

Project Topic – Create Login page using jetpack compose

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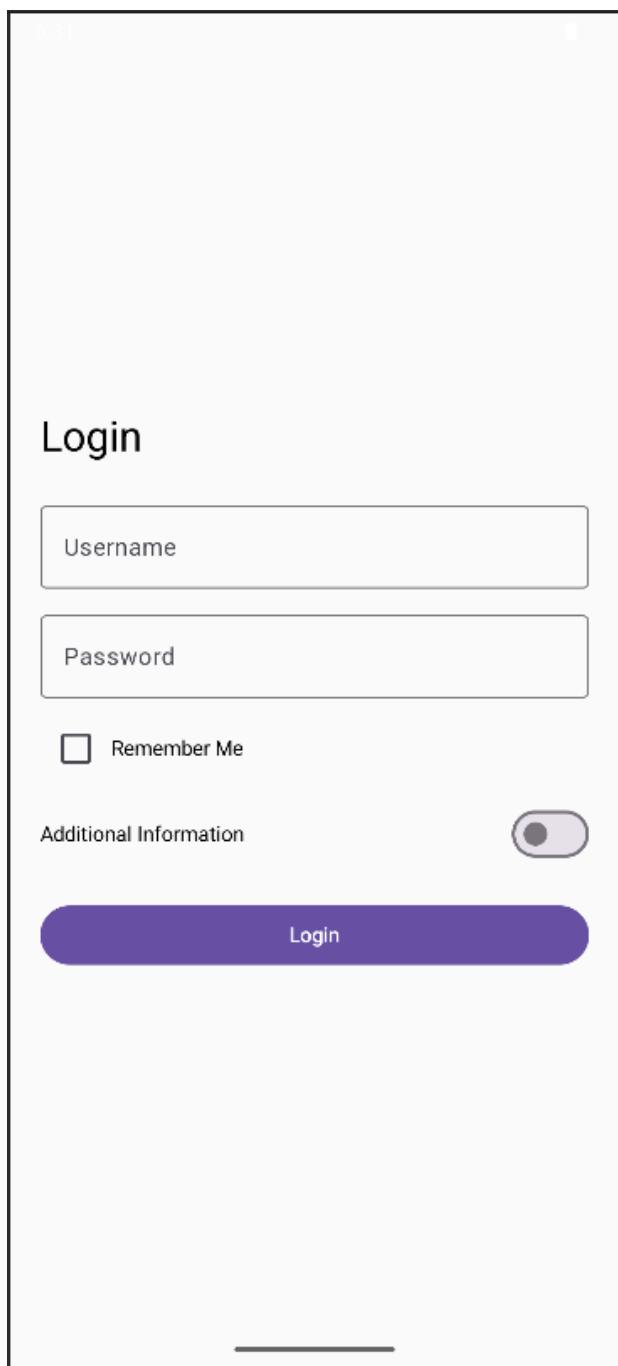
Roll Number – 05

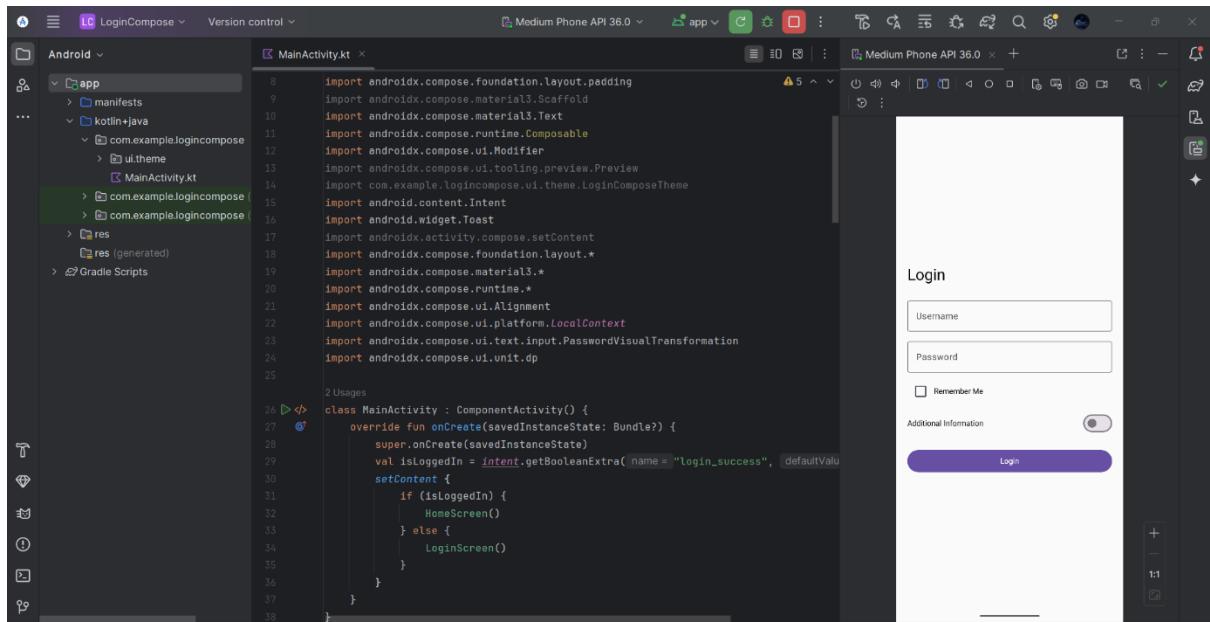
Section – KO007

Subject – CSE224

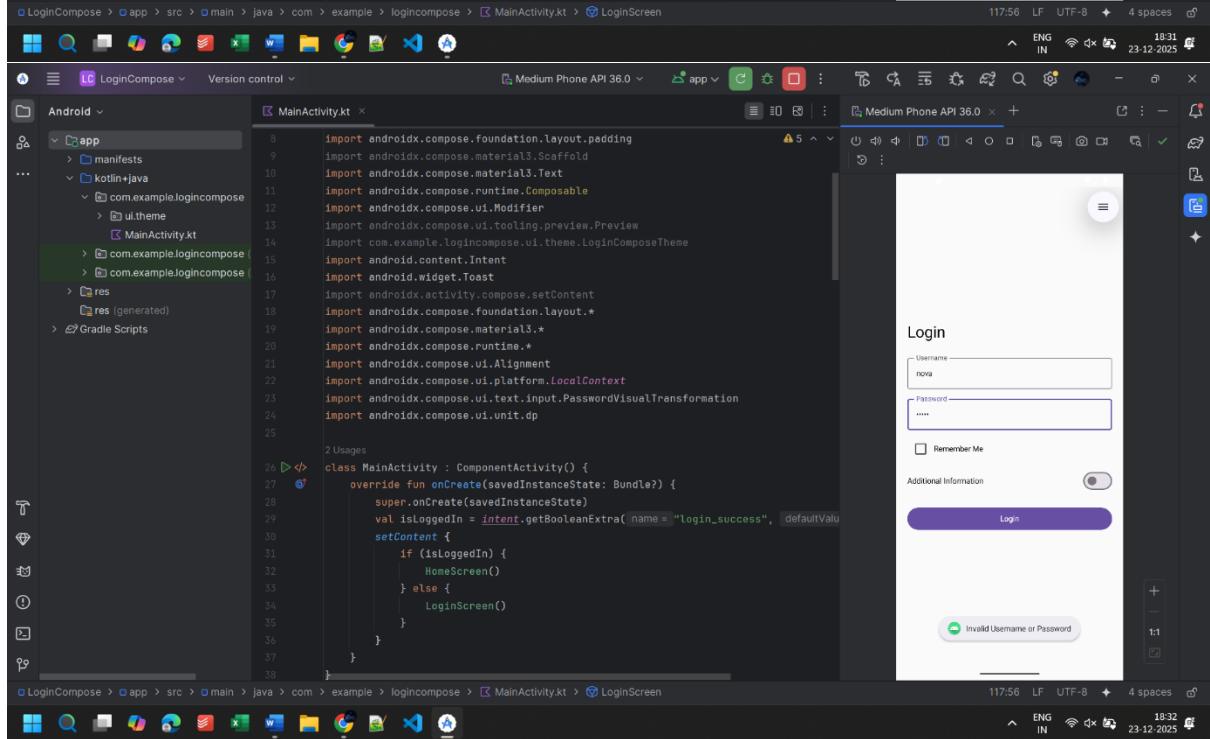
GitHub Repository Link - <https://github.com/Nova-Gupta/LoginCompose>

The Page looks like this:





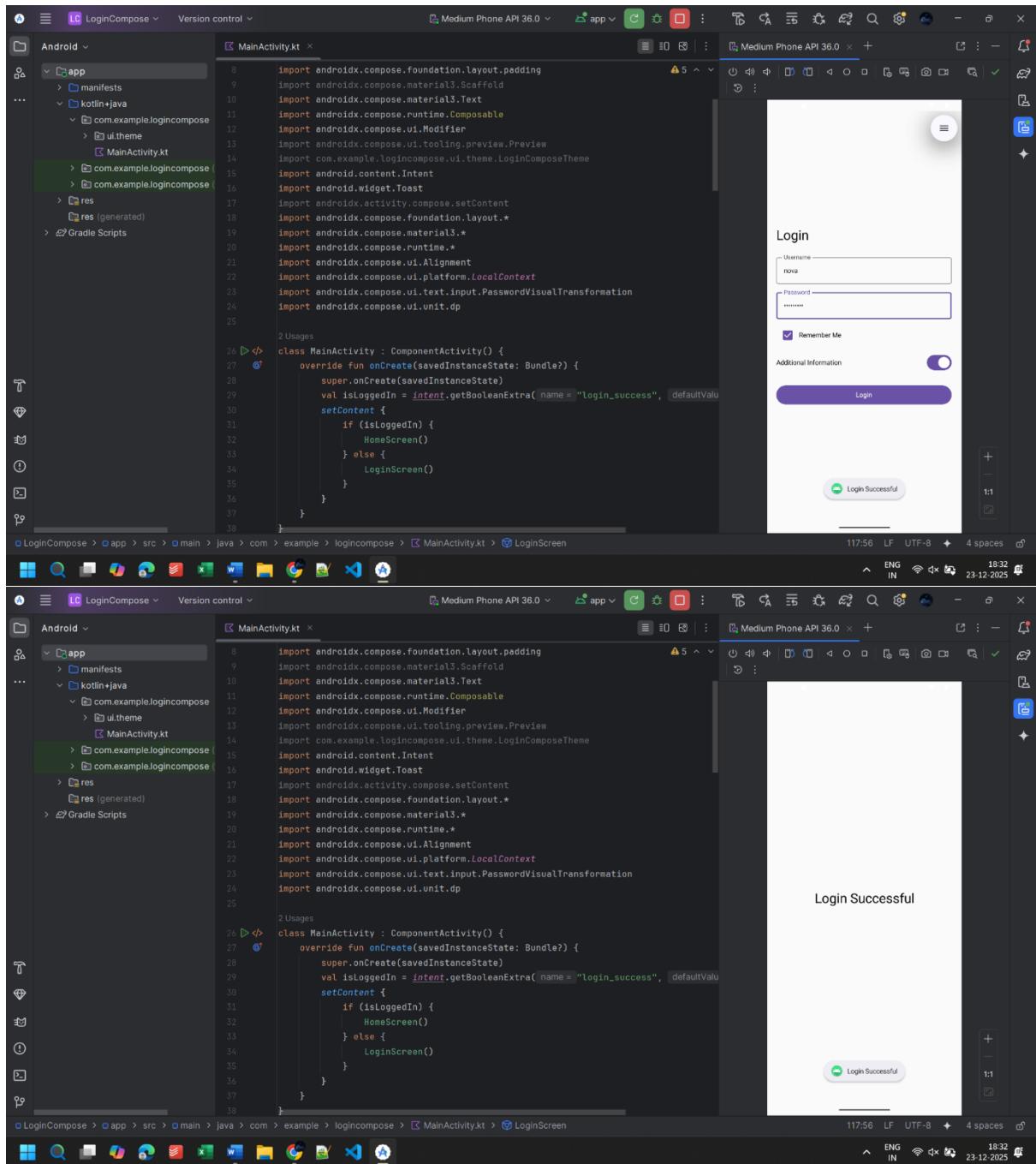
The screenshot shows the Android Studio interface with the code editor open to `MainActivity.kt`. The code defines a `MainActivity` that checks if the user is logged in via an intent extra. If logged in, it navigates to `HomeScreen`; otherwise, it navigates to `LoginScreen`. The right side of the screen displays the `Login` screen from the `Compose` library. It features two text input fields for `Username` and `Password`, a `Remember Me` checkbox, and a `Login` button. A small `Additional Information` section is visible below the main form.



The second screenshot shows the same setup but with an invalid password entered in the `Password` field. A red error message, "Invalid Username or Password", is displayed below the `Login` button, indicating a validation failure.

```
import androidx.compose.foundation.layout.padding
import androidx.compose.material3.Scaffold
import androidx.compose.material3.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Modifier
import androidx.compose.ui.tooling.preview.Preview
import com.example.logincompose.ui.theme.LoginComposeTheme
import android.content.Intent
import android.widget.Toast
import androidx.activity.compose.setContent
import androidx.compose.foundation.layout.*
import androidx.compose.material3.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.text.input.PasswordVisualTransformation
import androidx.compose.ui.unit.dp

2 Usages
class MainActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        val isLoggedIn = intent.getBooleanExtra("name = \"login_success\"", defaultValue)
        setContent {
            if (isLoggedIn) {
                HomeScreen()
            } else {
                LoginScreen()
            }
        }
    }
}
```



The MainActivity.kt file code:

```
package com.example.logincompose
```

```
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.setContent
import androidx.activity.enableEdgeToEdge
import androidx.compose.foundation.layout.fillMaxSize
import androidx.compose.foundation.layout.padding
import androidx.compose.material3.Scaffold
import androidx.compose.material3.Text
import androidx.compose.runtime.Composable
```

```
import androidx.compose.ui.Modifier
import androidx.compose.ui.tooling.preview.Preview
import com.example.logincompose.ui.theme.LoginComposeTheme
import android.content.Intent
import android.widget.Toast
import androidx.activity.compose.setContent
import androidx.compose.foundation.layout.*
import androidx.compose.material3.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.text.input.PasswordVisualTransformation
import androidx.compose.ui.unit.dp

class MainActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        val isLoggedIn = intent.getBooleanExtra("login_success", false)
        setContent {
            if (isLoggedIn) {
                HomeScreen()
            } else {
                LoginScreen()
            }
        }
    }
}

@Composable
fun LoginScreen() {
    val context = LocalContext.current

    var username by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var rememberMe by remember { mutableStateOf(false) }
    var additionalInfo by remember { mutableStateOf(false) }

    Column(
        modifier = Modifier
            .fillMaxSize()
            .padding(20.dp),
        verticalArrangement = Arrangement.Center
    ) {
        Text(text = "Login", style = MaterialTheme.typography.headlineMedium)

        Spacer(modifier = Modifier.height(20.dp))

        OutlinedTextField(
            value = username,
```

```
onValueChange = { username = it },
label = { Text("Username") },
modifier = Modifier.fillMaxWidth()
)

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

OutlinedTextField(
    value = password,
    onValueChange = { password = it },
    label = { Text("Password") },
    visualTransformation = PasswordVisualTransformation(),
    modifier = Modifier.fillMaxWidth()
)

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

Row(verticalAlignment = Alignment.CenterVertically) {
    Checkbox(
        checked = rememberMe,
        onCheckedChange = { rememberMe = it }
    )
    Text(text = "Remember Me")
}

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

Row(
    modifier = Modifier.fillMaxWidth(),
    verticalAlignment = Alignment.CenterVertically,
    horizontalArrangement = Arrangement.SpaceBetween
) {
    Text(text = "Additional Information")
    Switch(
        checked = additionalInfo,
        onCheckedChange = { additionalInfo = it }
    )
}

Spacer(modifier = Modifier.height(20.dp))

Button(
    modifier = Modifier.fillMaxWidth(),
    onClick = {
        if (username.length >= 4 && password.length > 6) {

            Toast.makeText(
                context,
                "Login Successful",
                Toast.LENGTH_SHORT
            ).show()
        }
    }
)
```

```
// Explicit Intent (to same activity, different screen)
val intent = Intent(context, MainActivity::class.java)
intent.putExtra("login_success", true)
context.startActivity(intent)

} else {
    Toast.makeText(
        context,
        "Invalid Username or Password",
        Toast.LENGTH_SHORT
    ).show()
}
}

) {
    Text(text = "Login")
}
}

@Composable
fun HomeScreen() {
    Box(
        modifier = Modifier.fillMaxSize(),
        contentAlignment = Alignment.Center
    ) {
        Text(
            text = "Login Successful",
            style = MaterialTheme.typography.headlineMedium
        )
    }
}
```