

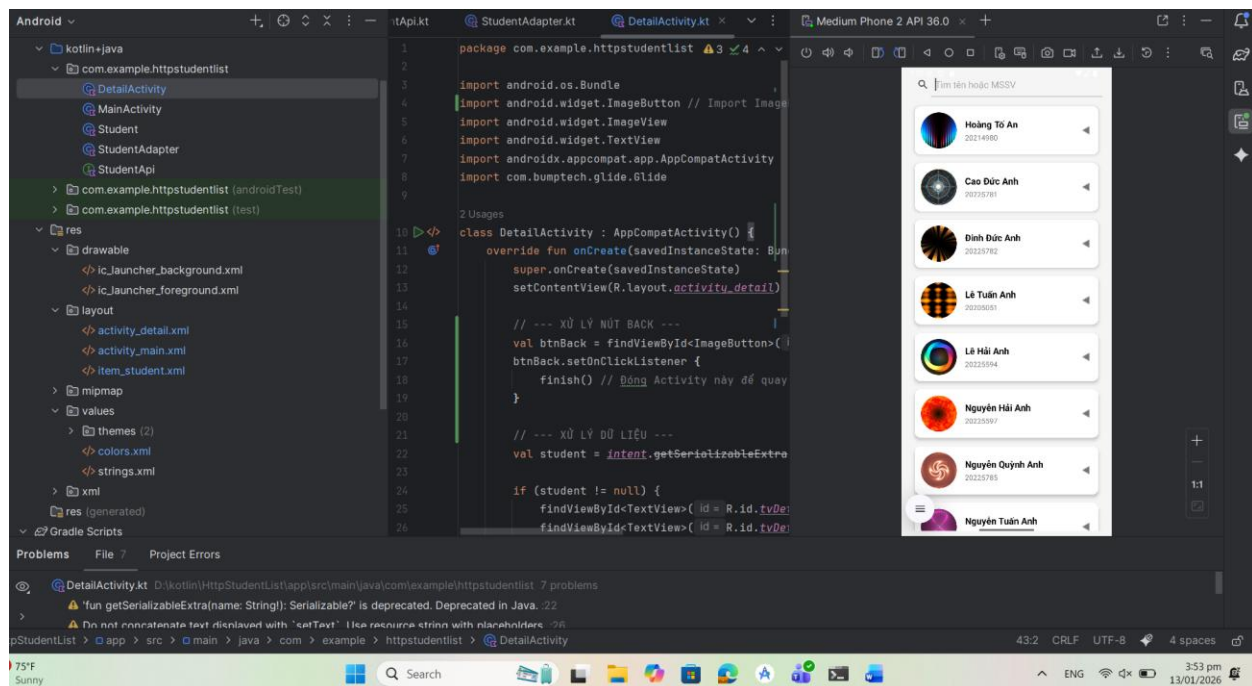
Họ và tên : Võ Anh Khôi

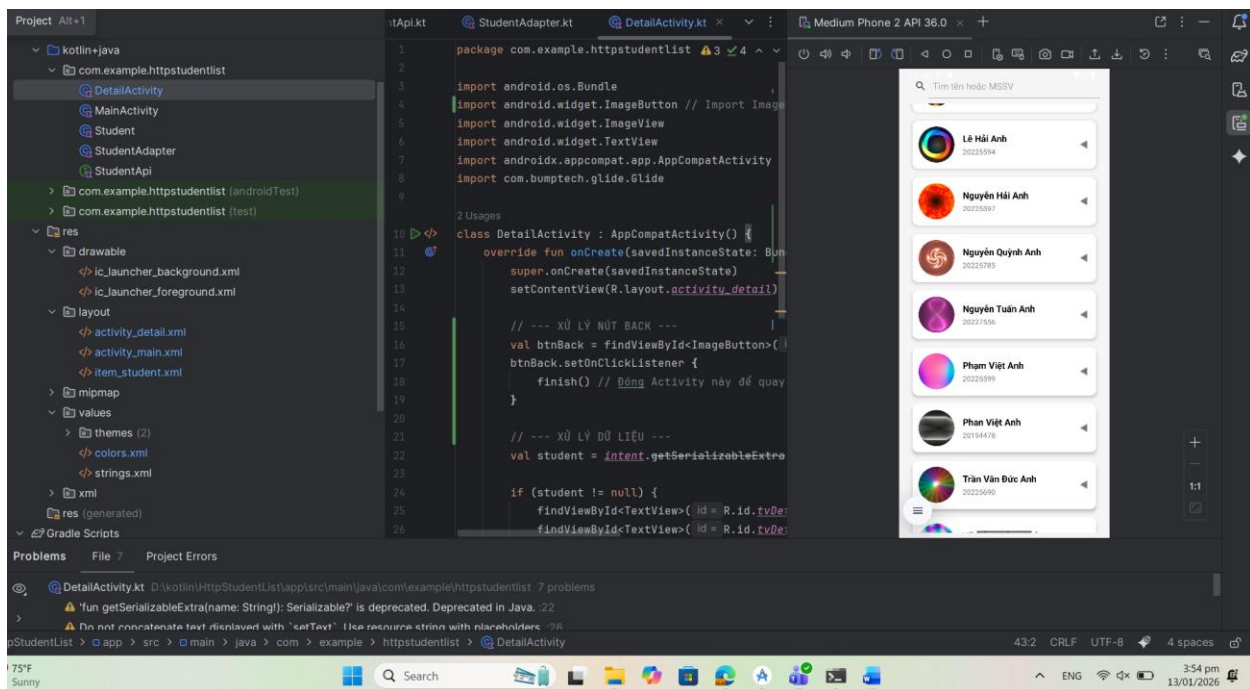
MSSV: 20225870

Báo cáo bài tập internet Json

13/01/2026

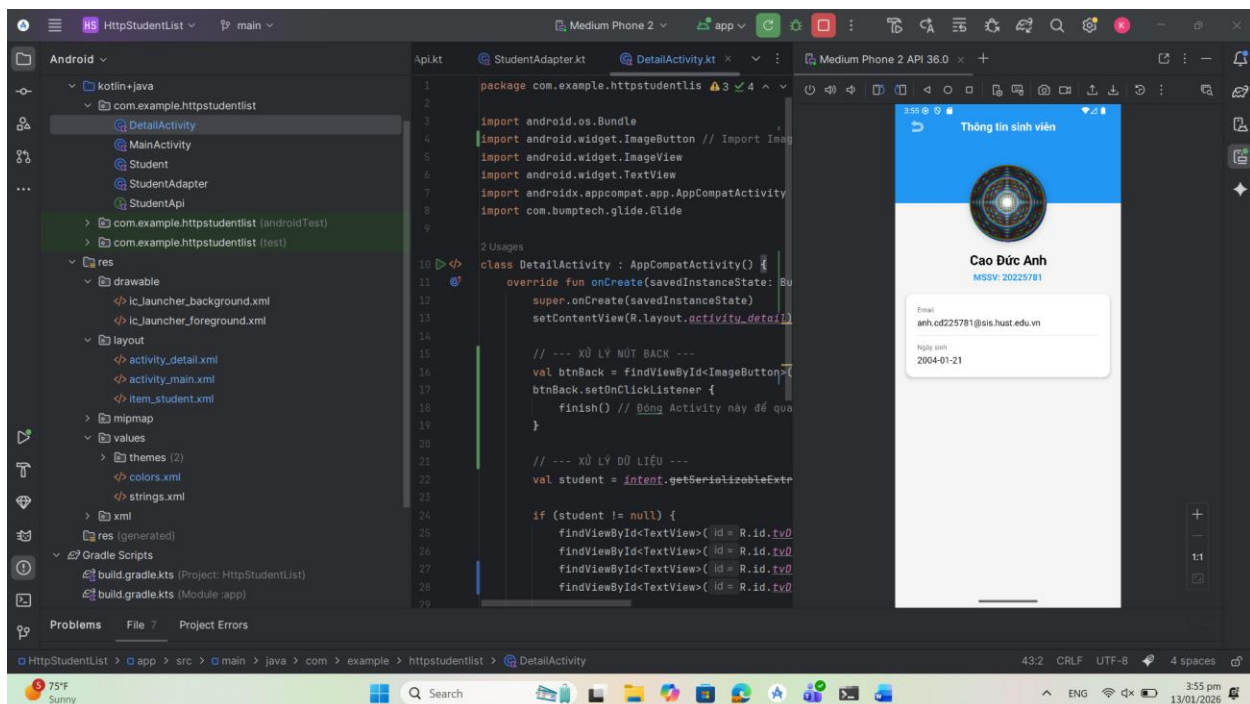
Màn hình chính



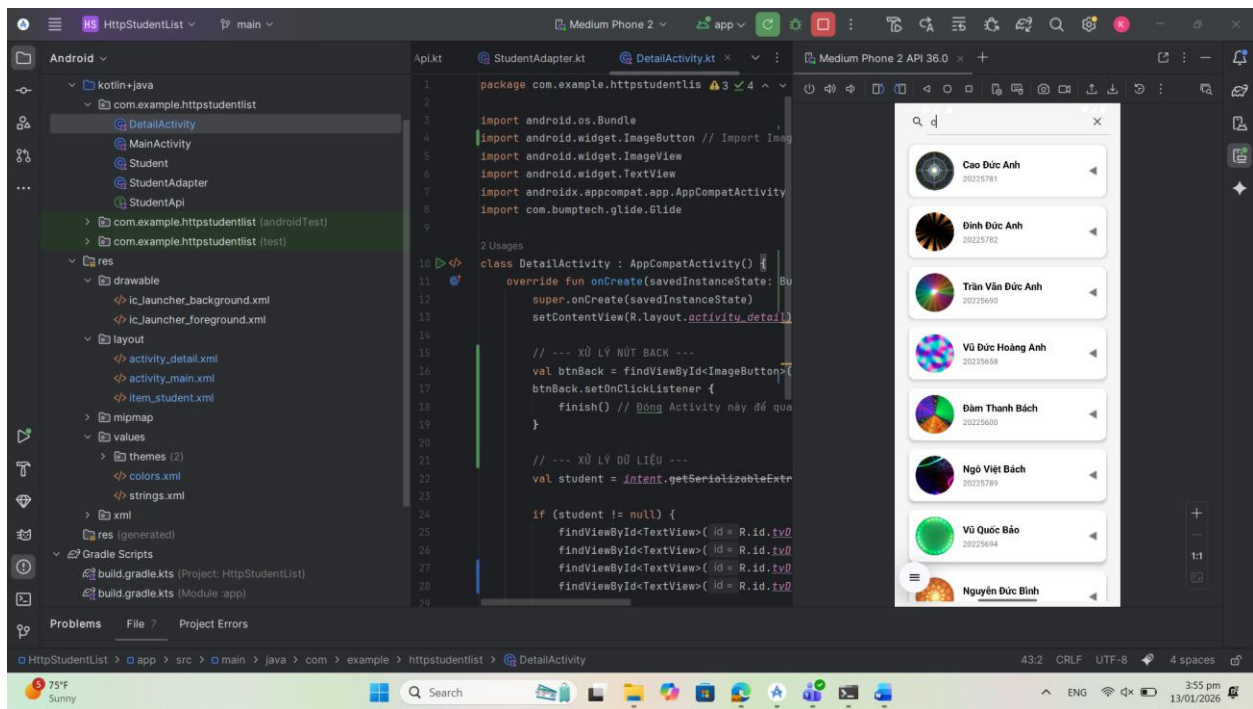


Màn hình chi tiết sinh viên

Có thêm nút Back để xử lý ra ngoài

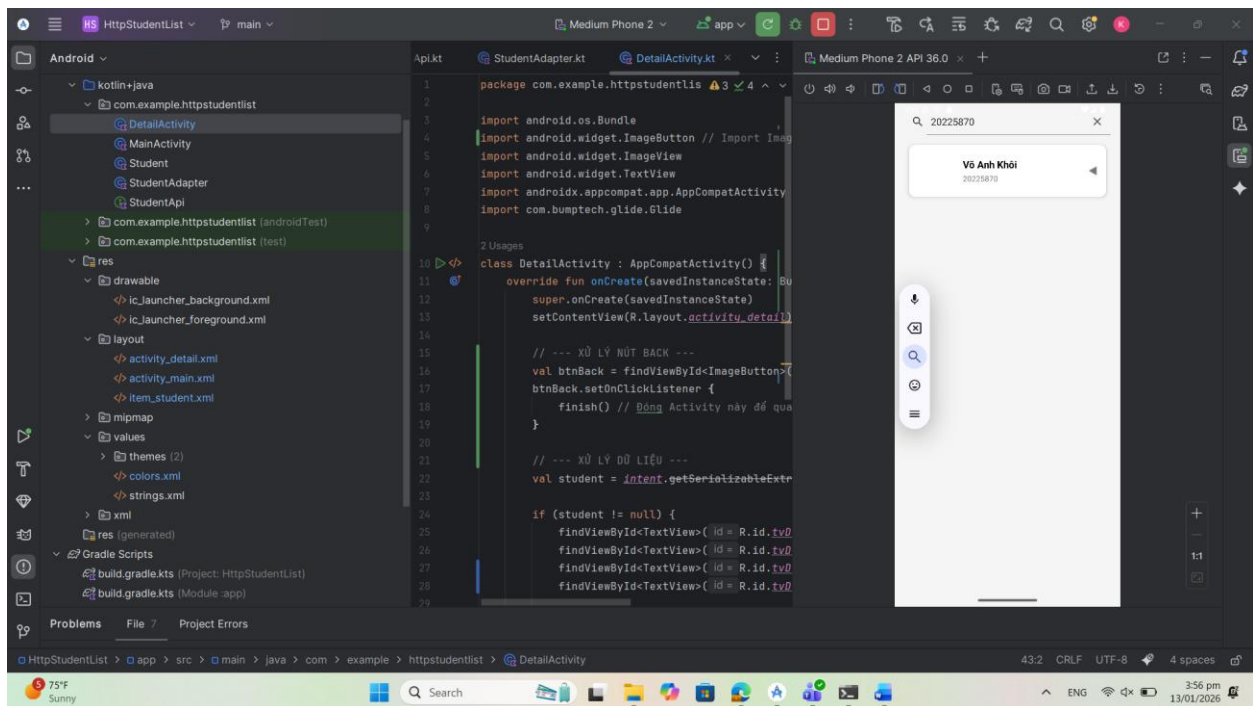


Tìm kiếm theo tên

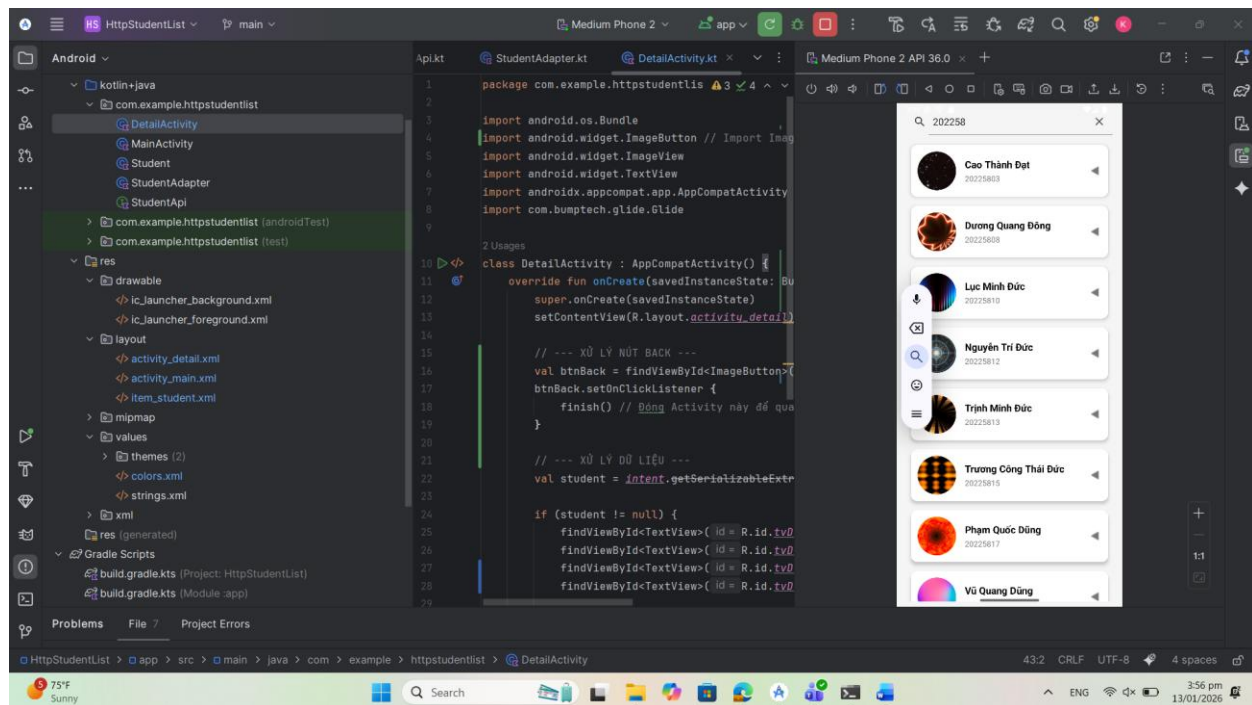


Tìm kiếm bằng mssv

Mssv chi tiết



Mssv tương đối



Source code

Student.kt

```
package com.example.httpstudentlist
```

```
import java.io.Serializable
```

```
data class Student(
    val hoten: String,
    val mssv: String,
    val thumbnail: String,
    val ngaysinh: String,
    val email: String
) : Serializable
```

studentAPI

```
package com.example.httpstudentlist
```

```
import retrofit2.Call
import retrofit2.http.GET
```

```
interface StudentApi {
```

```

    @GET("students")
    fun getStudents(): Call<List<Student>>
}

```

StudentAdapter.kt

```

package com.example.httpstudentlist

```

```

import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.ImageView
import android.widget.TextView
import androidx.recyclerview.widget.RecyclerView
import com.bumptech.glide.Glide

```

```

class StudentAdapter(
    private var originalList: List<Student>,
    private val onClick: (Student) -> Unit
) : RecyclerView.Adapter<StudentAdapter.StudentViewHolder>() {

```

```

    private var filteredList: List<Student> = originalList

```

```

    inner class StudentViewHolder(itemView: View) :
        RecyclerView.ViewHolder(itemView) {
        val imgThumbnail: ImageView = itemView.findViewById(R.id.imgThumbnail)
        val tvName: TextView = itemView.findViewById(R.id.tvName)
        val tvMssv: TextView = itemView.findViewById(R.id.tvMssv)
    }

```

```

    override fun onCreateViewHolder(parent: ViewGroup, viewType: Int):
        StudentViewHolder {
        val view = LayoutInflater.from(parent.context).inflate(R.layout.item_student, parent,
        false)
        return StudentViewHolder(view)
    }

```

```

    override fun onBindViewHolder(holder: StudentViewHolder, position: Int) {
        val student = filteredList[position]
        holder.tvName.text = student.hoten
    }

```

```
holder.tvMssv.text = student.mssv
```

```
val imageUrl = if (student.thumbnail.startsWith("http")) {  
    student.thumbnail  
} else {  
    "https://lebavui.io.vn" + student.thumbnail  
}
```

```
Glide.with(holder.itemView.context)  
    .load(imageUrl) // Truyền link đã xử lý vào đây  
    .placeholder(android.R.drawable.ic_menu_gallery)  
    .error(android.R.drawable.stat_notify_error)  
    .into(holder.imgThumbnail)
```

```
holder.itemView.setOnClickListener { onClick(student) }  
}
```

```
override fun getItemCount(): Int = filteredList.size
```

```
// Hàm lọc tìm kiếm
```

```
fun filter(query: String) {  
    filteredList = if (query.isEmpty()) {  
        originalList  
    } else {  
        originalList.filter {  
            it.hoten.contains(query, ignoreCase = true) ||  
            it.mssv.contains(query, ignoreCase = true)  
        }  
    }  
    notifyDataSetChanged()  
}
```

```
fun updateData(newList: List<Student>) {  
    originalList = newList  
    filteredList = newList  
    notifyDataSetChanged()  
}  
}
```

DetailActivity.kt

```
package com.example.httpstudentlist
```

```
import android.os.Bundle
import android.widget.ImageButton
import android.widget.ImageView
import android.widget.TextView
import androidx.appcompat.app.AppCompatActivity
import com.bumptech.glide.Glide
```

```
class DetailActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_detail)

        // --- XỬ LÝ NÚT BACK ---
        val btnBack = findViewById<ImageButton>(R.id.btnBack)
        btnBack.setOnClickListener {
            finish()
        }

        // --- XỬ LÝ DỮ LIỆU ---
        val student = intent.getSerializableExtra("STUDENT_DATA") as? Student

        if (student != null) {
            findViewById<TextView>(R.id.tvDetailName).text = student.hoten
            findViewById<TextView>(R.id.tvDetailMssv).text = "MSSV: ${student.mssv}"
            findViewById<TextView>(R.id.tvDetailDob).text = student.ngaysinh
            findViewById<TextView>(R.id.tvDetailEmail).text = student.email

            val img = findViewById<ImageView>(R.id.imgDetailAvatar)

            val imageUrl = if (student.thumbnail.startsWith("http")) {
                student.thumbnail
            } else {
                "https://lebvui.io.vn" + student.thumbnail
            }

            Glide.with(this)
                .load(imageUrl)
```

```

        .into(img)
    }
}
}

```

MainActivity.kt

```
package com.example.httpstudentlist
```

```

import android.content.Intent
import android.os.Bundle
import android.widget.SearchView
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity
import androidx.recyclerview.widget.LinearLayoutManager
import androidx.recyclerview.widget.RecyclerView
import retrofit2.Call
import retrofit2.Callback
import retrofit2.Response
import retrofit2.Retrofit
import retrofit2.converter.gson.GsonConverterFactory

```

```

class MainActivity : AppCompatActivity() {
    private lateinit var adapter: StudentAdapter
    private lateinit var searchView: SearchView
    private lateinit var recyclerView: RecyclerView

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        recyclerView = findViewById(R.id.recyclerView)
        searchView = findViewById(R.id.searchView)

        // Cấu hình RecyclerView
        adapter = StudentAdapter(listOf()) { student ->
            val intent = Intent(this, DetailActivity::class.java)
            intent.putExtra("STUDENT_DATA", student)
            startActivity(intent)
        }
    }
}

```



```
recyclerView.layoutManager = LinearLayoutManager(this)
recyclerView.adapter = adapter
```

```
// Cấu hình Search
```

```
searchView.setOnQueryTextListener(object : SearchView.OnQueryTextListener {
    override fun onQueryTextSubmit(query: String?): Boolean = false
    override fun onQueryTextChange(newText: String?): Boolean {
        adapter.filter(newText ?: "")
        return true
    }
})
```

```
fetchData()
}
```

```
private fun fetchData() {
    val retrofit = Retrofit.Builder()
        .baseUrl("https://lebvui.io.vn/")
        .addConverterFactory(GsonConverterFactory.create())
        .build()
```

```
val api = retrofit.create(StudentApi::class.java)
```

```
api.getStudents().enqueue(object : Callback<List<Student>> {
    override fun onResponse(call: Call<List<Student>>, response:
Response<List<Student>>) {
        if (response.isSuccessful) {
            val students = response.body() ?: emptyList()
            adapter.updateData(students)
        } else {
            Toast.makeText(this@MainActivity, "Lỗi server: ${response.code()}",
Toast.LENGTH_SHORT).show()
        }
    }
})
```

```
        override fun onFailure(call: Call<List<Student>>, t: Throwable) {
            Toast.makeText(this@MainActivity, "Lỗi mạng: ${t.message}",
Toast.LENGTH_SHORT).show()
        }
    })
```

```
}  
}
```

activitydetail.xml

```
<?xml version="1.0" encoding="utf-8"?>  
<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:app="http://schemas.android.com/apk/res-auto"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:background="@color/background_gray"  
    android:fillViewport="true">  
  
    <androidx.constraintlayout.widget.ConstraintLayout  
        android:layout_width="match_parent"  
        android:layout_height="wrap_content"  
        android:paddingBottom="40dp">  
  
        <View  
            android:id="@+id/viewHeader"  
            android:layout_width="match_parent"  
            android:layout_height="180dp"  
            android:background="@color/primary"  
            app:layout_constraintTop_toTopOf="parent" />  
  
        <ImageButton  
            android:id="@+id/btnBack"  
            android:layout_width="48dp"  
            android:layout_height="48dp"  
            android:layout_marginStart="16dp"  
            android:layout_marginTop="16dp"  
            android:background="?attr/selectableItemBackgroundBorderless"  
            android:src="@android:drawable/ic_menu_revert"  
            app:tint="@color/white"  
            app:layout_constraintStart_toStartOf="parent"  
            app:layout_constraintTop_toTopOf="parent" />  
  
        <TextView  
            android:layout_width="wrap_content"  
            android:layout_height="wrap_content"
```

```
android:text="Thông tin sinh viên"
android:textColor="@color/white"
android:textSize="20sp"
android:textStyle="bold"
app:layout_constraintBottom_toBottomOf="@+id/btnBack"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="@+id/btnBack" />
```

```
<androidx.cardview.widget.CardView
    android:id="@+id/cardAvatar"
    android:layout_width="140dp"
    android:layout_height="140dp"
    android:layout_marginTop="110dp"
    app:cardCornerRadius="70dp"
    app:cardElevation="8dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent">
```

```
<ImageView
    android:id="@+id/imgDetailAvatar"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:scaleType="centerCrop"
    android:src="@mipmap/ic_launcher" />
```

```
</androidx.cardview.widget.CardView>
```

```
<TextView
    android:id="@+id/tvDetailName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:text="Nguyễn Văn A"
    android:textColor="@color/black"
    android:textSize="24sp"
    android:textStyle="bold"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/cardAvatar" />
```

```
<TextView
    android:id="@+id/tvDetailMssv"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="4dp"
    android:text="20201234"
    android:textColor="@color/primary"
    android:textSize="16sp"
    android:textStyle="bold"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/tvDetailName" />
```

```
<androidx.cardview.widget.CardView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="20dp"
    app:cardCornerRadius="12dp"
    app:cardElevation="4dp"
    app:cardBackgroundColor="@color/white"
    app:layout_constraintTop_toBottomOf="@+id/tvDetailMssv">
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    android:padding="20dp">
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Email"
    android:textColor="@color/text_gray"
    android:textSize="12sp" />
```

```
<TextView
    android:id="@+id/tvDetailEmail"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
```

```
android:layout_marginTop="4dp"
android:text="email@example.com"
android:textColor="@color/black"
android:textSize="16sp" />
```

```
<View
    android:layout_width="match_parent"
    android:layout_height="1dp"
    android:layout_marginVertical="12dp"
    android:background="#E0E0E0" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Ngày sinh"
    android:textColor="@color/text_gray"
    android:textSize="12sp" />
```

```
<TextView
    android:id="@+id/tvDetailDob"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="4dp"
    android:text="01/01/2000"
    android:textColor="@color/black"
    android:textSize="16sp" />
```

```
</LinearLayout>
```

```
</androidx.cardview.widget.CardView>
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

```
</ScrollView>
```

Itemstudent.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.cardview.widget.CardView
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
```

```
android:layout_marginHorizontal="16dp"
android:layout_marginVertical="8dp"
app:cardCornerRadius="12dp"
app:cardElevation="4dp"
app:cardBackgroundColor="@color/white">
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:gravity="center_vertical"
    android:orientation="horizontal"
    android:padding="12dp">
```

```
<androidx.cardview.widget.CardView
    android:layout_width="70dp"
    android:layout_height="70dp"
    app:cardCornerRadius="35dp"
    app:cardElevation="0dp">
```

```
<ImageView
    android:id="@+id/imgThumbnail"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:scaleType="centerCrop"
    android:src="@mipmap/ic_launcher" />
</androidx.cardview.widget.CardView>
```

```
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_weight="1"
    android:orientation="vertical">
```

```
<TextView
    android:id="@+id/tvName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Tên Sinh Viên"
    android:textColor="@color/black"
```

```
        android:textSize="18sp"  
        android:textStyle="bold" />
```

```
<TextView  
    android:id="@+id/tvMssv"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginTop="4dp"  
    android:text="MSSV: 20201234"  
    android:textColor="@color/text_gray"  
    android:textSize="14sp" />
```

```
</LinearLayout>
```

```
<ImageView  
    android:layout_width="24dp"  
    android:layout_height="24dp"  
    android:src="@android:drawable/ic_media_play"  
    android:rotation="180"  
    android:layout_gravity="center_vertical"  
    app:tint="@color/text_gray"/>
```

```
</LinearLayout>
```

```
</androidx.cardview.widget.CardView>
```