

# SMARTBRIDGE EXTERNSHIP

## ANDROID DEVELOPMENT WITH KOTLIN

### ASSIGNMENT WEEK 2

#### BLOOD BANK APP

```
package com.shrimadbhagwat.bloodbank

import android.content.Intent
import android.os.Bundle
import android.widget.Toast
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.border
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.text.KeyboardOptions
import androidx.compose.material.*
import androidx.compose.material3.Button
import androidx.compose.material3.ButtonDefaults
import androidx.compose.material3.ExperimentalMaterial3Api
import androidx.compose.material3.Scaffold
import androidx.compose.material3.Text
import androidx.compose.material3.TextField
import androidx.compose.material3.TextFieldDefaults
import androidx.compose.material3.TopAppBar
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.paint
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.graphics.Shadow
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.TextStyle
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.input.KeyboardType
import androidx.compose.ui.text.style.TextAlign

import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.compose.ui.window.Dialog
import androidx.core.content.ContextCompat.startActivity
```

```

class MainActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            BloodBankApp()
        }
    }
}

@OptIn(ExperimentalMaterial3Api::class)
@Composable
fun BloodBankApp() {
    var username by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var blooddonation by remember { mutableStateOf("") }
    var applicationContext = LocalContext.current
    Column(
        modifier = Modifier.fillMaxSize(),
        verticalArrangement = Arrangement.Center,
        horizontalAlignment = Alignment.CenterHorizontally
    ) {

        Box(modifier = Modifier.padding(40.dp)) {
            Column() {

                Image(
                    painter = painterResource(id = R.drawable.blood),
                    contentDescription = "Blood Logo",
                    modifier = Modifier
                        .width(80.dp)
                        .height(80.dp),
                    alignment = Alignment.Center
                )
                Spacer(modifier = Modifier.height(16.dp))
                Text(
                    text = "Blood Bank", fontSize = 30.sp, style = TextStyle(
                        color = Color.Black,
                        background = Color.White,
                        textAlign = TextAlign.Center
                    )
                )
            )

            Text(
                text = "Blood Donation Campaign", fontSize = 20.sp, style = TextStyle(
                    color = Color.Black,
                    background = Color.White,
                    textAlign = TextAlign.Center
                )
            )
        }
    }
}

```

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    )
  }
}

Row() {
  TextField(
    value = username,
    onValueChange = { username = it },
    colors = TextFieldDefaults.textFieldColors(containerColor = Color(0xffffbfafb)),

    placeholder = { Text("Username", color = Color.Gray) },
    modifier = Modifier
      .width(320.dp)
      .height(50.dp)
      .border(1.dp, Color.LightGray)
  )
}
Spacer(modifier = Modifier.height(16.dp))
Row() {
  TextField(
    value = password,
    onValueChange = { password = it },
    colors = TextFieldDefaults.textFieldColors(containerColor = Color(0xffffbfafb)),

    placeholder = { Text("Password", color = Color.Gray) },
    modifier = Modifier
      .width(320.dp)
      .height(50.dp)
      .border(1.dp, Color.LightGray)
  )
}

Row(modifier = Modifier.padding(24.dp)) {
  Column() {

    Button(
      onClick = {
        Toast.makeText(applicationContext, "Sign Up", Toast.LENGTH_SHORT).show()
      },
      colors = ButtonDefaults.buttonColors(Color.Red),
      shape = RoundedCornerShape(10.dp),
      modifier = Modifier
        .padding(all = 5.dp)
        .width(120.dp)
    ) {

      Text(
        text = "Sign Up",

```

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        fontWeight = FontWeight.Bold,
        color = Color.White,
        fontSize = 20.sp
    )
}
}
Spacer(modifier = Modifier.width(16.dp))
Column() {

    Button(
        onClick = {
            Toast.makeText(applicationContext, "Sign In", Toast.LENGTH_SHORT).show()
            val intent = Intent(applicationContext, HomeActivity::class.java)
            intent.putExtra("username", username)
            intent.putExtra("password", password)
            applicationContext.startActivity(intent)
        },
        colors = ButtonDefaults.buttonColors(Color.Red),
        shape = RoundedCornerShape(10.dp),
        modifier = Modifier
            .padding(all = 5.dp)
            .width(120.dp)
    ){

        Text(
            text = "Sign In",
            fontWeight = FontWeight.Bold,
            color = Color.White,
            fontSize = 20.sp
        )
    }
}
}

}

}

package com.shrimadbhagwat.bloodbank

import android.app.DatePickerDialog
import android.content.Intent
import android.os.Bundle
import android.widget.DatePicker
import android.widget.TimePicker
import android.widget.Toast
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.border

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import androidx.compose.foundation.layout.*
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.text.KeyboardOptions
import androidx.compose.material.*
import androidx.compose.material3.Button
import androidx.compose.material3.ButtonDefaults
import androidx.compose.material3.ExperimentalMaterial3Api
import androidx.compose.material3.RadioButton
import androidx.compose.material3.Scaffold
import androidx.compose.material3.Text
import androidx.compose.material3.TextField
import androidx.compose.material3.TextFieldDefaults
import androidx.compose.material3.TopAppBar
import androidx.compose.runtime.*
import androidx.compose.runtime.saveable.rememberSaveable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.drawBehind
import androidx.compose.ui.draw.paint
import androidx.compose.ui.geometry.Offset
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.graphics.Shadow
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.TextStyle
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.input.KeyboardType
import androidx.compose.ui.text.style.TextAlign

import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.compose.ui.window.Dialog
import androidx.core.content.ContextCompat.startActivity
import java.util.Calendar
import java.util.Date

```

```

class HomeActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            var username = intent.getStringExtra("username")
            var password = intent.getStringExtra("password")

            var applicationContext = LocalContext.current
            App(intent)
        }
    }
}

```

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@OptIn(ExperimentalMaterial3Api::class)
@Composable
fun App(intent: Intent) {
    var username = intent.getStringExtra("username")
    var password = intent.getStringExtra("password")

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var applicationContext = LocalContext.current
Scaffold(
    topBar = {
        TopAppBar(
            title = {
                Text(
                    text = "Donate Blood",
                    color = Color.Red,
                    fontWeight = FontWeight.Bold,
                    modifier = Modifier.padding(all = 10.dp)
                )
            },
            Spacer(modifier = Modifier.width(32.dp))
            Text(
                text = "          "+username.toString(),
                color = Color.Black,

                modifier = Modifier.padding(all = 10.dp)
            )
        ),
        modifier = Modifier
            .drawBehind {
                drawLine(
                    Color.Gray,
                    Offset(0f, size.height),
                    Offset(size.width, size.height),
                    5f
                )
            }
            .background(Color(0xFF85FBFF))
            .height(56.dp)

    )

),
content = { padding ->
    Column(modifier = Modifier.padding(padding)) {
        BloodForm()
    }
},
)
}

```

```

@OptIn(ExperimentalMaterial3Api::class)

```

```

@Composable

```

```

fun BloodForm() {
    var name by remember {
        mutableStateOf("")
    }

    var age by remember {
        mutableStateOf("")
    }
    var mobile by remember {
        mutableStateOf("")
    }
}

```

```

var gender by remember {
    mutableStateOf("")
}
var bloodgroup by remember {
    mutableStateOf("")
}
var date by remember {
    mutableStateOf("")
}
var time by remember {
    mutableStateOf("")
}
var curDate by remember {
    mutableStateOf("")
}
val applicationContext = LocalContext.current

val mYear: Int
val mMonth: Int
val mDay: Int
val mCalendar = Calendar.getInstance()
mYear = mCalendar.get(Calendar.YEAR)
mMonth = mCalendar.get(Calendar.MONTH)
mDay = mCalendar.get(Calendar.DAY_OF_MONTH)

mCalendar.time = Date()
val mDate = remember { mutableStateOf("") }
val mDatePickerDialog = DatePickerDialog(
    applicationContext,
    { _: DatePicker, mYear: Int, mMonth: Int, mDayOfMonth: Int ->
        mDate.value = "$mDayOfMonth-{$mMonth + 1}-$mYear"
    }, mYear, mMonth, mDay
)
Column(
    modifier = Modifier.padding(16.dp),
    horizontalAlignment = Alignment.CenterHorizontally
) {
    TextField(
        value = name,
        onChange = { name = it },
        colors = TextFieldDefaults.textFieldColors(containerColor = Color(0xffffbafb)),

        placeholder = { Text("Name", color = Color.Gray) },
        modifier = Modifier
            .width(320.dp)
            .height(50.dp)
            .border(1.dp, Color.LightGray)
    )
    Spacer(modifier = Modifier.height(16.dp))
    TextField(
        value = age,
        onChange = { age = it },
        colors = TextFieldDefaults.textFieldColors(containerColor = Color(0xffffbafb)),
        keyboardOptions = KeyboardOptions(keyboardType = KeyboardType.Number),
        placeholder = { Text("Age", color = Color.Gray) },
        modifier = Modifier
            .width(320.dp)

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        .height(50.dp)
        .border(1.dp, Color.LightGray)
    )
    Spacer(modifier = Modifier.height(16.dp))
    TextField(
        value = mobile,
        onValueChange = { mobile = it },
        colors = TextFieldDefaults.textFieldColors(containerColor = Color(0xffffbafb)),
        keyboardOptions = KeyboardOptions(keyboardType = KeyboardType.Number),
        placeholder = { Text("Mobile", color = Color.Gray) },
        modifier = Modifier
            .width(320.dp)
            .height(50.dp)
            .border(1.dp, Color.LightGray)
    )
    Spacer(modifier = Modifier.height(16.dp))
    Text("Gender")
    Row(
        modifier = Modifier.padding(vertical = 8.dp),
        verticalAlignment = Alignment.CenterVertically
    ) {
        RadioButton(
            selected = true,
            onClick = { gender = "male" }
        )
        Text("Male", modifier = Modifier.padding(start = 8.dp))
        RadioButton(
            selected = false,
            onClick = { gender = "female" }
        )
        Text("Female", modifier = Modifier.padding(start = 8.dp))
    }
    Spacer(modifier = Modifier.height(16.dp))
    TextField(
        value = bloodgroup,
        onValueChange = { bloodgroup = it },
        colors = TextFieldDefaults.textFieldColors(containerColor = Color(0xffffbafb)),

        placeholder = { Text("Blood Group", color = Color.Gray) },
        modifier = Modifier
            .width(320.dp)
            .height(50.dp)
            .border(1.dp, Color.LightGray)
    )
    Spacer(modifier = Modifier.height(16.dp))
    Button(onClick = {
        mDatePickerDialog.show()
        curDate = mDay.toString() + "/" + mMonth.toString() + "/" + mYear.toString()
    }, colors = ButtonDefaults.buttonColors(Color.Red),
        shape = RoundedCornerShape(10.dp),
        modifier = Modifier
            .padding(all = 5.dp)
            .width(120.dp)
    ) {
        Text(text = "Select Date")
    }
}

```



```

        Spacer(modifier = Modifier.height(16.dp))
        Text(text = curDate)
        Spacer(modifier = Modifier.height(32.dp))
        Button(
            onClick = {
                Toast.makeText(applicationContext, "Sign In", Toast.LENGTH_SHORT).show()
                val intent = Intent(applicationContext, DetailActivity::class.java)
                intent.putExtra("name",name)
                intent.putExtra("age",age)
                intent.putExtra("mobile",mobile)
                intent.putExtra("gender",gender)
                intent.putExtra("bloodgroup",bloodgroup)
                intent.putExtra("date",date)

                applicationContext.startActivity(intent)
            }, colors = ButtonDefaults.buttonColors(Color.Red),
            shape = RoundedCornerShape(10.dp),
            modifier = Modifier
                .padding(all = 5.dp)
                .width(120.dp)
        ){
            Text("Schedule")
        }
    }
}

```

```

package com.shrimadbhagwat.bloodbank

```

```

import android.app.DatePickerDialog
import android.content.Intent
import android.os.Bundle
import android.widget.DatePicker
import android.widget.TimePicker
import android.widget.Toast
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.border
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.foundation.text.KeyboardOptions
import androidx.compose.material.*
import androidx.compose.material3.Button
import androidx.compose.material3.ButtonDefaults
import androidx.compose.material3.ExperimentalMaterial3Api
import androidx.compose.material3.RadioButton
import androidx.compose.material3.Scaffold
import androidx.compose.material3.Text
import androidx.compose.material3.TextField
import androidx.compose.material3.TextFieldDefaults
import androidx.compose.material3.TopAppBar
import androidx.compose.runtime.*
import androidx.compose.runtime.saveable.rememberSaveable

```

```

import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.drawBehind
import androidx.compose.ui.draw.paint
import androidx.compose.ui.geometry.Offset
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.graphics.Shadow
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.TextStyle
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.input.KeyboardType
import androidx.compose.ui.text.style.TextAlign

import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.compose.ui.window.Dialog
import androidx.core.content.ContextCompat.startActivity
import java.util.Calendar
import java.util.Date

class DetailActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {

            var applicationContext = LocalContext.current
            DetailsAct(intent)
        }
    }
}

@OptIn(ExperimentalMaterial3Api::class)
@Composable
fun DetailsAct(intent: Intent) {

    var name = intent.getStringExtra("name")

    var age = intent.getStringExtra("age")

    var mobile = intent.getStringExtra("mobile")

    var gender = intent.getStringExtra("gender")

    var bloodgroup = intent.getStringExtra("bloodgroup")

    var date = intent.getStringExtra("date")

    var applicationContext = LocalContext.current

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

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        horizontalAlignment = Alignment.CenterHorizontally
    ){
        Text(text = "Details")
        Spacer(modifier = Modifier.height(32.dp))
        Text(text = name.toString())
        Spacer(modifier = Modifier.height(16.dp))
        Text(text = age.toString())
        Spacer(modifier = Modifier.height(16.dp))
        Text(text = mobile.toString())
        Spacer(modifier = Modifier.height(16.dp))
        Text(text = gender.toString())
        Spacer(modifier = Modifier.height(16.dp))
        Text(text = bloodgroup.toString())
        Spacer(modifier = Modifier.height(16.dp))
        Text(text = date.toString())

    }
}
```