

A Project Report on  
Owl-M: A Material Design Study App  
BACHELOER OF COMPUTER APPLICATION  
Saiva Bhanu Kshatriya Arts & Science College,  
(Affiliated to Madurai Kamaraj University)  
Aruppukottai-626101

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(Affiliated to Madurai Kamaraj University)  
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Submitted

BY

K. MUTHULAKSHMI (Reg.No:COS23655)

K. PAVITHRA (Reg.No:COS23656)

S. RAJALAKSHMI (Reg.No:COS23657)

N.RASMITHA (Reg.No:COS23658)

# **Project Report Template**

## **1.Introduction**

### **1.1 Overview**

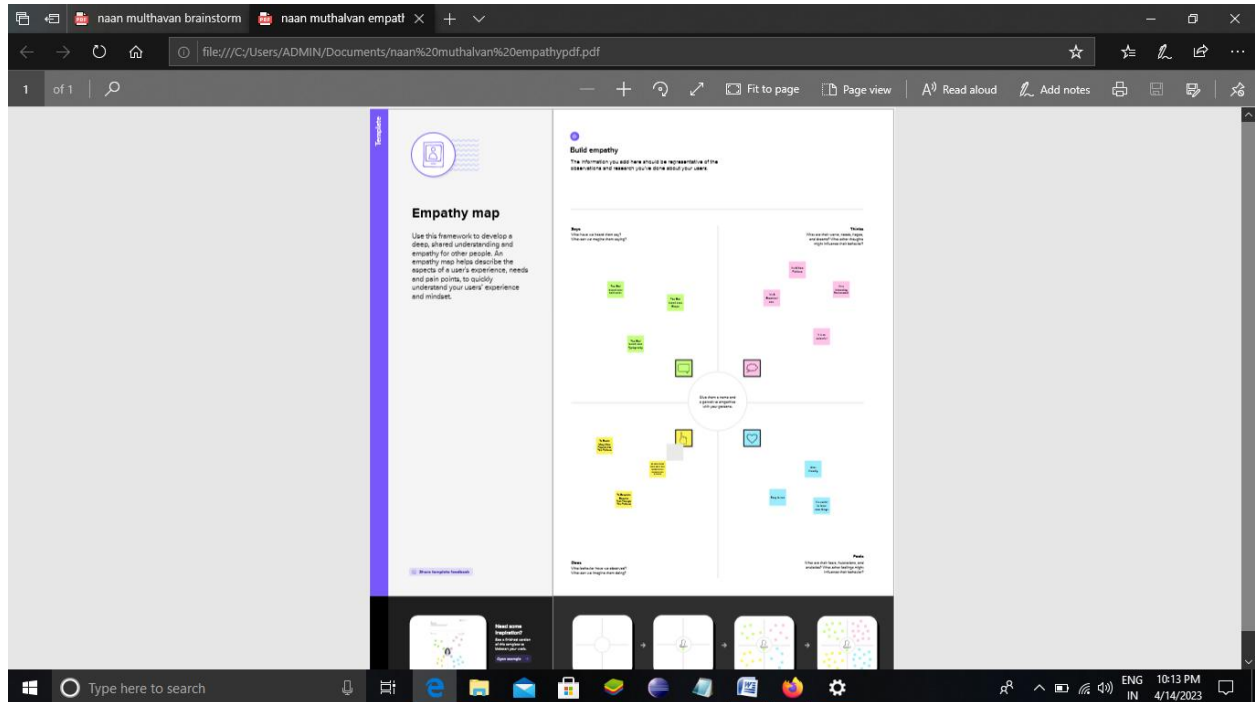
A Project that demonstrate the use of Android Jetpack compose to built a UI for a Owl-M: a material design study app. Owl-M app is a sample project built using the Android compose UI toolkit. A compose implementation of the Owl Material study.

### **1.2 Purpose**

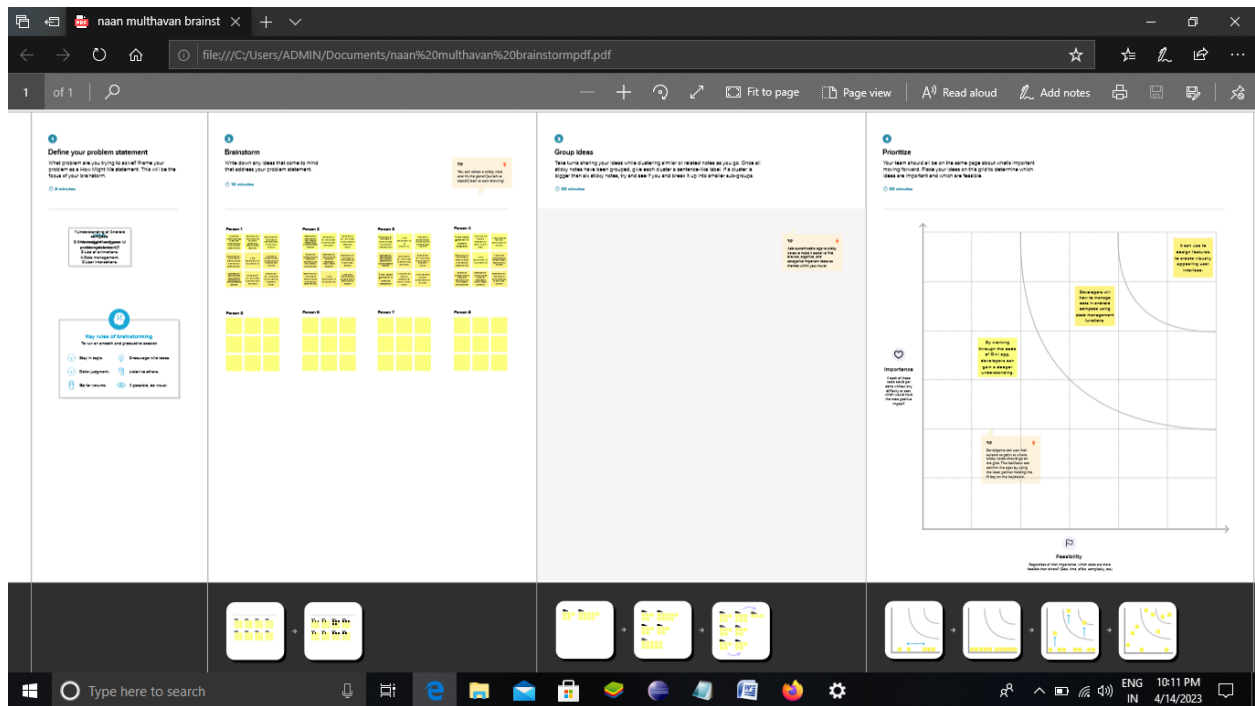
Material components are interactive building blocks for creating a user interface, and include a built-in states system to communicate focus, selection, activation, error, hover, press, drag, and disabled states. Components libraries are available for Android, IOS, Flutter, and the web.

## 2.Problem Definition & Design Thinking

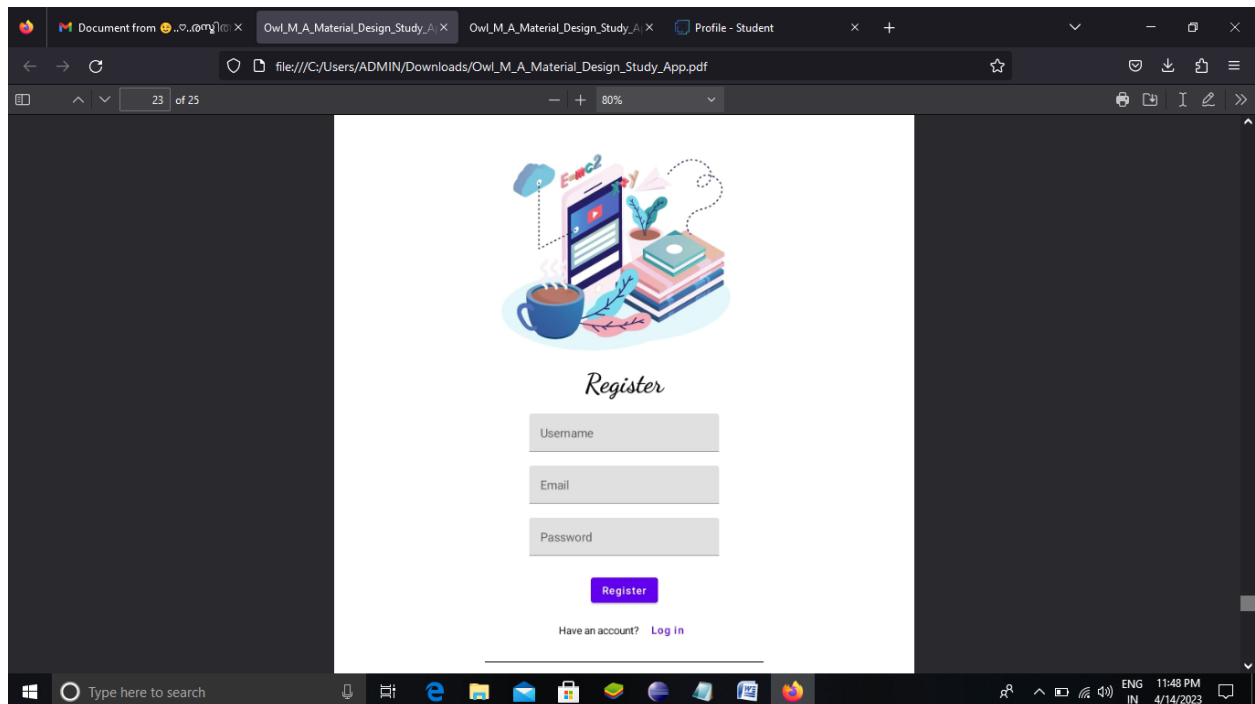
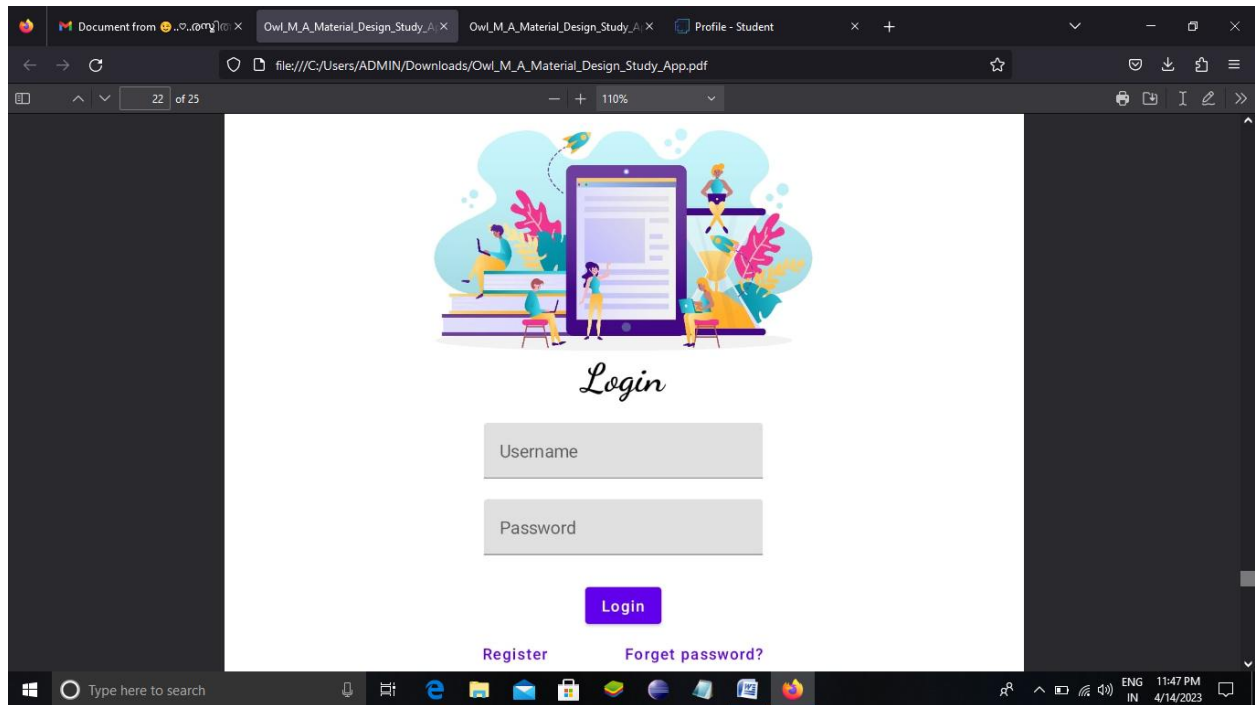
### 2.1 Empathy Map

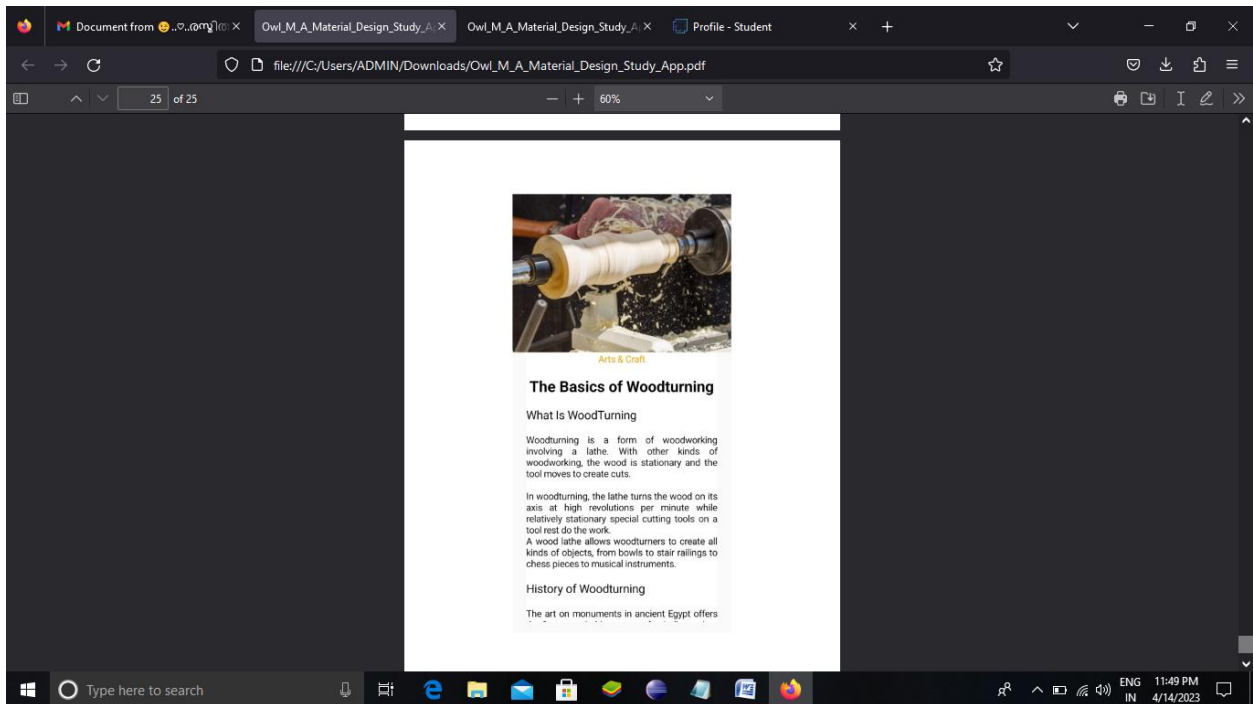
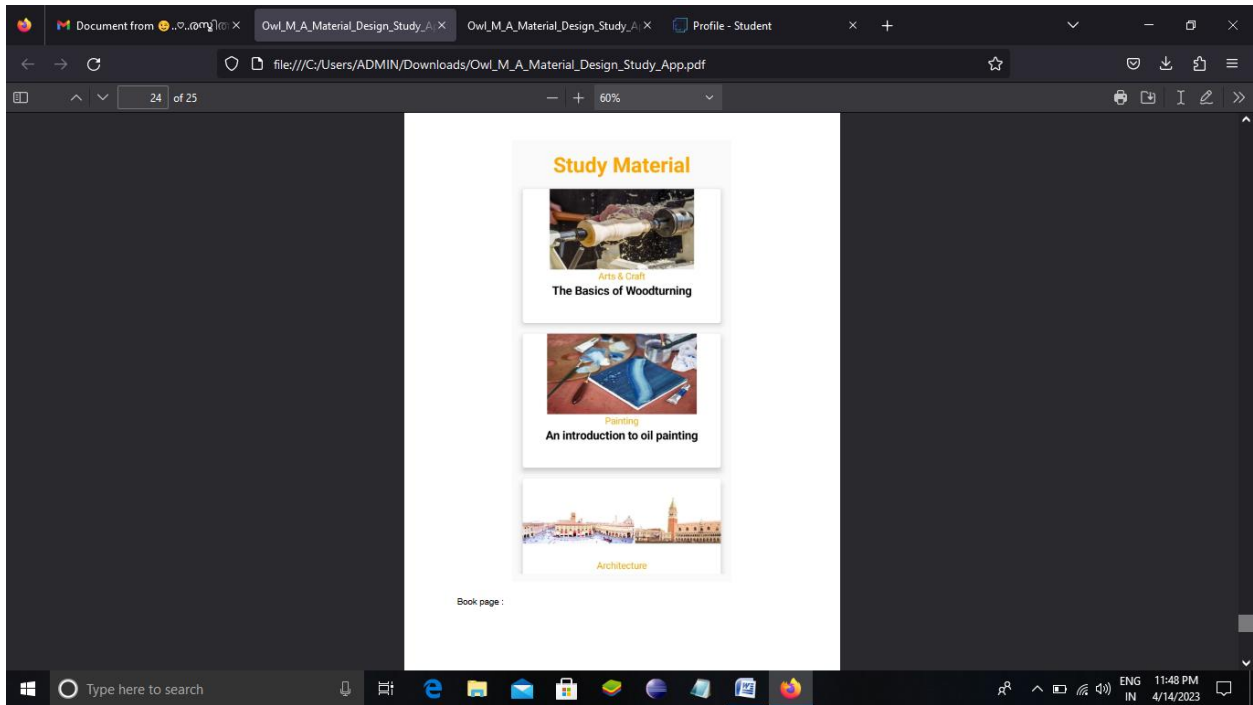


### 2.2 Ideation & Brainstorming Map



### 3.Result





## 4. Advantages & Disadvantages

Advantages:

All classes are live and teacher-led. There are no boring lectures, or recorded modules. You can ask question, get feedback, participate and communicate with students from different parts of the world.

Disadvantages:

- Elements such as floating action buttons can be superfluous.
- Designs only valid for Android devices.
- Heavily associated with Google with less room for branding.
- UIs designed without motion often lack intuitiveness.

## 5. Applications

Backed by open-source code, Material **streamlines collaboration between designers and developers, and helps teams quickly build beautiful products.**” In short, Material Design provides standards for designing UI and UX for applications across desktop, browser and mobile devices.

## 6. Conclusion

Conclusion wrap up what you have been discussing in your paper. After moving from general to specific information in the introduction and body paragraph, your conclusion should begin pulling back into more general information that restates the main points of your arguments. Conclusion may also called for action or overview future possible research.

## 7. Future scope

Electronic learning (e-learning) has been developed and become the most popular way of learning through the internet and electronic medium. E-learning Management System (ELMS) in Kurdistan Region-Iraq does not provide semantic

web and ontology as well; so building ontology and applying semantic web technology on ELMS are important. The main point of this paper is to design an ontology for E-learning Management System of Duhok Polytechnic University. Ontology is one of the important technologies of the semantic web used to organize the contents of the system. Our ELMS-DPU includes various tools and services such as Registration, Lecturer and Student. The system contains most of the E-learning features. Each of these services has a subsection as well and has been explained in this paper. The architecture of ELMS-DPU has been explained in details. Protégé application is used in order to design the ontology of the system, in addition to the VOWL plugin in Protégé which is used to visualize the elements in graphical depiction. In the future, there should be development and expansion of the ontology in order to improve the integrity in ELMS-DPU with other E-learning system and to implement the system an online server. For the future work, In order to make the ontology university more accurate and to get the data from the ontology SPARQL query will be used and DL query in protégé.

## 8. Appendix

### Source code

```
package com.example.owlapplication

import android.content.Context
import android.content.Intent
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.clickable
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.Card
import androidx.compose.material.Text
```

```

import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.scale
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.res.stringResource
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp

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

@Composable
fun StudyApp(context: Context) {

    Column(
        modifier = Modifier
            .padding(20.dp)
            .verticalScroll(rememberScrollState())
    ) {

        Text(text = "Study Material",
            fontSize = 36.sp,

```



```
        fontWeight = FontWeight.Bold,
        color = Color(0xFFFFFA500),
        modifier = Modifier.align(Alignment.CenterHorizontally))

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

// 01
Card(
    modifier = Modifier
        .fillMaxWidth()
        .height(250.dp)
        .clickable {
            context.startActivity(
                Intent(context, MainActivity2::class.java)
            )
        },
    elevation = 8.dp
)
{
    Column(
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Image(
            painterResource(id = R.drawable.img_1), contentDescription = "",
            modifier = Modifier
                .height(150.dp)
                .scale(scaleX = 1.2F, scaleY = 1F)
        )
        Text(text = stringResource(id = R.string.course1), color = Color(0xFFFFFA500),
            fontSize = 16.sp)
```

```

Text(
    text = stringResource(id = R.string.topic1),
    fontWeight = FontWeight.Bold,
    fontSize = 20.sp,
    textAlign = TextAlign.Center,
)
}
}

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

// 02

Card(
    modifier = Modifier
        .fillMaxWidth()
        .height(250.dp)
        .clickable {
            context.startActivity(
                Intent(context, MainActivity3::class.java)
            )
        },
    elevation = 8.dp
)
{
    Column(
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Image(
            painterResource(id = R.drawable.img_2), contentDescription = "",
            modifier = Modifier
                .height(150.dp)

```

```

        .scale(scaleX = 1.4F, scaleY = 1F)
    )
    Text(text = stringResource(id = R.string.course2),color = Color(0xFFFFFA500),
        fontSize = 16.sp)

    Text(
        text = stringResource(id = R.string.topic2),
        fontWeight = FontWeight.Bold,
        fontSize = 20.sp,
        textAlign = TextAlign.Center,
    )
}
}

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

// 03
Card(
    modifier = Modifier
        .fillMaxWidth()
        .height(250.dp)
        .clickable {
            context.startActivity(
                Intent(context, MainActivity4::class.java)
            )
        },
    elevation = 8.dp
)
{
    Column(
        horizontalAlignment = Alignment.CenterHorizontally
    ) {

```

```

Image(
    painterResource(id = R.drawable.img_3), contentDescription = "",
    modifier = Modifier
        .height(150.dp)
        .scale(scaleX = 1.2F, scaleY = 1F)
)
Text(text = stringResource(id = R.string.course3),color = Color(0xFFFFFA500),
    fontSize = 16.sp)

Text(
    text = stringResource(id = R.string.topic3),
    fontWeight = FontWeight.Bold,
    fontSize = 20.sp,
    textAlign = TextAlign.Center,
)
}
}

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

// 04
Card(
    modifier = Modifier
        .fillMaxWidth()
        .height(250.dp)
        .clickable {
            context.startActivity(
                Intent(context, MainActivity5::class.java)
            )
        },
    elevation = 8.dp

```

```
)

{
    Column(
        horizontalAlignment = Alignment.CenterHorizontally
    ) {
        Image(
            painterResource(id = R.drawable.img_4), contentDescription = "",
            modifier = Modifier
                .height(150.dp)
                .scale(scaleX = 1.2F, scaleY = 1F)
        )
        Text(text = stringResource(id = R.string.course4),color = Color(0xFFFFFA500),
            fontSize = 16.sp)

        Text(
            text = stringResource(id = R.string.topic4),
            fontWeight = FontWeight.Bold,
            fontSize = 20.sp,
            textAlign = TextAlign.Center,
        )
    }
}

}
```