ST JOHNS COLLEGE PALYAMKOTTAI

NAAN MUDHALVAN

KOTLIN

A Material Design Study App Project Based On Experiential Learning Algorithm

Submitted By:

Krithika SK

Siva Priya G

Gayathri R

Jeya Priya G

Sheeba Jeba Christy S

PROJECT REPORT

A – Material Design Study App

1. Introduction

1.1. Overview

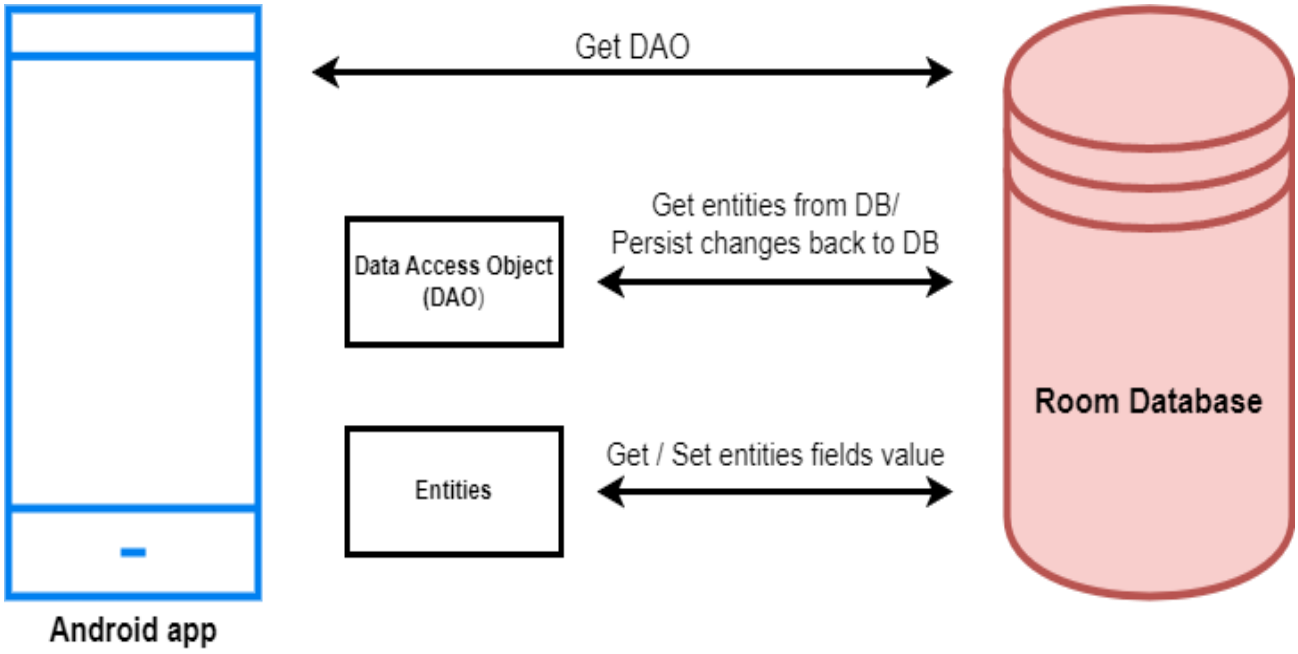
A Material Design Study App is a software application , Use Material studies to inspire your own adoption of Material Theming and components. These studies explore real-world design and product limitations through the examination of a set of fictional apps, each designed with unique properties and use cases. Each study illustrates how multiple design decisions are made and how different brands express themselves across a variety of product categories.

A dedicated page explains the rationale behind each Material Study's design.

1.2. Purpose

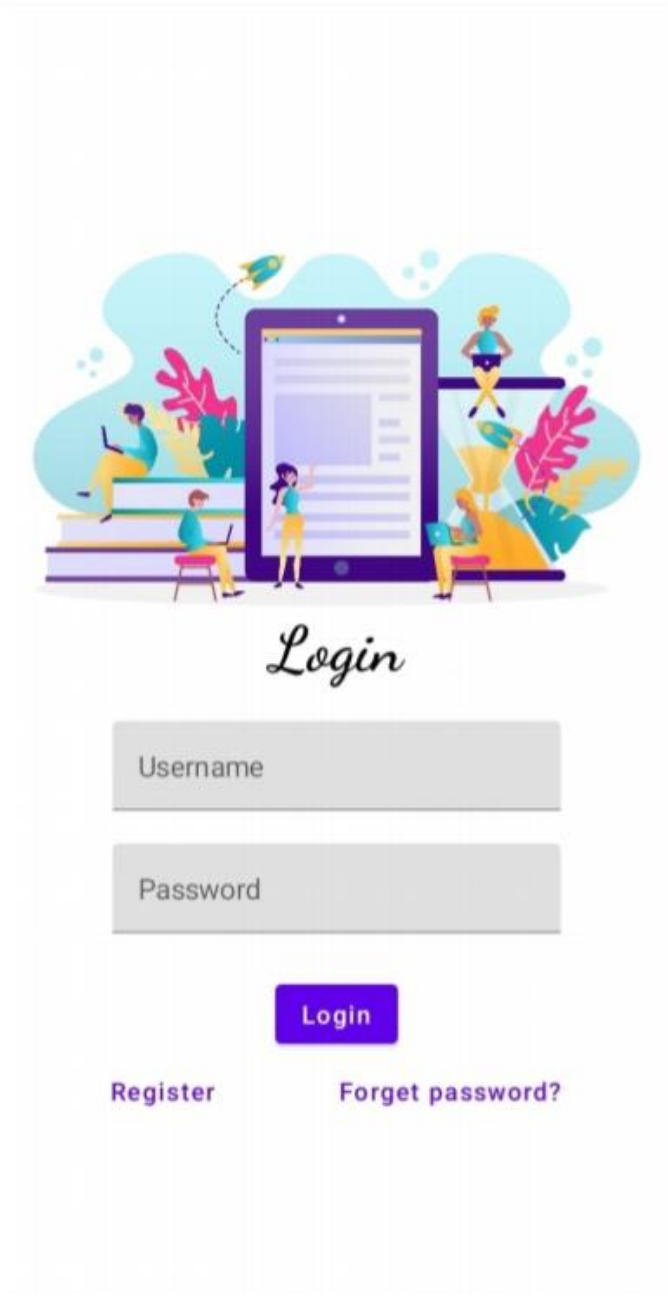
The propose of Study material generally assists the students to enhance their learning process. This encourages students to learn new concepts that significantly enhance their knowledge. If you are a student and preparing for exams you need study material that can help you clear the exam.

2. Architecture

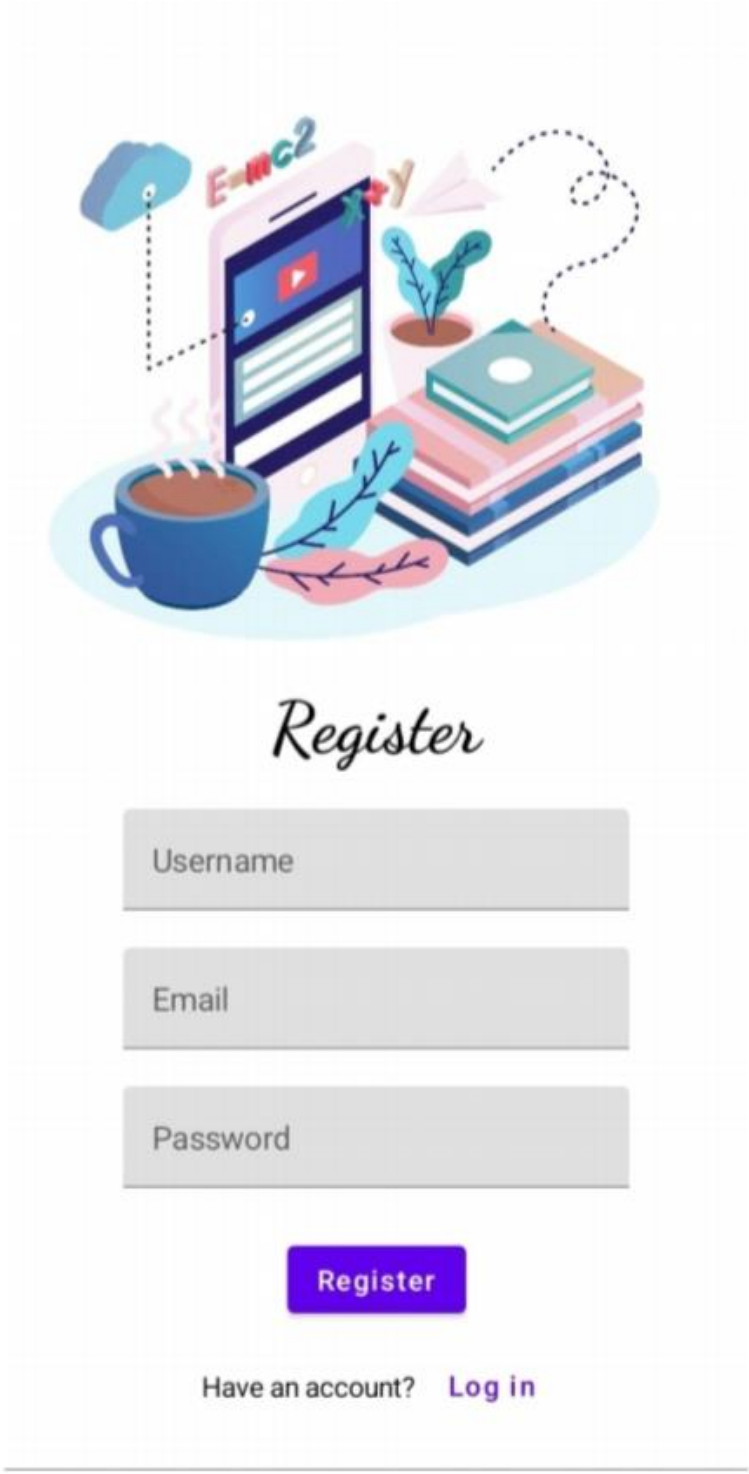


3. Result

3.1 Login Page :



3.2 Register Page :


E=mc2
Register
Username
Email
Password
Register
Have an account? Log in

3.3 Output :


Study Material
Arts & Craft
The Basics of Woodturning
Painting
An introduction to oil painting
Architecture

3.4. Book Page

Arts & Craft

The Basics of Woodturning

What Is WoodTurning

Woodturning is a form of woodworking involving a lathe. With other kinds of woodworking, the wood is stationary and the tool moves to create cuts.

In woodturning, the lathe turns the wood on its axis at high revolutions per minute while relatively stationary special cutting tools on a tool rest do the work.
A wood lathe allows woodturners to create all kinds of objects, from bowls to stair railings to chess pieces to musical instruments.

History of Woodturning

The art on monuments in ancient Egypt offers

4.Advantages :

Easy to use:

A simple study app is easy to use, navigate, and understand. Users can quickly find the study material they went to read to, and access them without any confusion or frustration.

Saves time:

A simple study app can we saave users a lot of time by providing them with a streamlined users experience. Users can quickly find and access the study material they want to save to without having to spend a lot of time searching for them.

Enhanced user experience:

A simple study app with a login page, signup page, Book page with some study material , and for each study page can provide users with a more engaging and personalized experience.

5. Disadvantages :

Limited features:

A simple study app with only basic features may not meet the needs of all users, especially those who are looking for more advanced features .

Lack of differentiation:

A simple study app with a basic design and limited features may not stand out in a crowded marketplace, making it harder to attract and retain users.

Limited Scalability:

A simple study app with a limited set of features may not be able to handle a large user base or high level of traffic, potentially limiting its scalability and ability to grow.

Limited user data:

A simple study app with limited features may not collect enough user data to provide personalized

recommendations or improve the user experience over time .

6. Application:

User-friendly interface: The application should have and intuitive interface that allows users to easily search for and listen to podcasts.

Login and sign-up pages: Users should be able to create an account or log in to access the study material.

Education:

Study app are also being used in education, allowing students and teachers to learning outside of the classroom , share information, and collaborate on the project.

7. **Conclusion:**

Using online tools and technologies, experiential learning encourages students to enhance their knowledge and skills, it allows student to learn using impactful methods and tactics that are impossible to do with traditional classroom studies. So having hands –on technology and innovation students and teachers alike can benefit from experiential leaning opportunities in the classroom as well as in online learning.

8. Appendix:

LoginActivity.kt

Package com.momo.luna

Import com.momo.luna.ui.theme.LunaTheme

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.background

Import androidx.compose.foundation.layout.*

Import androidx.compose.material.*

Import androidx.compose.runtime.*

Import androidx.compose.ui.Alignment

Import androidx.compose.ui.Modifier

Import androidx.compose.ui.graphics.Color

Import androidx.compose.ui.layout.ContentScale

Import androidx.compose.ui.res.painterResource

Import androidx.compose.ui.text.font.FontFamily

Import androidx.compose.ui.text.font.FontWeight

Import androidx.compose.ui.text.input.PasswordVisualTransformation

Import androidx.compose.ui.tooling.preview.Preview

Import androidx.compose.ui.unit.dp

Import androidx.compose.ui.unit.sp

Import androidx.core.content.ContextCompat

```
Class LoginActivity : ComponentActivity() {
   Private lateinit var databaseHelper:
UserDatabaseHelper
   Override fun onCreate(savedInstanceState: Bundle?)
{
      Super.onCreate(savedInstanceState)
      databaseHelper = UserDatabaseHelper(this)
      setContent {
         LoginScreen(this, databaseHelper)
      }
   }
}
@Composable
Fun LoginScreen(context: Context, databaseHelper:
UserDatabaseHelper) {

   Var username by remember { mutableStateOf(“”) }
   Var password by remember { mutableStateOf(“”) }
```

```
Var error by remember { mutableStateOf("") }


Column(
    Modifier = Modifier.fillMaxSize().background(Color.White),
    horizontalAlignment = Alignment.CenterHorizontally,
    verticalArrangement = Arrangement.Center
) {

    Image(painterResource(id = R.drawable.study_login), contentDescription = "")

    Text(
        fontSize = 36.sp,
        fontWeight = FontWeight.ExtraBold,
        fontFamily = FontFamily.Cursive,
        text = "Login"
```

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

        TextField(
            Value = username,
            onValueChange = { username = it },
            label = { Text("Username") },
            modifier = Modifier.padding(10.dp)
                .width(280.dp)
        )

        TextField(
            Value = password,
            onValueChange = { password = it },
            label = { Text("Password") },
            visualTransformation =
PasswordVisualTransformation(),
            modifier = Modifier.padding(10.dp)
```

```
            .width(280.dp)
        )

        If (error.isNotEmpty()) {
            Text(
                Text = error,
                Color = MaterialTheme.colors.error,
                Modifier = Modifier.padding(vertical = 16.dp)
            )
        }

        Button(
            onClick = {
                if (username.isNotEmpty() &&
password.isNotEmpty()) {
                    val user =
databaseHelper.getUserByUsername(username)
```

```
            if (user != null && user.password ==
password) {
                error = “Successfully log in”
                context.startActivity(
                    Intent(
                        Context,
                        MainActivity::class.java
                    )
                )
                //onLoginSuccess()
            }
            Else {
                Error =  “Invalid username or password”
            }

        } else {
            Error = “Please fill all fields”
        }
```

```
    },
    Modifier = Modifier.padding(top = 16.dp)
) {
    Text(text = “Login”)
}
Row {
    TextButton(onClick = {context.startActivity(
        Intent(
            Context,
            RegisterActivity::class.java
        )
    )}
    )
    { Text(text = “Register”) }
    TextButton(onClick = {
    })
```

```
            {
                Spacer(modifier = Modifier.width(60.dp))
                Text(text = “Forget password?”)
            }
        }
    }
}
Private fun startMainPage(context: Context) {
    Val intent = Intent(context, MainActivity::class.java)
    ContextCompat.startActivity(context, intent, null)
}
```