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**AIM-Create an Android Application that includes
Login and Registration screens using Jetpack
Compose.**

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MainActivity.kt

```
package com.bytemap.mad_23012011026_practical4

package com.bytemap.mad_23012011026_practical5

import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.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.runtime.Composable
import androidx.compose.ui.Modifier
import
com.bytemap.mad_23012011026_practical5.ui.theme.Pactical5Theme

class MainActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        { super.onCreate(savedInstanceState)
            enableEdgeToEdge()
            setContent {
                Pactical5Theme {
                    AppNavigation(context = this)
                }
            }
        }
    }
}
```

AppNavigation.kt

```
package com.bytemap.mad_23012011026_practical5

import android.content.Context
import androidx.compose.runtime.Composable
import androidx.navigation.compose.NavHost
import androidx.navigation.compose.composable
import androidx.navigation.compose.rememberNavController
import
com.bytemap.mad_23012011026_practical5.screen.components.LoginScreen
import
```

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com.bytemap.mad_23012011026_practical5.screen.components.RegisterUI

@Composable

```
fun AppNavigation(context: Context) {  
    val navController = rememberNavController()  
  
    NavHost(  
        navController = navController,  
        startDestination = "login"  
    ) {  
        composable("login")  
            { LoginScreen(context, navController)  
            }  
        composable("register")  
            { RegisterUI(navController)  
            }  
    }  
}
```

FormFields.kt

package com.bytemap.mad_23012011026_practical5.screen.components

```
import androidx.compose.foundation.layout.Row  
import androidx.compose.foundation.layout.fillMaxWidth  
import androidx.compose.foundation.layout.padding  
import androidx.compose.foundation.text.KeyboardOptions  
import androidx.compose.material3.LocalTextStyle  
import androidx.compose.material3.OutlinedTextField  
import androidx.compose.material3.Text  
import androidx.compose.runtime.Composable  
import androidx.compose.ui.Modifier  
import androidx.compose.ui.text.input.KeyboardType  
import androidx.compose.ui.text.input.PasswordVisualTransformation  
import androidx.compose.ui.text.input.VisualTransformation  
import androidx.compose.ui.tooling.preview.Preview  
import androidx.compose.ui.unit.dp  
import androidx.compose.ui.unit.sp  
import  
com.bytemap.mad_23012011026_practical5.ui.theme.Pactical5Theme
```

@Composable

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```
fun FormField(label : String, textState : String,
    onChange : (String) -> Unit,
    isPasswordField: Boolean = false,
    isNumber: Boolean = false) {
    Row(modifier = Modifier.fillMaxWidth().padding(10.dp))
    { if (!isNumber) {
        OutlinedTextField( val
            ue = textState,
            onChange = onChange,
            modifier = Modifier.padding(start = 16.dp),
            textStyle = LocalTextStyle.current.copy(fontSize =
20.sp),
            visualTransformation = if (isPasswordField)
PasswordVisualTransformation() else VisualTransformation.None,
            label = { Text("Enter $label") },
            placeholder = { Text(text = "Enter $label") },
        )
    } else {
        NumericOutlineTextField( lab
            el = label,
            value = textState, Modifier.padding(start =
16.dp).weight(2f),
            onChange = onChange
        )
    }
    }
}
```

@Composable

```
fun NumericOutlineTextField(label: String,
    value: String,
    modifier: Modifier,
    onChange: (String) -> Unit) {
    OutlinedTextField( val
        ue = value,
        onChange = { newText ->
            if (newText.all { it.isDigit() })
                { onChange(newText)
            }
        },
        modifier = modifier,
```

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```
        label = { Text("Enter $label") },
        textStyle = LocalTextStyle.current.copy(fontSize = 18.sp),
        placeholder = { Text(text = "Enter $label") },
        keyboardOptions = KeyboardOptions(keyboardType =
KeyboardType.Number),
        visualTransformation = VisualTransformation.None
    )
}
```

```
@Preview(showBackground = true)
@Composable
fun GreetingPreview()
{ Pactical5Theme {
    FormField(
        label = "Name",
        textState = "Pratham",
        onTextChange = {}
    )
}
}
```

LoginScreen.kt

```
package com.bytemap.mad_23012011026_practical5.screen.components
```

```
import android.content.Context
import androidx.compose.foundation.Image
import androidx.compose.foundation.layout.Box
import androidx.compose.foundation.layout.Column
import androidx.compose.foundation.layout.Row
import androidx.compose.foundation.layout.Spacer
import androidx.compose.foundation.layout.fillMaxSize
import androidx.compose.foundation.layout.fillMaxWidth
import androidx.compose.foundation.layout.height
import androidx.compose.foundation.layout.padding
import androidx.compose.foundation.layout.width
import androidx.compose.material3.Button
import androidx.compose.material3.Card
import androidx.compose.material3.CardDefaults
import androidx.compose.material3.MaterialTheme
import androidx.compose.material3.Scaffold
import androidx.compose.material3.Text
```

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```
import androidx.compose.material3.TextButton
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.layout.ContentScale
import androidx.compose.ui.res.painterResource
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.navigation.NavController
import com.bytemap.mad_23012011026_practical5.R
import com.bytemap.mad_23012011026_practical5.ui.theme.Pink80
```

@Composable

```
fun LoginScreen(context: Context, navController: NavController)
    { Scaffold (modifier = Modifier.fillMaxSize()){
        innerPadding ->
        Box(modifier
Modifier.fillMaxSize().padding(innerPadding)){ LoginUI(
        navController = navController)
    }
    }
}
```

@Composable

```
fun LoginUI(navController: NavController?= null)
    { var email by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    Column(modifier = Modifier
        .fillMaxSize()
        .padding(20.dp)) {
        Spacer(modifier = Modifier.height(20.dp))
        Image(
            painter = painterResource(R.drawable.guni_pink_logo),
            contentDescription = "Guni Pink Logo",
```

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```
        modifier = Modifier
            .height(130.dp)
            .align(Alignment.CenterHorizontally),
        contentScale = ContentScale.Fit
    )
    Card(
        elevation = CardDefaults.cardElevation(defaultElevation
= 20.dp),
        shape = MaterialTheme.shapes.medium,
        modifier = Modifier.fillMaxWidth()
    ) {
        Column(modifier = Modifier
            .fillMaxWidth()
            .padding(20.dp))
        {
            FormField(
                label = "Email", textState = email,
                onTextChange = { email = it })
            FormField(
                label = "Password", textState = password,
                onTextChange = { password = it },
isPasswordField = true
            )
            Text(
                text = "Forgot Password?",
                fontSize = 18.sp,
                modifier = Modifier
                    .padding(bottom = 50.dp)
                    .align(Alignment.End)
            )

            Button(onClick = {

            }, modifier = Modifier
                .fillMaxWidth()
                .align(Alignment.CenterHorizontally))
            {
                Text("Login", fontSize = 18.sp)
            }
        }
    }
}
```

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```
        Spacer(modifier = Modifier.height(50.dp))
        Row(
            modifier = Modifier.align(Alignment.CenterHorizontally),
            verticalAlignment = Alignment.CenterVertically
        ) {
            Text(text = "Don't have an account?", fontSize = 16.sp)
            Spacer(modifier = Modifier.width(5.dp))
            TextButton(onClick = {
                navController?.navigate("register")
            }) {
                Text("SIGN UP", color = Pink80, fontSize = 18.sp,
fontWeight = FontWeight.Bold)
            }
        }
    }
}
```

RegisterScreen.kt

```
package com.bytemap.mad_23012011026_practical5.screen.components
```

```
import androidx.compose.foundation.Image
import androidx.compose.foundation.layout.Column
import androidx.compose.foundation.layout.Row
import androidx.compose.foundation.layout.Spacer
import androidx.compose.foundation.layout.fillMaxSize
import androidx.compose.foundation.layout.fillMaxWidth
import androidx.compose.foundation.layout.height
import androidx.compose.foundation.layout.padding
import androidx.compose.foundation.layout.width
import androidx.compose.material3.Button
import androidx.compose.material3.Card
import androidx.compose.material3.CardDefaults
import androidx.compose.material3.MaterialTheme
import androidx.compose.material3.Text
import androidx.compose.material3.TextButton
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
```


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```
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.res.painterResource
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.navigation.NavController
import com.bytemap.mad_23012011026_practical5.R
import com.bytemap.mad_23012011026_practical5.ui.theme.Pink80

@Composable
fun RegisterUI(navController: NavController? = null)
    { var name by remember { mutableStateOf("") }
    var phoneNumber by remember { mutableStateOf("") }
    var city by remember { mutableStateOf("") }
    var email by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var confirmPassword by remember { mutableStateOf("") }

    Column(modifier = Modifier
        .fillMaxSize()
        .padding(20.dp)) {
        Spacer(modifier = Modifier.height(10.dp))
        Image(
            painter = painterResource(R.drawable.guni_pink_logo),
            contentDescription = "Guni Pink Logo",
            modifier = Modifier
                .height(130.dp)
                .align(Alignment.CenterHorizontally),
            contentScale = ContentScale.Fit
        )
        Card(
            elevation = CardDefaults.cardElevation(defaultElevation
= 20.dp),
            shape = MaterialTheme.shapes.medium,
            modifier = Modifier.fillMaxWidth()
        ) {
            Column(modifier = Modifier
                .fillMaxWidth()
                .padding(20.dp))
            {
```

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```
        FormField(
            label = "Name", textState = name,
            onChange = { name = it })
        FormField(
            label = "Phone Number", textState = phoneNumber,
            onChange = { phoneNumber = it }
        )
        FormField(
            label = "City", textState = city,
            onChange = { city = it }
        )
        FormField(
            label = "email", textState = email,
            onChange = { email = it }
        )
        FormField(
            label = "Password", textState = password,
            onChange = { password = it }
        )
        FormField(
            label = "Confirm Password", textState =
confirmPassword,
            onChange = { confirmPassword = it }
        )

        Button(onClick = {

            }, modifier = Modifier
                .fillMaxWidth()
                .align(Alignment.CenterHorizontally))
        {
            Text("Register", fontSize = 18.sp)
        }
    }
}
Spacer(modifier = Modifier.height(20.dp))
Row(
    modifier = Modifier.align(Alignment.CenterHorizontally),
    verticalAlignment = Alignment.CenterVertically
) {
    Text(text = "Do you have an account?", fontSize = 16.sp)
```

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```
        Spacer(modifier = Modifier.width(5.dp))
        TextButton(onClick = {
            navController?.navigate("login")
        }) {
            Text("LOGIN", color = Pink80, fontSize = 18.sp,
fontWeight = FontWeight.Bold)
        }
    }
}

@Composable
@Preview(showBackground = true)
fun RegisterActivityPreview() {
    RegisterUI()
}
```

Output:

