Name: Rahul Kumar S

RegNo: 20BCE1878

Code:

MainActivity.kt

```
package com.plcoding.videoplayercompose
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.rememberLauncherForActivityResult
import androidx.activity.compose.setContent
import androidx.activity.result.contract.ActivityResultContracts
import androidx.compose.foundation.clickable
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.lazy.LazyColumn
import androidx.compose.foundation.lazy.items
import androidx.compose.material.*
import androidx.compose.material.icons.Icons
import androidx.compose.material.icons.filled.FileOpen
mport androidx.compose.runtime.*
import androidx.compose.ui.Modifier
import androidx.compose.ui.platform.LocalLifecycleOwner
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.viewinterop.AndroidView
import androidx.hilt.navigation.compose.hiltViewModel
import androidx.lifecycle.Lifecycle
import androidx.lifecycle.LifecycleEventObserver
import androidx.lifecycle.LifecycleOwner
import androidx.media3.ui.PlayerView
import com.plcoding.videoplayercompose.ui.theme.VideoPlayerComposeTheme
import dagger.hilt.android.AndroidEntryPoint
@AndroidEntryPoint
class MainActivity : ComponentActivity() {
 override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContent {
       VideoPlayerComposeTheme {
         val viewModel = hiltViewModel < MainViewModel > ()
         val videoItems by viewModel.videoItems.collectAsState()
         val selectVideoLauncher = rememberLauncherForActivityResult(
           contract = ActivityResultContracts.GetContent(),
           onResult = { uri ->
              uri?.let(viewModel::addVideoUri)
         var lifecycle by remember {
           mutableStateOf(Lifecycle.Event.ON_CREATE)
         val lifecycleOwner = LocalLifecycleOwner.current
         DisposableEffect(lifecycleOwner) {
           val observer = LifecycleEventObserver { _, event ->
           lifecycleOwner.lifecycle.addObserver(observer)
```

```
onDispose {
    lifecycleOwner.lifecycle.removeObserver(observer)
  modifier = Modifier
    .fillMaxSize()
    .padding(16.dp)
){
  AndroidView(
    factory = { context ->
       PlayerView(context).also {
         it.player = viewModel.player
       when (lifecycle) {
         Lifecycle.Event.ON_PAUSE -> {
            it.onPause()
            it.player?.pause()
         Lifecycle.Event.ON_RESUME -> {
            it.onResume()
    modifier = Modifier
       .fillMaxWidth()
       .aspectRatio(16 / 9f)
  Spacer(modifier = Modifier.height(8.dp))
    selectVideoLauncher.launch("video/mp4")
  }) {
  Spacer(modifier = Modifier.height(16.dp))
  LazyColumn(
    modifier = Modifier.fillMaxWidth()
    items(videoItems) { item ->
         modifier = Modifier
            .fillMaxWidth()
            .clickable {
              viewModel.playVideo(item.contentUri)
            .padding(16.dp)
```

```
}
}
}
```

MainViewModel.kt

```
package com.plcoding.videoplayercompose
import android.net.Uri
import androidx.lifecycle.SavedStateHandle
import androidx.lifecycle.ViewModel
import androidx.lifecycle.viewModelScope
import androidx.media3.common.MediaItem
import androidx.media3.common.Player
import dagger.hilt.android.lifecycle.HiltViewModel
import kotlinx.coroutines.flow.SharingStarted
import kotlinx.coroutines.flow.map
import javax.inject.Inject
@HiltViewModel
class MainViewModel @Inject constructor(
  private val savedStateHandle: SavedStateHandle,
  val player: Player,
  private val metaDataReader: MetaDataReader
): ViewModel() {
  private val videoUris = savedStateHandle.getStateFlow("videoUris", emptyList<Uri>())
  val videoItems = videoUris.map { uris ->
    uris.map { uri ->
       VideoItem(
         contentUri = uri.
         mediaItem = MediaItem.fromUri(uri),
         name = metaDataReader.getMetaDataFromUri(uri)?.fileName ?: "No name"
  }.stateIn(viewModelScope, SharingStarted.WhileSubscribed(5000), emptyList())
  init {
    player.prepare()
  fun addVideoUri(uri: Uri) {
    player.addMediaItem(MediaItem.fromUri(uri))
  fun playVideo(uri: Uri) {
    player.setMediaItem(
       videoItems.value.find { it.contentUri == uri }?.mediaItem ?: return
  override fun onCleared() {
    super.onCleared()
```

Output

