

MOBILE APPLICATION DEVELOPMENT USING KOTLIN

SMART BRIDGE- ANDROID APP DEVELOPMENT



21BCE8951

VANAPARTHI BULLI SIVA

VIT-AP, AMARAVATHI

SMART INTERNZ

ASSIGNMENT-3 REPORT



Snippets of the code

Compose Preview refresh: refreshing Compose previews total elapsed time was 6 s 561 ms (3 minutes ago)

```

1 package com.example.radiobuttons
2 import android.content.Intent
3 import android.net.Uri
4 import android.os.Bundle
5 import androidx.activity.ComponentActivity
6 import androidx.activity.compose.setContent
7 import androidx.compose.foundation.Image
8 import androidx.compose.foundation.background
9 import androidx.compose.foundation.clickable
10 import androidx.compose.foundation.layout.*
11 import androidx.compose.foundation.text.BasicTextField
12 import androidx.compose.foundation.text.KeyboardActions
13 import androidx.compose.foundation.text.KeyboardOptions
14 import androidx.compose.material3.*
15 import androidx.compose.runtime.*
16 import androidx.compose.ui.Alignment
17 import androidx.compose.ui.ExperimentalComposeUiApi
18 import androidx.compose.ui.Modifier
19 import androidx.compose.ui.graphics.Color
20 import androidx.compose.ui.layout.ContentScale
21 import androidx.compose.ui.platform.*
22 import androidx.compose.ui.res.painterResource
23 import androidx.compose.ui.text.font.FontWeight
24 import androidx.compose.ui.text.input.KeyboardType
25 import androidx.compose.ui.tooling.preview.Preview
26 import androidx.compose.ui.unit.dp
27 import androidx.compose.ui.unit.sp
28
29 @ExperimentalComposeUiApi
30 class MainActivity : ComponentActivity() {
31     override fun onCreate(savedInstanceState: Bundle?) {
32         super.onCreate(savedInstanceState)
33         setContent {
34             MyApp()
35         }
36     }
37
38     @OptIn(ExperimentalMaterial3Api::class)
39     @Composable
40     fun MyApp() {
41         var selectedOption by remember { mutableStateOf( value: 0 ) }
42         var username by remember { mutableStateOf( value: " " ) }
43         var password by remember { mutableStateOf( value: " " ) }
44         val context = LocalContext.current
45
46         Box(
47             modifier = Modifier
48                 .fillMaxSize()
49                 .background(Color.White)
50         ) {
51             // Background Image
52             Image(
53                 painter = painterResource(id = R.drawable.img_4),
54                 contentDescription = null,
55                 contentScale = ContentScale.Crop,
56                 modifier = Modifier.fillMaxSize()
57             )
58
59             Column(
60                 modifier = Modifier
61                     .fillMaxSize()
62             )
63         }
64     }
65 }

```

Activate Windows
Go to Settings to activate Windows.

21:16 LF UTF-8 4 spaces 14:22
32°C Mostly cloudy 11-09-2023

Compose Preview refresh: refreshing Compose previews total elapsed time was 6 s 561 ms (5 minutes ago)

```

31     override fun onCreate(savedInstanceState: Bundle?) {
32         super.onCreate(savedInstanceState)
33         setContent {
34             MyApp()
35         }
36     }
37
38     @OptIn(ExperimentalMaterial3Api::class)
39     @Composable
40     fun MyApp() {
41         var selectedOption by remember { mutableStateOf( value: 0 ) }
42         var username by remember { mutableStateOf( value: " " ) }
43         var password by remember { mutableStateOf( value: " " ) }
44         val context = LocalContext.current
45
46         Box(
47             modifier = Modifier
48                 .fillMaxSize()
49                 .background(Color.White)
50         ) {
51             // Background Image
52             Image(
53                 painter = painterResource(id = R.drawable.img_4),
54                 contentDescription = null,
55                 contentScale = ContentScale.Crop,
56                 modifier = Modifier.fillMaxSize()
57             )
58
59             Column(
60                 modifier = Modifier
61                     .fillMaxSize()
62             )
63         }
64     }
65 }

```

Activate Windows
Go to Settings to activate Windows.

21:16 LF UTF-8 4 spaces 14:23
Watchlist ideas 11-09-2023



Compose Preview refresh: refreshing Compose previews total elapsed time was 6 s 561 ms (4 minutes ago)

```

File Edit View Navigate Code Refactor Build Run Tools VCS Window Help RadioButtons - MainActivity.kt [RadioButtons.app.main]
RadioButtons app src main java com example radiobuttons MainActivity.kt RadioOption
Main Activity.kt img_2.png themes.xml colors.xml Color.kt AndroidManifest.xml
app manifests java com.example.radiobuttons ui.theme Color.kt Theme.kt Type.kt MainActivity.kt
res drawable img_2.png themes.xml values colors.xml strings.xml theme.xml
res generated Gradle Scripts

    .fillMaxSize()
    .padding(4.dp),
    horizontalAlignment = Alignment.CenterHorizontally
) { this@ColumnScope
    Text(
        text = "Login",
        style = MaterialTheme.typography.bodyMedium.copy(
            fontSize = 30.sp,
            fontWeight = FontWeight.Bold,
            color = Color( color: 0xFF476810)
        )
    )
    Spacer(modifier = Modifier.height(16.dp))
    Image(
        painter = painterResource(id = R.drawable.img),
        contentDescription = null,
        contentScale = ContentScale.Crop,
        modifier = Modifier
            .height(200.dp)
            .width(400.dp)
    )
    Spacer(modifier = Modifier.height(20.dp))
//Username TextField
OutlinedTextField(
    value = username,
    onValueChange = { username = it },
    label = { Text(text = "Username") },
    modifier = Modifier
        .width(270.dp)
)

```

Activate Windows
Go to Settings to activate Windows.

211:6 LF UTF-8 4 spaces 1423 11-09-2023 23

Compose Preview refresh: refreshing Compose previews total elapsed time was 6 s 561 ms (5 minutes ago)

```

File Edit View Navigate Code Refactor Build Run Tools VCS Window Help RadioButtons - MainActivity.kt [RadioButtons.app.main]
RadioButtons app src main java com example radiobuttons MainActivity.kt RadioOption
Main Activity.kt img_2.png themes.xml colors.xml Color.kt AndroidManifest.xml
app manifests java com.example.radiobuttons ui.theme Color.kt Theme.kt Type.kt MainActivity.kt
res drawable img_2.png themes.xml values colors.xml strings.xml theme.xml
res generated Gradle Scripts

    .width(270.dp)
    .height(50.dp)
)

Spacer(modifier = Modifier.height(8.dp))

OutlinedTextField(
    value = password,
    onValueChange = { password = it },
    label = { Text(text = "password") },
    keyboardActions = KeyboardActions(
        onDone = { this.KeyboardActionScope
            //Handle Login Here
        }
    ),
    modifier = Modifier
        .width(270.dp)
        .height(50.dp)
)
Spacer(modifier = Modifier.height(16.dp))
Text(
    text = "Select the option to visit the website",
    style = MaterialTheme.typography.bodyMedium.copy(
        fontSize = 20.sp,
        fontWeight = FontWeight.Bold,
        color = Color( color: 0xFFFF4433)
    )
)

```

Activate Windows
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211:6 LF UTF-8 4 spaces 1424 11-09-2023 23



Compose Preview refresh: refreshing Compose previews total elapsed time was 6 s 561 ms (6 minutes ago)

Type here to search

File Edit View Navigate Code Refactor Build Run Tools VCS Window Help RadioButtons - MainActivity.kt [RadioButtons.app.main]

MainActivity.kt img_2.png themes.xml colors.xml Color.kt AndroidManifest.xml

```

121 // Center the radio buttons below the password field
122 Column(
123     modifier = Modifier
124         .fillMaxWidth()
125         .padding(1.dp), // Decreased padding
126         horizontalAlignment = Alignment.CenterHorizontally
127 ) { this.ColumnScope
128     RadioOption(
129         text = "VIT AP",
130         selected = selectedOption == 0,
131         onSelected = { selectedOption = 0 }
132     )
133     RadioOption(
134         text = "VIT VELLORE",
135         selected = selectedOption == 1,
136         onSelected = { selectedOption = 1 }
137     )
138     RadioOption(
139         text = "VIT CHENNAI",
140         selected = selectedOption == 2,
141         onSelected = { selectedOption = 2 }
142     )
143     RadioOption(
144         text = "VIT BHOPAL",
145         selected = selectedOption == 3,
146         onSelected = { selectedOption = 3 }
147     )
148 }
149
150 Spacer(modifier = Modifier.height(8.dp)) // Decreased spacer height
151

```

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Watchlist ideas

File Edit View Navigate Code Refactor Build Run Tools VCS Window Help RadioButtons - MainActivity.kt [RadioButtons.app.main]

MainActivity.kt img_2.png themes.xml colors.xml Color.kt AndroidManifest.xml

```

151 Spacer(modifier = Modifier.height(8.dp)) // Decreased spacer height
152
153 Box(
154     modifier = Modifier
155         .padding(4.dp) // Decreased padding
156 ) { this.BoxScope
157     Button(
158         {
159             val urls = arrayOf(
160                 "https://vitap.ac.in/",
161                 "https://vit.ac.in/",
162                 "https://chennai.vit.ac.in/",
163                 "https://vitbhopal.ac.in/"
164             )
165
166             val selectedUrl = urls.getOrElse(selectedOption) {
167                 when (selectedOption) {
168                     0, 1, 2, 3 -> {
169                         if (!selectedUrl.isNullOrEmpty()) {
170                             val intent = Intent(Intent.ACTION_VIEW, Uri.parse(selectedUrl))
171                             context.startActivity(intent)
172                         }
173                     }
174                     else -> {
175                         // Handle the case where no option is selected
176                     }
177                 }
178             }
179         }, Modifier
180             .padding(1.dp),
181

```

Activate Windows
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16673 LF UTF-8 4 spaces 14:25 11-09-2023

Watchlist ideas



```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help RadioButtons - MainActivity.kt [RadioButtons.app.main]
RadioButtons app src main java com radiobuttons MainActivity.kt MyApp
MainModule.kt img_2.png themes.xml colors.xml Color.kt AndroidManifest.xml
Code Split Design
A 3 A 1 1 1
184     ) { thisRowScope
185         Text(text = "Click Here To Open The Website!!!", color = Color.Black)
186     }
187     } } } }
188 @Composable
189 fun RadioOption(
190     text: String,
191     selected: Boolean,
192     onSelected: () -> Unit
193 ) {
194     Row(
195         modifier = Modifier
196             .fillMaxWidth()
197             .padding(2.dp)
198             .clickable { onSelected() },
199         verticalAlignment = Alignment.CenterVertically // Align content vertically
200     ) { thisRowScope
201         RadioButton(
202             selected = selected,
203             onClick = { onSelected() }
204         )
205         Spacer(modifier = Modifier.width(8.dp))
206         Text(text)
207     }
208 }
209 @OptIn(ExperimentalComposeUiApi::class)
210 @Composable
211 @Preview(showBackground = true)
212 fun PreviewMyApp() {
213     MyApp()
214 }
```

CODE:

```
package com.example.radiobuttons
import android.content.Intent
import android.net.Uri
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.clickable
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.text.BasicTextField
import androidx.compose.foundation.text.KeyboardActions
import androidx.compose.foundation.text.KeyboardOptions
import androidx.compose.material3.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.ExperimentalComposeUiApi
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.platform.*
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.input.KeyboardType
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp

@ExperimentalComposeUiApi
class MainActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            MyApp()
        }
    }
}
@OptIn(ExperimentalMaterial3Api::class)
@Composable
fun MyApp() {
```

```

var selectedOption by remember { mutableStateOf(0) }
var username by remember { mutableStateOf(" ") }
var password by remember { mutableStateOf(" ") }
val context = LocalContext.current

Box(
    modifier = Modifier
        .fillMaxSize()
        .background(Color.White)
) {
    // Background Image
    Image(
        painter = painterResource(id = R.drawable.img_4),
        contentDescription = null,
        contentScale = ContentScale.Crop,
        modifier = Modifier.fillMaxSize()
    )

    Column(
        modifier = Modifier
            .fillMaxSize()
            .padding(4.dp),
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Text(
            text = "Login",
            style = MaterialTheme.typography.bodyMedium.copy(
                fontSize = 30.sp,
                fontWeight = FontWeight.Bold,
                color = Color(0xFF476810)
            )
        )

        Spacer(modifier = Modifier.height(16.dp))
        Image(
            painter = painterResource(id = R.drawable.img),
            contentDescription = null,
            contentScale = ContentScale.Crop,
            modifier = Modifier
                .height(200.dp)
                .width(400.dp)
        )
    }

    Spacer(modifier = Modifier.height(20.dp))
    //Username TextField
    OutlinedTextField(
        value = username,
        onValueChange = { username = it },
        label = { Text(text = "Username") },
        modifier = Modifier
            .width(270.dp)
            .height(50.dp)
    )

    Spacer(modifier = Modifier.height(8.dp))

    OutlinedTextField(
        value = password,
        onValueChange = { password = it },
        label = { Text(text = "password") },
        keyboardActions = KeyboardActions(

```



```

        onDone = {
            //Handle Login Here
        }
    ),
    modifier = Modifier
        .width(270.dp)
        .height(50.dp)
)
Spacer(modifier = Modifier.height(16.dp))
Text(
    text = "Select the option to visit the website",
    style = MaterialTheme.typography.bodyMedium.copy(
        fontSize = 20.sp,
        fontWeight = FontWeight.Bold,
        color = Color(0xFFFF44336)
    )
)

// Center the radio buttons below the password field
Column(
    modifier = Modifier
        .fillMaxWidth()
        .padding(1.dp), // Decreased padding
    horizontalAlignment = Alignment.CenterHorizontally
) {
    RadioOption(
        text = "VIT AP",
        selected = selectedOption == 0,
        onSelected = { selectedOption = 0 }
    )
    RadioOption(
        text = "VIT VELLORE",
        selected = selectedOption == 1,
        onSelected = { selectedOption = 1 }
    )
    RadioOption(
        text = "VIT CHENNAI",
        selected = selectedOption == 2,
        onSelected = { selectedOption = 2 }
    )
    RadioOption(
        text = "VIT BHOPAL",
        selected = selectedOption == 3,
        onSelected = { selectedOption = 3 }
    )
}
Spacer(modifier = Modifier.height(8.dp)) // Decreased spacer
height

Box(
    modifier = Modifier
        .padding(4.dp) // Decreased padding
) {
    Button(
    {
        val urls = arrayOf(
            "https://vitap.ac.in/",
            "https://vit.ac.in/",

```



```

        "https://chennai.vit.ac.in/",
        "https://vitbhupal.ac.in/"
    )

    val selectedUrl = urls.getOrNull(selectedOption)

    when (selectedOption) {
        0, 1, 2, 3 -> {
            if (!selectedUrl.isNullOrEmpty()) {
                val intent = Intent(Intent.ACTION_VIEW,
Uri.parse(selectedUrl))
                context.startActivity(intent)
            }
        }

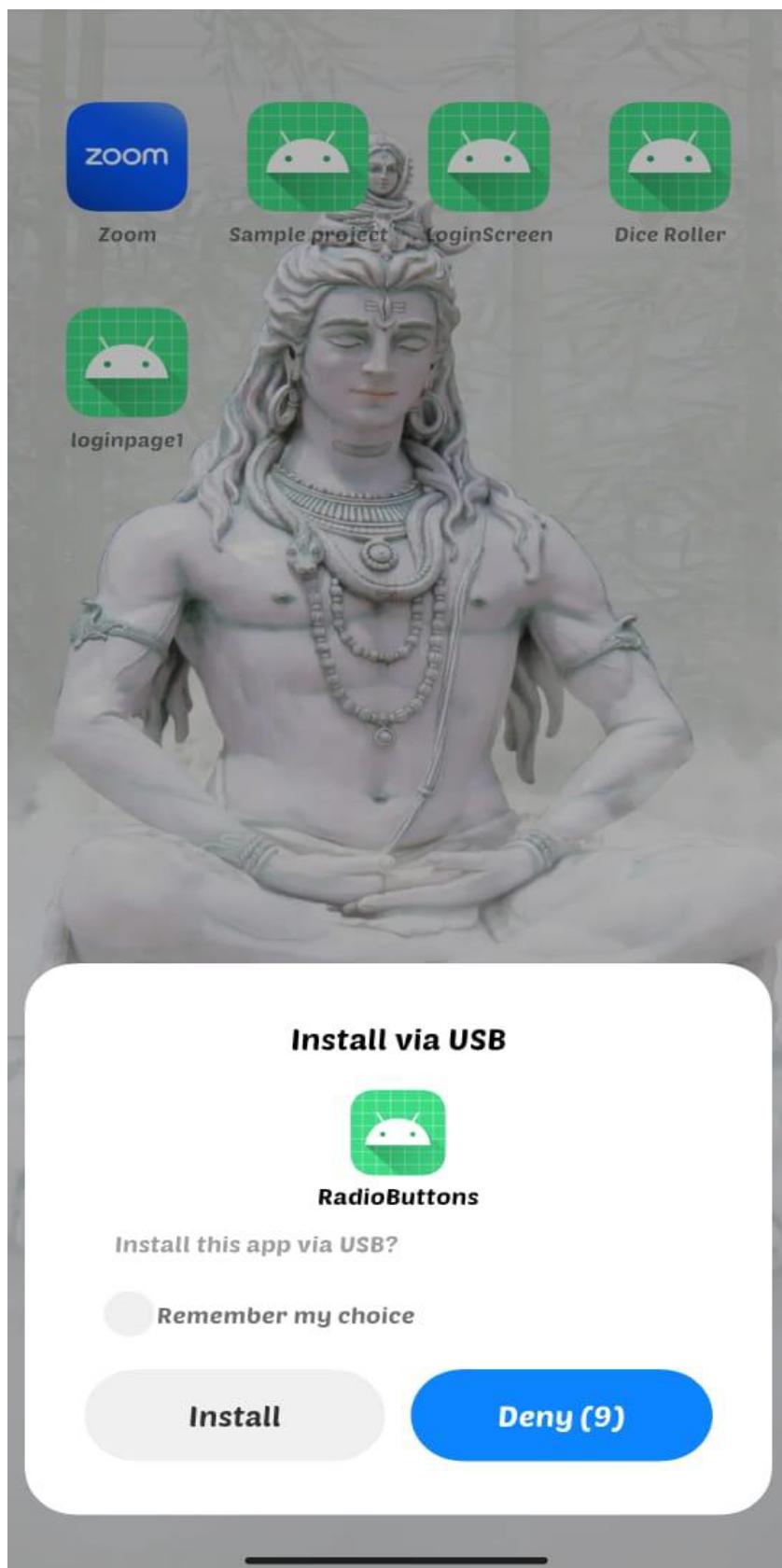
        else -> {
            // Handle the case where no option is
selected
        }
    },
    Modifier
        .padding(1.dp),
    // Decreased padding
) {
    Text("Click Here To Open The Website!!!", color =
Color.Black)
}

}
}
}
}

@Composable
fun RadioOption(
    text: String,
    selected: Boolean,
    onSelected: () -> Unit
) {
    Row(
        modifier = Modifier
            .fillMaxWidth()
            .padding(2.dp)
            .clickable { onSelected() },
        verticalAlignment = Alignment.CenterVertically // Align content
vertically
    ) {
        RadioButton(
            selected = selected,
            onClick = { onSelected() }
        )
        Spacer(modifier = Modifier.width(8.dp))
        Text(text)
    }
}
@OptIn(ExperimentalComposeUiApi::class)
@Composable
@Preview(showBackground = true)
fun PreviewMyApp() {
    MyApp()
}

```

Installing the app into device via USB

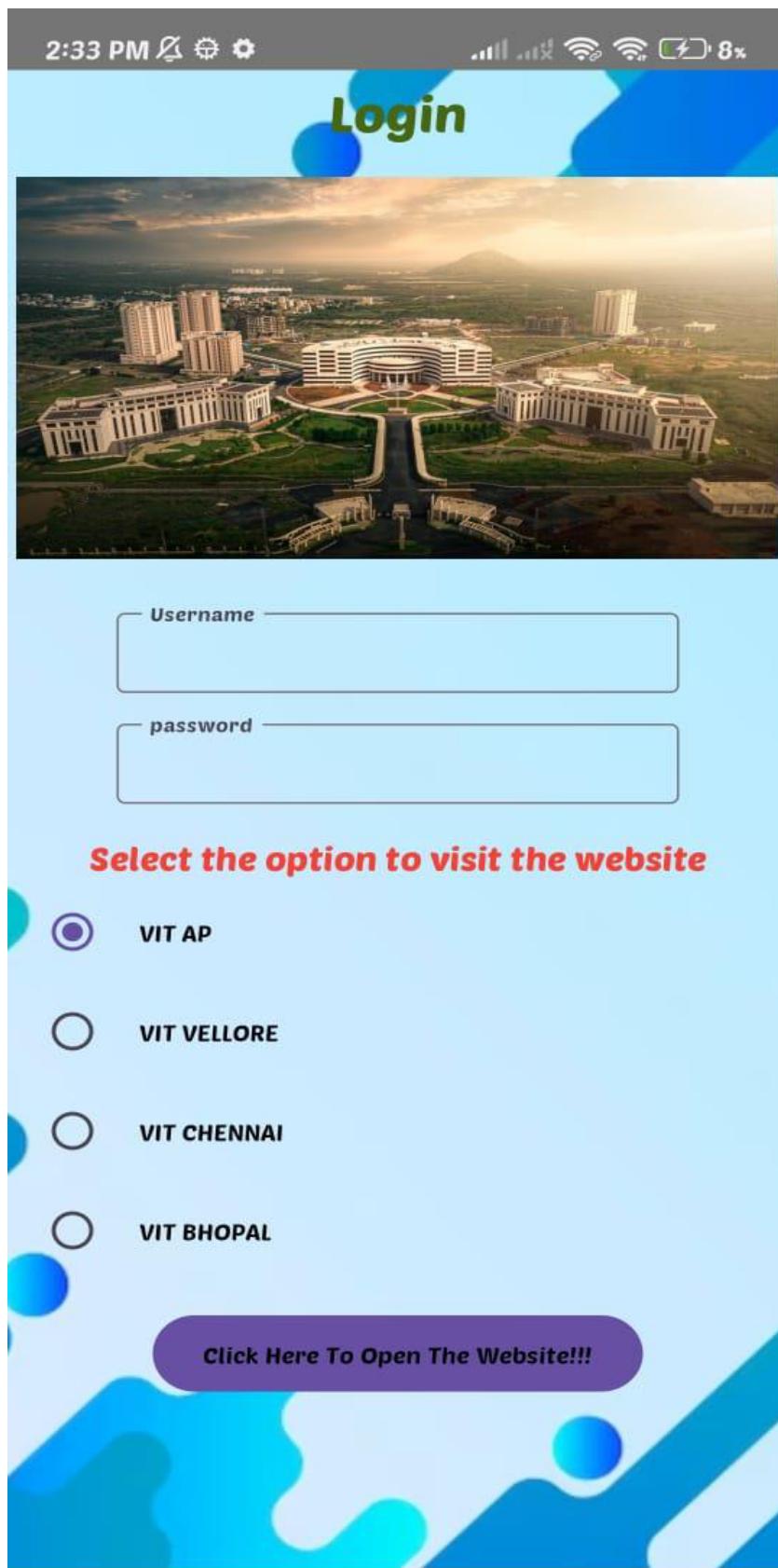


After Installation



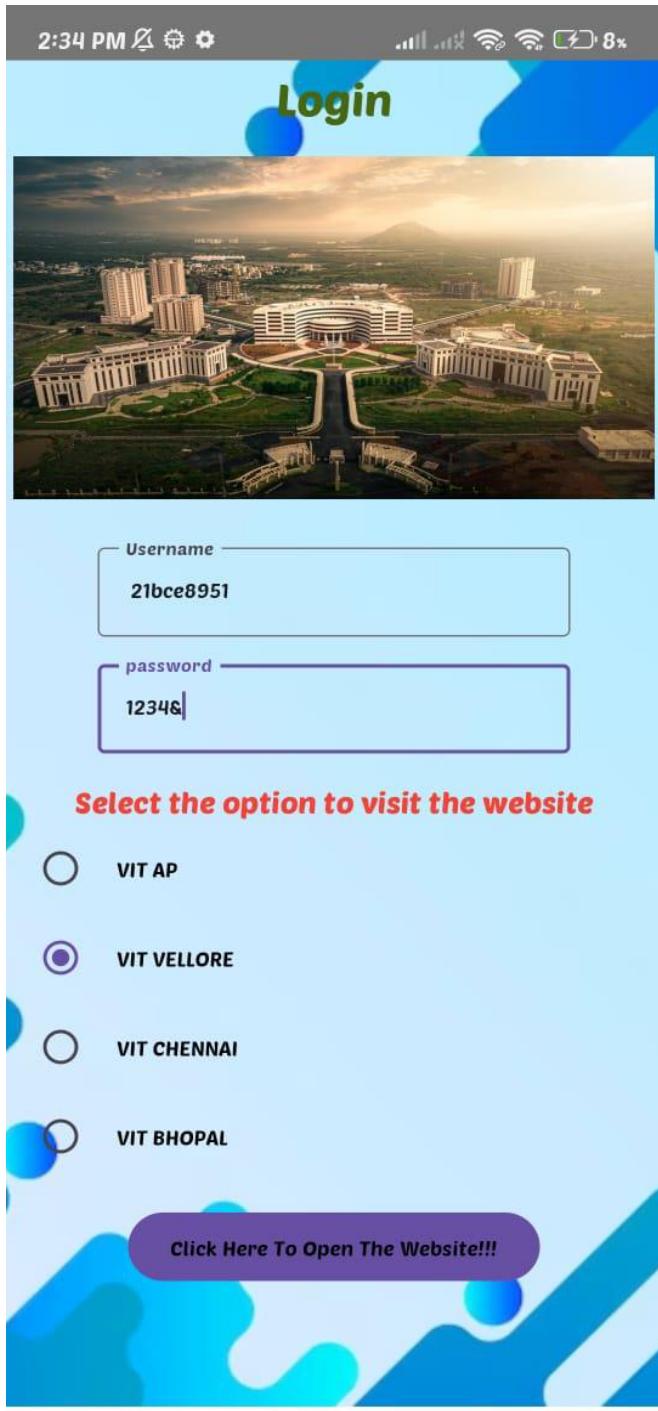


Intial Screen of the application





Redirecting to the respective web page after the credentials are provided



THE END

