeight = FontWeight.Bold,
        color = Color.Cyan
    )
}

//21BBS0252 RAJVIR SINGH
@OptIn(ExperimentalMaterial3Api::class)
@Composable
fun UsernameField(){
    var text by remember { mutableStateOf("") }
    TextField(value = text ,
        onValueChange = { text = it },
        label = { Text(text = "Username")},
        leadingIcon = {
            Icon(Icons.Default.Email, contentDescription = "Email")
        },
        modifier = Modifier
            .width(340.dp)
            .clip(CutCornerShape(4.dp))
    )
}

@OptIn(ExperimentalMaterial3Api::class)
@Composable
fun PasswordField(){
    var text by remember { mutableStateOf("") }
    TextField(value = text ,

```

```

        onChange = { text = it },
        label = { Text(text = "Password") },
        visualTransformation = PasswordVisualTransformation(),
        leadingIcon = {
            Icon(Icons.Default.Lock, contentDescription = "Password" )
        },
        modifier = Modifier
            .width(340.dp)
            .clip(CutCornerShape(4.dp))
    )
}
@Composable
fun loginButton() {
    Button(modifier = Modifier.padding(20.dp), onClick = { /*TODO*/ }) {
        Text(text = "LOGIN")
    }
}

//21BBS0252 RAJVIR SINGH
@Preview(showBackground = true)
@Composable
fun Previewlogin() {
    Column(modifier = Modifier.fillMaxSize(), horizontalAlignment =
Alignment.CenterHorizontally) {
        Column(modifier = Modifier.padding(vertical = 30.dp),
verticalArrangement = Arrangement.spacedBy(15.dp) , horizontalAlignment =
Alignment.CenterHorizontally){
            Login()
        }

        Column(
            modifier = Modifier,
            verticalArrangement = Arrangement.spacedBy(15.dp),
            horizontalAlignment = Alignment.CenterHorizontally,
        ) {
            UsernameField()
            PasswordField()
        }

        Column(modifier = Modifier
            .fillMaxSize(1f)
            .padding(vertical = 130.dp) ,verticalArrangement =
Arrangement.spacedBy(30.dp), horizontalAlignment =
Alignment.CenterHorizontally) {
            loginButton()
        }
    }
}

```

Previewlogin

LOGIN FORM

✉ Username

🔒 Password

LOGIN

Google drive link:

<https://drive.google.com/drive/folders/1NvoBrpg4NWkw6bCvgaDfDKYKA22A6Bh9?usp=sharing>