## Báo cáo công việc đã làm

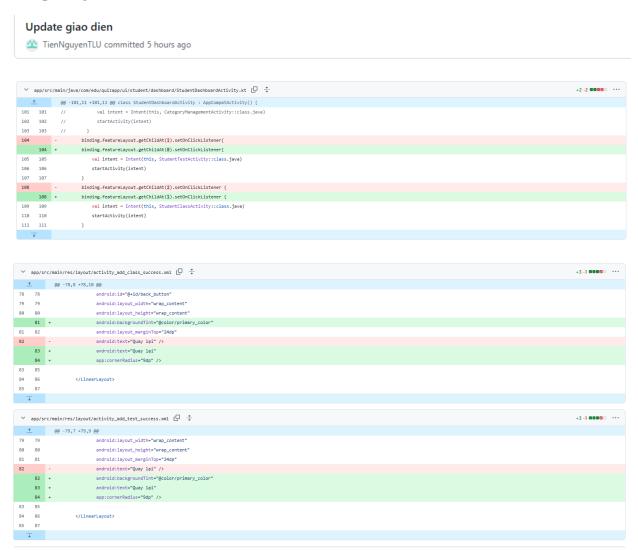
Kính gửi: Thầy Kiều Tuấn Dũng

Em tên là Nguyễn Minh Tiến

Sinh viên lớp 64CNTT1-NB

## Sau đây là trình bày báo cáo công việc làm bài tập lớn môn lập trình ứng dụng di động:

Làm phần giao diện



~	app/sro	c/main/res/layout/activity_change_password_teacher.xml 🕒 ‡
t		ee −92,21 +92,23 ee
92	92	android:layout_width="wrap_content"
93	93	android:layout_height="wrap_content"
94	94	android:layout_marginTop="24dp"
	95	+ android:backgroundTint="@color/primary_color"
95	96	android:text="DGi mật khẩu"
96		- app:layout_constraintTop_toBottomOf="@id/confirm_password_layout"
	97	app:cornerRadius="9dp"
	98	* app:layout_constraintEnd_toEndOf="parent"
97	99	app:layout_constraintStart_toStartOf="parent"
98		- app:layout_constraintEnd_toEndOf="parent" />
	100	app:layout_constraintTop_to8ottomOf="@id/confirm_password_layout" />
99	101	
100	102	<textview< td=""></textview<>
101	103	android:id="@*id/forgot_password_link"
102	104	android:layout_width="wrap_content"
103	105	android:layout_height="wrap_content"
104	106	android:layout_marginTop="l6dp"
105	107	android:text="Quēn māt khấu)"
106		- android:textColor="@color/purple_580"
107		- app:layout_constraintTop_toBottomOf="@id/change_password_button"
	108	+ android:textColor="@color/black"
	109	+ app:layout_constraintEnd_toEndOf="parent"
108	110	app:layout_constraintStart_toStartOf="parent"
109		- app:layout_constraintEnd_toEndOf="parent" />
	111	app:layout_constraintTop_to8ottomOf="@id/change_password_button" />
110	112	
111	113	
112	114	

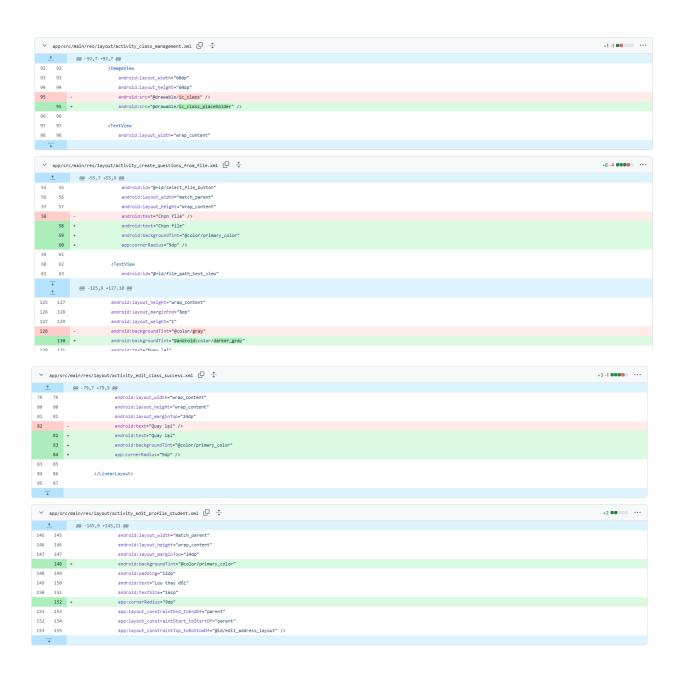
```
..... @@ -47,9 +47,9 @@
 47 47
48 48
                                android:id="@+id/class_icon"
                               android:layout_width="48dp"
  49 49
                                 android:layout_height="48dp"
50 - androids:re-"@drawable/ic_class_placeholder"
51 50 android:layout_marginfart="166p"
52 - android:layout_marginfard="166p" />
51 + android:layout_marginfard="16dp"
52 + android:layout_marginfard="16dp"
53 53
54 64
 53 53
54 54 <TextView
55 55 android
                                android:id="@+id/class_name"
62
  62
 - 62
63 63
64 64
                      </LinearLayout>
 73 65 (LinearLayout
74 66 android:la;
75 67 android:la;

$\frac{4}{4}$ @@ -119,20 +111,22 @@
                        android:layout_width="match_parent"
                             android:layout_height="wrap_content"
 119 111
                                android:id="@+id/edit_button"
 120 112
                 android:layout_width="0dp"
android:layout_height="wrap_content"
 121 113
114 + android:layout_marginEnd="8dp"
 122 115
∨ app/src/main/res/layout/activity_class_detail.xml 📮 💠
 74 66
75 67
                       android:layout_width="match_parent"
android:layout_height="wrap_content"
 ..... @@ -119,20 +111,22 @@
 119 111
                                android:id="@+id/edit button"
                                android:layout_width="0dp"
  121 113
                                 android:layout_height="wrap_content"
android:layout_megint="wrap_com"

114 + android:layout_megint=dap"

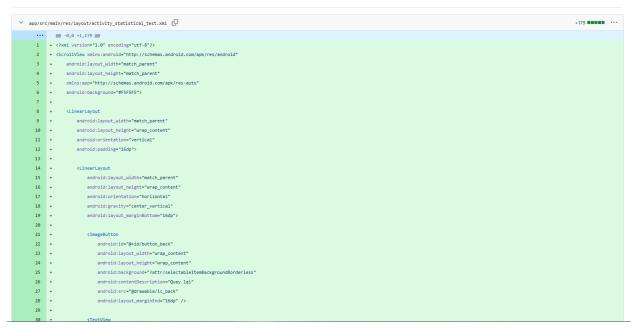
122 115 android:layout_weight="l"

123 - android:text="Chinh ska"
  124 116
                                 android:backgroundTint="@color/yellow"
117 + android:text="Chinh sửa"
117 +
125 118
126 -
119 +
127 120
                                 android:textColor="@color/black"
                      android:textColor="@color/black"
android:layout_marginEnd="8dp" />
                     app:cornerRadius="9dp" />
                     <Button
 128 121
                        android:id="@+id/delete_button"
android:layout_width="0dp"
android:layout_height="wrap_content"
 129 122
  131 124
  132 125
                                 android:layout_weight="1"
136 130
                         </LinearLayout>
 137 131
  138 132
                      </LinearLayout>
 T
```



```
+102 00000 ...

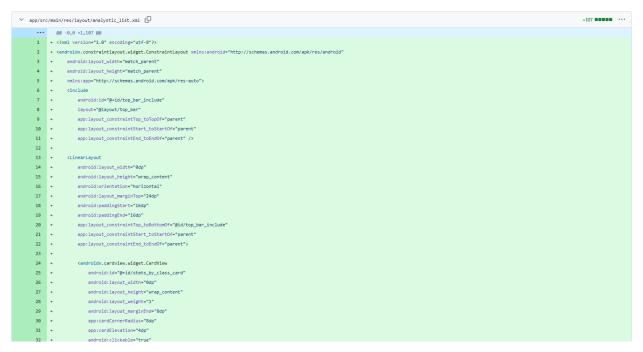
✓ app/src/main/res/layout/activity_statistical_class.xml 
□
               ... @@ -0.0 +1.102 @@
           1 + <?xml version="1.0" encoding="utf-8"?>
               2 + <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
            2 + <adordidx.constraintlayout.widget.Constraintlayout.walns:
3 + walns:app="fltpt]/schemaa.android.com/app/res-auto"
4 + walns:tools="http://schemas.android.com/tools"
5 + android:layout_width="match_parent"
6 + android:layout_height="match_parent"
7 + android:background="#FFFFFF">
8 +
                                     cnclude
android:id="@-id/top_bar_include"
layout="@layout/top_bar"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintTart_toStartOf="parent"
app:layout_constraintTart_toStartOf="parent"
app:layout_constraintEnd_toEndOf="parent"/>
               10 +
              11 +
               12 +
               13 +
               14 +
               15 +
             16 + ClasgeButton
17 + android:id="@eid/button_back"
18 + android:layout_width="wrap_content"
19 + android:layout_height="wrap_content"
20 + android:layout_nerginStart="16dp"
21 + android:layout_marginStart="16dp"
22 + android:layout_marginStart="16dp"
23 + android:layout_marginStart="16dp"
24 + android:layout_marginStart="16dp"
             22 + android:onethoscription="Quay lai"
23 + android:onethoscription="Quay lai"
24 + android:src="@drawable/ic_back"
25 + app:layout_constraintStart_toStartOf="parent"
26 + app:layout_constraintTop_toSottomOf="@id/top_bar_include" />
              27 +
               28 + <TextView
              29 + android:id="@+id/title_stats_by_class"
30 + android:layout width="@do"
```



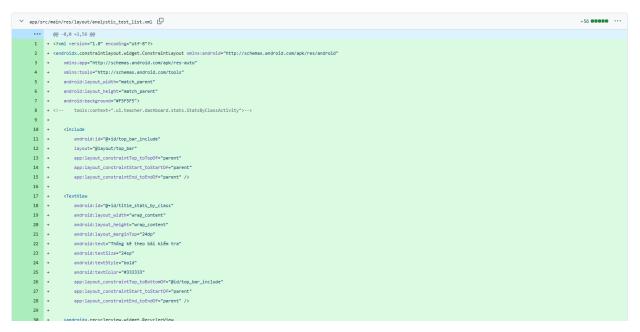
× ,	app/s	rc/ma:	in/res/layout/activity_test_management.xml 🕒 💠
		@(	e -1,10 +1,11 ee
1	1	<	<pre>?xml version="1.0" encodings"utf-8"?&gt;</pre>
2	2	<	androidx.constraintlayout.widget.Constraintlayout
3		-	xmlns:app="http://schemas.android.com/apk/res-auto"
4	3		xmlns:android="http://schemas.android.com/apk/res/android"
	4	+	xmlns:app="http://schemas.android.com/apk/res-auto"
5	5		xmlns:tools="http://schemas.android.com/tools"
6	6		android:layout_width="match_parent"
7	7		android:layout_height="match_parent"
	8	+	android:background="#F87878"
8	9		tools:context=".ui.teacher.dashboard.test.TestManagementActivity">
9	10		
	11		<include< td=""></include<>
		@	@ -14,68 +15,82 @@
14	15		<pre>app:layout_constraintStart_toStartOf="parent"</pre>
	16		<pre>app:layout_constraintTop_toTopOf="parent" /&gt;</pre>
	17		
17		-	Œditlext
18		-	android:id="@+id/search_bar"
		+	<pre><androidx.cardview.widget.cardview< pre=""></androidx.cardview.widget.cardview<></pre>
	19	+	android:id="@+id/search_card"
	20		android:layout_width="04p"
20			android:layout_height="48dp"
	21	+	android:layout_height="wrap_content"
	22		android:layout_marginStart="16dp"
	23		android:layout_marginTop="16dp"
	24		android:layout_marginEnd="160p"
24			android:background-"@drawable/search_bar_background"
25 26		-	android:drawableStart="@drawable/ic_search"
26			android:drawableModing~Bdp*
28		-	android:hint="lim kiém"  android:paddingStart="16do"
29		-	android:paddingEnd="16dp"

```
✓ app/src/main/res/layout/analystic_class_item.xml 
☐

                                                                                                                                                                                                                                                                                                                                                                                                                                                                  +39 00000 ...
            ... 00 -0,0 +1,39 00
           2 - <androids.cardview.widget.Cardview.xmlns:android="http://s
3 - xmlns:app="http://schemas.android.com/apk/res-auto"
4 - android:layout_theight="urap_content"
5 - android:layout_pargin="8dp"
6 - app:cardCornerRadius="8dp"
8 - app:cardSelvestion="2dp"
9 - android:clickable="true"
10 - android:focusable="true"
11 - android:foreground="?attr/selectableItemBackground">
12 -
            12 +
            13 + <LinearLayout
                                    android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="vertical"
android:padding="16dp">
             14 +
             15 +
            16 +
17 +
            19 +
20 +
                                        ClextView
    androidid="@+id/class_name"
    androidilayout_width="wrap_content"
    androidilayout_height="wrap_content"
    androiditext="t0; Toán 01"
    androiditextSize="18sp"
    androiditextStyle="bold"
    androiditextStyle="bold"
    androiditextStyle="bold"
    androiditextStyle="bold"
    androiditextSulor="#333333"
    androidilayout_margimBottom="4dp" />
            21 +
            23 +
             25 +
            26 +
27 +
                                    <TextView
android:id="@+id/class code"</pre>
            29 +
```



```
✓ app/src/main/res/layout/analystic_test_item.xml 
□
                                                                                                                                                                                                                                 +39 ••••• ···
      ... @@ -0,0 +1,39 @@
     1 + <?xml version="1.0" encoding="utf-8"?>
     9 + android:clickable="true"
      11 + android:foreground="?attr/selectableItemBackground">
      12 +
      13 + <LinearLayout
      14 +
                  android:layout_width="match_parent"
      15 +
                    android:layout_height="wrap_content"
                  android: nayout_neight="wrap_con
android: orientation="vertical"
android: padding="16dp">
      16 +
      18 +
      19 +
                  <TextView
                  offextView
android:id="@-id/test_name"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Bab" kiden tra giDa ky l"
android:textSize="18sp"
android:textSize="Polo"
android:textStyle="Polo"
android:textColor="#333333"
android:layout_margimSottom="4dp" />
      21 +
      22 +
      24 +
      25 +
      26 +
      27 +
      28 +
                   <TextView
```





Chức năng tìm kiếm lớp

```
+19 -4 @@@@ ...
..... @@ -2,6 +2,8 @@ package com.edu.quizapp.ui.student.dashboard.classes
 2 2
3 3 import android.content.Intent
4 4 import android.os.Bundle
4 4 import android.os.Bundle
5 + import android.text.Editable
6 + import android.text.TextWatcher
 5 7 import android.util.log
6 8 import androidx.appcompat.app.AppCompatActivity
7 9 import androidx.lifecycle.ViewModelProvider
 # @@ -31,6 +33,7 @@ class StudentClassActivity : AppCompatActivity() {
 31 33 setupViewModel()
32 34 setupRecyclerView()
33 35 setupBottomNavigation()
36 + setupSearchBar()
 34 37
35 38 val studentId = FirebaseAuth.getInstance().currentUser?.uid ?: ""
  36 39
                       viewModel.loadStudentClasses(studentId)
# @@ -47,25 +50,37 @@ class StudentClassActivity : AppCompatActivity() {
47 50
  48 51
                private fun setupViewModel() {
 49 52 viewModel = ViewModelProvider(this)[StudentClassViewModel::class.java]
50 - teacherRepository = TeacherRepository() // Khôi tao teacherRepository & dây
53 + teacherRepository = TeacherRepository()
 51 54 setupObservers()
52 55 }
         54 57
  55
 58 + // Cập nhật adapter với danh sách lớp học đã lọc
50 + viewModel.filtered(lasses.observe(this) ( classes
private fun setupObservers() {
  55 - viewModel.classes.observe(this) { classes ->
58 + // Cập nhật adapter với danh sách lớp học đã lọc
 59 + viewModel.filteredClasses.observe(this) { classes ->
| 56 | 60 | adapter.updateClasses(classes) | 57 | 61 | } | 58 | 62 | } | 59 | 63 | 60 | 64 | private fun setupRecyclerView() {
60 64 private fun setupRecyclerView() {
61 - adapter = StudentClassAdapter(emptyList(), teacherRepository) // Truyèn teacherRepository vào adapter
65 + adapter = StudentClassAdapter(emptyList(), teacherRepository)
 62 66 binding.classRecyclerView.layoutVanager = linearLayoutManager(this)
63 67 binding.classRecyclerView.adapter = adapter
 64 68
                     Log.d("StudentClassActivity", "setupRecyclerView() called, adapter set: $adapter")
 65 69
      71 + private fun setupSearchBar() {
      72 +
73 +
                    binding.searchBar.addTextChangedListener(object : TextWatcher {
                     override fun beforeTextChanged(s: CharSequence?, start: Int, count: Int, after: Int) {}
      74 +
                     override fun onTextChanged(s: CharSequence?, start: Int, before: Int, count: Int) {
      75 +
                             viewModel.filterClasses(s.toString())
      77 +
      78 +
79 +
                          override fun afterTextChanged(s: Editable?) {}
     80 +
81 + }
 82 +
67 83
                  private fun setupBottomNavigation() {
68 - // Thiết lập bottom navigation
            binding.bottomNavigation.setOnItemSelectedListener { item ->
                    when (item.itemId) {
                             R.id.navigation_home -> {
```

```
import androidx.lifecycle.MutableLiveData
 5 import androidx.lifecycle.ViewModel
7 import androidx.lifecycle.viewModelScope
          - import com.edu.quizapp.data.models.Classes // Thêm dòng import này
8 + import com.edu.quizapp.data.models.Classes
 9 9 import com.edu.quitapp.data.repository.ClassRepository
10 10 import com.edu.quitapp.data.repository.StudentRepository
11 11 import com.edu.quitapp.data.repository.StudentRepository
              import kotlinx.coroutines.async
@ -20,18 +20,19 @@ class StudentClassViewModel : ViewModel() {
               private val _classes = MutableLiveData<List<Classes>>()
val classes: LiveData<List<Classes>> = _classes
 21 21
 22
       23 + private val _filteredClasses = MutableLiveData<List<Classes>>()
  24 + val filteredClasses: LiveData<List<Classes>> = _filteredClasses
25 +
 23 26
24 27
                   fun loadStudentClasses(studentId: String) {
                Viewrouesbouge.aumin. |
try {
    val student = studentRepository.getStudent8yId(studentId)
    if (student != null) {
        Log.d("StudentClassViewRodel", "Student found: Sstudent")
        Lor.d."StudentClassViewRodel", "Student studentsId: S(studentStudentRepositor)
 25
 29 32 .
30 -
31 - // First try to get classes from the student's classes list
33 +

wal studentClasses = mutableListOf<Classes>()
                                   Log.d("StudentClassViewModel", "Student studentsId: ${student.studentsId}")
 32 34
33 -
                  val student(lasses = mutableListOf(las
// If student has classes list, use it
 35 +
                        Log.d("StudentClassViewModel", "Using student's classes list: ${student.classes}")
 36 37
                                         val deferredClasses = student.classes.map { classId ->
@@ -48,20 +49,17 @@ class StudentClassViewModel : ViewModel() {
 66 64
                                                    val updatedClasses = student.classes.toMutableList()
 @@ -73,17 +71,26 @@ class StudentClassViewModel : ViewModel() {
74 +
77 75 __classes.value = studentClasses
76 + __filteredClasses.value = studentClasses
 78 77 Log.d("
79 78 } else {
                                     Log.d("StudentClassViewModel", "Total classes found: ${studentClasses.size}")
 81 + __filteredClasses.value = emptyList()
 82 82 }
83 83 } catch (e: Exception) {
                    Log.e("StudentClassViewHodel", "Error loading student classes: ${e.message}")
_classes.value = emptyList()
 86 87
87 88 }
       90 +
      91 + fun filterClasses(query: String) {
92 + val allClasses = _classes.value
                      rum filerLasses(query; String) {
    vel allClasses = classes, value ?: emptyList()
    val filteredList = allClasses.filter { it.className.contains(query, ignoreCase = true) }
                        _filteredClasses.value = filteredList
```

Chức năng thống kê điểm theo lớp

```
### A PART OF THE PART OF THE
```

```
| package com.edu.pop.ul.teacher.desiboerd.malyytit.byclass
| poper indiredu.lifeycit.alvesta
| poper indiredu.lifeycit.alvestaci
| poper indiredu.lifeycit.avestacid
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| poper indiredu.lifeycit.avestacid.come
| poper indiredu.lifeycit.avestacid.come
| poper indiredu.lifeycit.avestacid.come
| poper indiredu.lifeycit.avestacid.come
| poper indiredu.lifeycit.avestacid.com
| poper
```

```
v app/src/main/java/com/edu/quizapp/ui/teacher/dashboard/analystic/byclass/StatisticalClassActivity.kt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  +133 00000 ...
                   app/src.main/java/com/edu/quilapp/ul/teacher/dashboard/amalystic/byclass/

1 + package com.edu.quilapp.ul.teacher.dashboard.amalystic.byclass/

2 + import android.os.sumdle

4 + import android.os.sumdle

5 + import android.ovien.view

6 + import android.ovien.view

7 + import android.ovien.view

8 + import android.ovien.view

9 + import android.ovien.view

10 + import android.ovien.view

10 + import android.ovien.view

11 + import android.ovien.view

12 + import android.ovien.view.top.compatActivity

13 + import android.ovien.view.ovien.ovien.view.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovien.ovie
                      15 + import kotlinx.coroutines.launch
                        16 +
17 + class StatisticalClassactivity : AppCompatActivity() {
                        19 + private lateinit var binding: ActivityStatisticalClassBinding
20 + private lateinit var viewModel: StatisticalClassViewModel
                        21 +
22 + override fun onCreate(savedInstanceState: Bundle?) {
                        23 +
24 +
25 +
                                                                        super.oncreate(savedInstanceState)
binding = ActivityStatisticalClassBinding.inflate(layoutInflater)
setContentView(binding.root)
                                                                         val classId = intent.getStringExtra("classId") ?: ""
                        27 + val

28 + vie

39 + vie

31 + set

32 + obs

33 + vie

35 + vie

36 + )

37 +
                                                                           viewModel = ViewModelProvider(this)[StatisticalClassViewModel::class.java]
                                                                         setupListeners()
                                                                         observeViewModel(classId)
                                                                           viewModel.fetchTestsBvClass(classId)
                         38 + private fun setupListeners() {
```

```
| ■ | Private val | private v
```

## Viết báo cáo

Vẽ figma cho chức năng đăng nhập, dashboard, lớp học, bài kiểm tra của người dùng sinh viên

