K Niranjana

20BCE1389

Smartbridge Externship Programme

Android App Development with Kotlin

Week - 3

Simple App with Youtube API,NavHost and Lazy Column

Main Activity

package com.example.niranjana\_assgn3  
  
import android.content.Context  
import android.os.Bundle  
import android.util.Log.e  
import androidx.activity.ComponentActivity  
import androidx.activity.compose.setContent  
import androidx.compose.foundation.Image  
import androidx.compose.foundation.clickable  
import androidx.compose.foundation.layout.Column  
import androidx.compose.foundation.layout.Row  
import androidx.compose.foundation.layout.Spacer  
import androidx.compose.foundation.layout.aspectRatio  
import androidx.compose.foundation.layout.fillMaxSize  
import androidx.compose.foundation.layout.height  
import androidx.compose.foundation.layout.padding  
import androidx.compose.foundation.layout.width  
import androidx.compose.foundation.lazy.LazyColumn  
import androidx.compose.foundation.lazy.items  
import androidx.compose.material3.Card  
import androidx.compose.material3.MaterialTheme  
import androidx.compose.material3.Surface  
import androidx.compose.material3.Text  
import androidx.compose.runtime.Composable  
import androidx.compose.ui.Modifier  
import androidx.compose.ui.input.key.Key.Companion.*Home*import androidx.compose.ui.platform.*LocalContext*import androidx.compose.ui.res.painterResource  
import androidx.compose.ui.tooling.preview.Preview  
import androidx.compose.ui.unit.dp  
import androidx.compose.ui.unit.sp  
import androidx.compose.ui.viewinterop.AndroidView  
import androidx.navigation.NavController  
import androidx.navigation.compose.NavHost  
import androidx.navigation.compose.composable  
import androidx.navigation.compose.rememberNavController  
import com.example.niranjana\_assgn3.ui.theme.Niranjana\_Assgn3Theme  
import com.pierfrancescosoffritti.androidyoutubeplayer.core.player.YouTubePlayer  
import com.pierfrancescosoffritti.androidyoutubeplayer.core.player.listeners.AbstractYouTubePlayerListener  
import com.pierfrancescosoffritti.androidyoutubeplayer.core.player.views.YouTubePlayerView  
  
class MainActivity : ComponentActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 *setContent* **{** Niranjana\_Assgn3Theme **{** *// A surface container using the 'background' color from the theme* Surface(  
 modifier = Modifier.*fillMaxSize*(),  
 color = MaterialTheme.colorScheme.primary  
 ) **{**App(*applicationContext*)**}  
 }  
 }** }  
}  
  
@Composable  
fun App(context: Context) {  
 val navController = rememberNavController()  
 NavHost(navController = navController, startDestination = "home")  
 **{** *composable*("home")  
 **{** Listofvid(navController)  
 **}** *composable*("nextp/{id}/{name}/{desc}")  
 **{** backStackEntry **->** val id=backStackEntry.arguments?.getString("id")  
 val name=backStackEntry.arguments?.getString("name")  
 val desc=backStackEntry.arguments?.getString("desc")  
 Nextpage(id,name,desc)  
  
 **}  
 }**}  
  
  
@Composable  
fun YoutubeScreen(  
 videoId: String  
) {  
 val ctx = *LocalContext*.current  
 AndroidView(factory = **{** var view = YouTubePlayerView(**it**)  
 val fragment = view.addYouTubePlayerListener(  
 object : AbstractYouTubePlayerListener() {  
 override fun onReady(youTubePlayer: YouTubePlayer) {  
 super.onReady(youTubePlayer)  
 youTubePlayer.loadVideo(videoId, 0f)  
 }  
 }  
 )  
 view  
 **}**)  
}  
  
@Composable  
fun Nextpage(id:String?,name:String?,desc:String?)  
{  
 val idy: String = id ?: ""  
 Column(modifier=Modifier.*padding*(20.*dp*)) **{** Spacer(modifier = Modifier.*height*(20.*dp*))  
 Text(name ?: " ", fontSize = 30.*sp*)  
 Spacer(modifier = Modifier.*height*(20.*dp*))  
 YoutubeScreen(idy)  
 Spacer(modifier = Modifier.*height*(20.*dp*))  
 Text(desc ?: " ", fontSize = 20.*sp*)  
 **}**}  
  
@Composable  
fun Listofvid(navController: NavController) {  
 val dataList = *listOf*(  
 YTCard("Elemental", "hXzcyx9V0xw", "This Summer, meet the residents of Element City",R.drawable.*ele*),  
 YTCard(  
 "Barbie",  
 "hNEmArEojhI",  
 "To live in Barbie Land is to be a perfect being in a perfect place."  
 ,R.drawable.*bb* ),  
 YTCard(  
 "SpiderMan",  
 "yEU\_jRepaQg",  
 "Miles Morales returns for the next chapter of the Spider-Verse saga",  
 R.drawable.*sm* ),  
 YTCard("Oppenheimer","bK6ldnjE3Y0","Written and directed by Christopher Nolan, Oppenheimer is an IMAX®-shot epic thriller that thrusts audiences into the pulse-pounding paradox of the enigmatic man who must risk destroying the world in order to save it. "  
 ,R.drawable.*opp*)  
 )  
  
 Column() **{** Text("K Niranjana 20BCE1389", fontSize = 30.*sp*)  
 Text("Youtube API : Simple Movie Trailers Display", fontSize = 20.*sp*)  
 LazyColumn()  
 **{** *items*(dataList) **{** data **->** VidCard(data,navController)  
  
 **}  
 }  
 }**}  
  
data class YTCard(  
 val name : String = "",  
 val ytid : String = "",  
 val desc : String = "",  
 val img : Int  
 )  
  
@Composable  
fun VidCard(data: YTCard,navController: NavController)  
{  
 val video: String = data.ytid  
 val vname: String = data.name  
 val vdesc: String = data.desc  
 Card(modifier= Modifier.*clickable***{**navController.navigate("nextp/$video/$vname/$vdesc")**}**.*padding*(10.*dp*)) **{** Row() **{** Image(painter = painterResource(id = data.img), contentDescription = data.name,modifier=Modifier.*width*(100.*dp*))  
 Column() **{** Text(data.name, fontSize = 30.*sp*)  
 Spacer(modifier = Modifier.*height*(10.*dp*))  
 Text(data.desc, fontSize = 20.*sp*)  
 **}  
 }  
  
 }**}