

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---

# Proposal Praktikum Pemrograman

## Mobile Proyek Akhir Semester

### Android App

#### 1.1 Deskripsi Aplikasi

Aplikasi yang dibuat adalah game kuis edukasi bernama PyQuiz : Play and Create Quiz. Terdapat 2 user pada aplikasi ini, yang pertama ada player yang hanya dapat memainkan quiz, kemudian ada admin yang dapat menambahkan dan menghapus quiz. Aplikasi ini dapat dimainkan secara offline, sehingga dapat dimainkan kapan saja dan dimana saja. Aplikasi ini dibuat untuk mengedukasi pemain sambil bersenang-senang dengan memanfaatkan kuis sebagai medianya. Aplikasi ini dapat diakses minimum di android 7.0 (nougat). Cara memainkannya cukup gampang, dengan pemain pertama login terlebih dahulu untuk mengakses semua quiz, jika belum memiliki akun maka dapat melakukan registrasi. Untuk admin, topik dan quiz nya dapat diedit sesuai keinginan dengan melakukan CRUD.

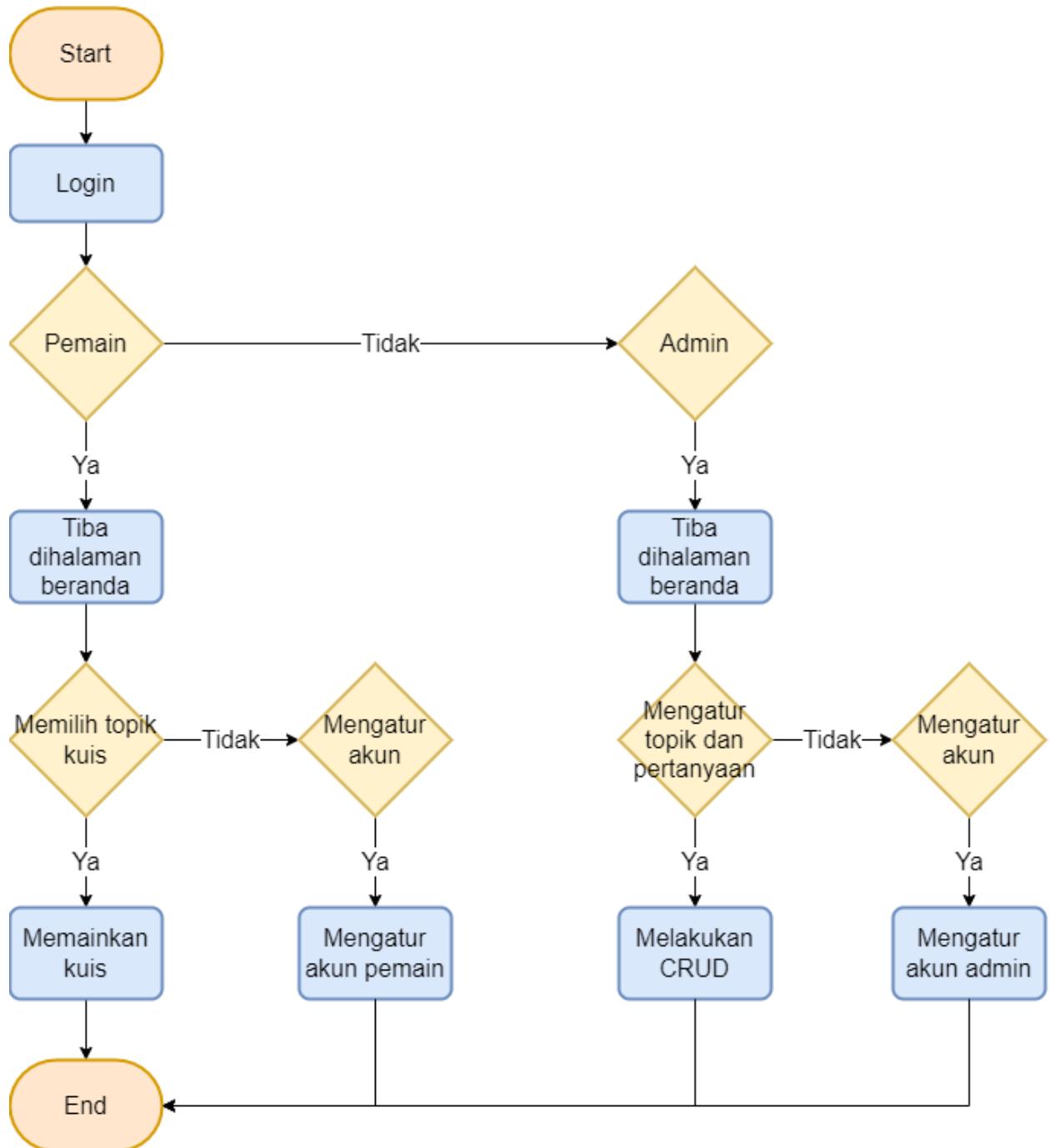
#### 1.2 Proses Bisnis Aplikasi

Aplikasi quiz ini berada di kategori education buatan tim SYL (Solo Yolo) dengan nama PyQuiz yang berasal dari singkatan *Play* dan kata *Quiz* dalam bahasa inggris yang jika digabungkan akan menjadi bermain kuis kalau ditranslate ke bahasa indonesia. Aplikasi ini hanya dapat diakses pada android berupa aplikasi native. Program berikut merupakan kombinasi antara game dan aplikasi edukasi yang terinspirasi dari aplikasi seperti Quizizz, Kahoot, dll. Dimana terdapat dua user dalam aplikasi ini, yaitu pemain dan admin. Pemain hanya dapat memainkan kuis, sedangkan admin dapat mengelola kuis yang ada dalam aplikasi.

Aplikasi berikut bersifat free, sehingga tidak ada sistem pembayaran dalam aplikasi. Dan tidak memiliki ads yang dapat mengganggu pemain dalam bermain. Fitur-fitur yang ada di aplikasi ini selain bermain quiz adalah pengaturan akun. Pemain maupun admin dapat mengatur akun nya sesuai kebutuhan. Berikut merupakan flowchart dari aplikasi PyQuiz untuk memperjelas alur program:

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

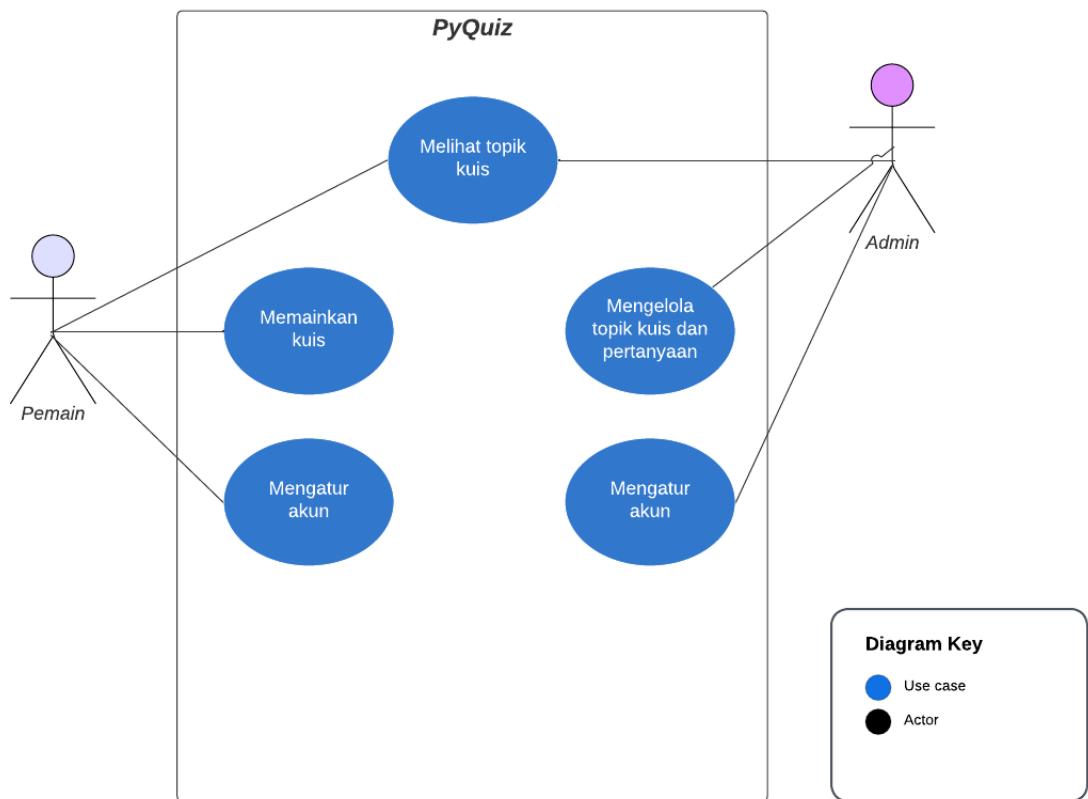
---



Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhan, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---

## 1.3 Usecase Diagram



Pada aktor pemain dan admin sama-sama dapat melihat topik kuis yang ada. Kemudian pemain dapat memainkan kuis dari topik yang dipilih, kalau dari sisi admin, admin dapat mengelola topik kuis dan pertanyaan di kuis. Lalu, kedua aktor dapat mengatur akun sesuai kebutuhan.

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---

## 1.4 ERD



Untuk login dan register user hanya memakai 1 table yaitu table user yang berlaku untuk pemain dan admin. Untuk kuisnya, dipisah-pisah bagian pentingnya seperti soal, jawaban, dan topik untuk mencegah redudansi dan mempermudah CRUD pada admin.

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---

## 1.5 Prototype UI Sistem

Pemain

The prototype UI consists of six screens arranged in a 3x2 grid:

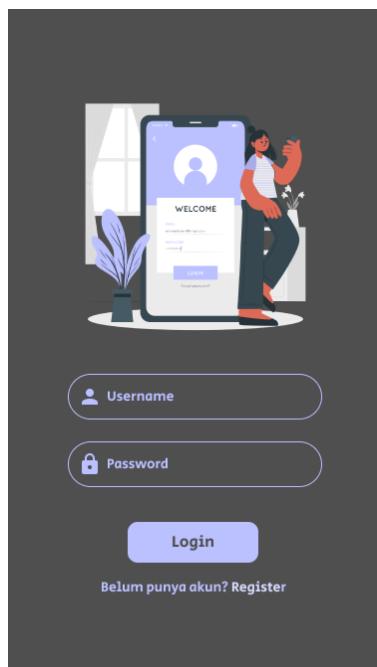
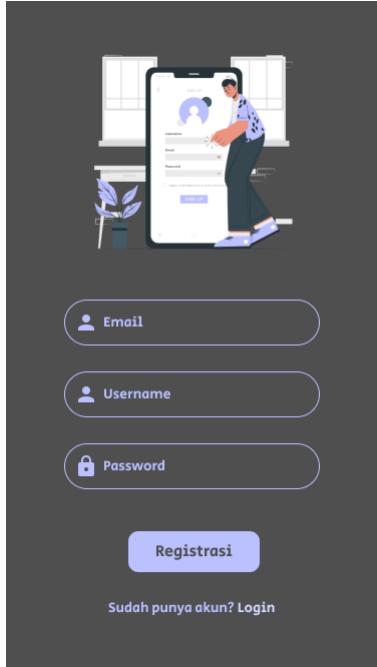
- Top Left (Pemain):** A large blue letter 'P' with a small magnifying glass icon at the bottom right.
- Top Middle (Login Screen):** A login form with fields for 'Username' and 'Password', a 'Login' button, and a 'Belum punya akun? Register' link.
- Top Right (Main Menu):** Greeted with "Halo, Fanny!". Shows a smartphone displaying a dashboard with various icons. Below it are categories: Teknologi, Musik, Olahraga, Ipa, and Matem. A "Main" button with a "Go" sub-button is also present.
- Middle Left (Topic Selection):** Titled "Topik Kuis". Shows five categories with icons: Teknologi (person with a computer), Musik (person dancing), Olahraga (person running), Ipa (person with a microscope), and Matematika (person writing on a chalkboard).
- Middle Middle (Music Quiz):** Titled "Musik". Shows a photo of Charlie Puth. Below it are three buttons: "Charlie Puth", "Talyor Swift", and "Harry Styles". A "Submit" button is at the bottom.
- Middle Right (Results):** Titled "Hasil". Shows two people holding a trophy. Text says "Congratulations! Fanny" and "Skor Kamu adalah 8 dari 10". A "Selesai" button is at the bottom.

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---



Admin



Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

### Topik Kuis

+

- Teknologi**
- Musik**
- Olahraga**
- Ipa**
- Matematika**

### Kelola Topik Soal

**Topik Soal**

**Jumlah Soal**

**Gambar**

**Upload File**

**Selesai**

### Kelola Soal

**Topik Soal**

**Teknologi**

**Soal**

**Gambar**

**Upload File**

**Jawaban**

**Selesai**

### Musik

+

No. 1

**Charlie Puth**

**Taylor Swift**

**Harry Styles**

**Submit**

### Pengaturan

**admin**  
**Administrator**

**Akun**  
Email, password, ubah password

**Bahasa**  
Bahasa Indonesia

**Pertolongan**  
Kontak kami

**Logout**

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---

## 1.6 Timeline dan Pembagian Kerja

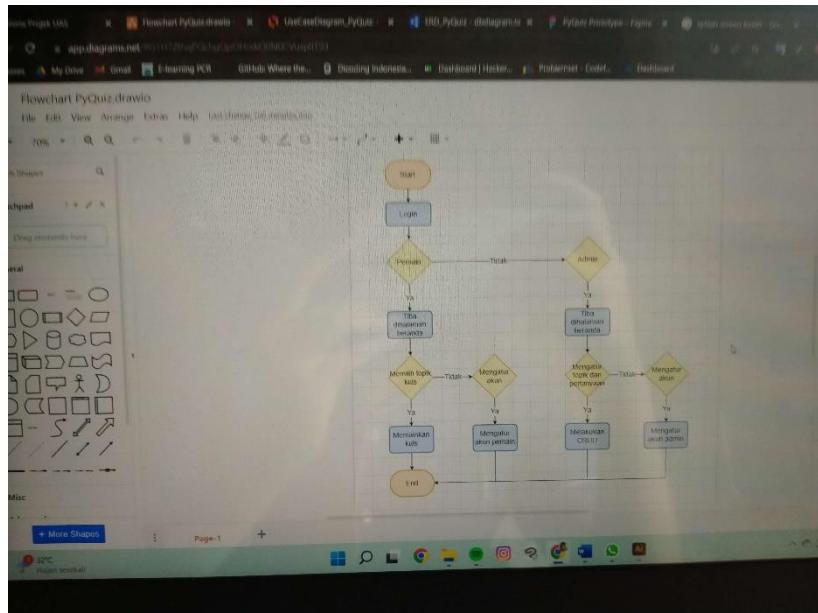
<Aplikasi akan dipresentasikan pada pekan UAS (Pertemuan ke 16). Jika ada waktu lebih, anda dipersilahkan mengerjakan projek di kelas. Silahkan rancang dan sesuaikan rencana waktu dan target pengerjaan aplikasi dengan kalender akademik>

No	Pekerjaan	Bulan Desember s/d Bulan Januari		PIC
1	Membuat interface aplikasi	Minggu 1	Minggu 2	Fanny
2	Melakukan pemrograman untuk back-end	Minggu 3	Minggu 5	Fanny
3	Melakukan testing	Minggu 6	Minggu 6	Fanny

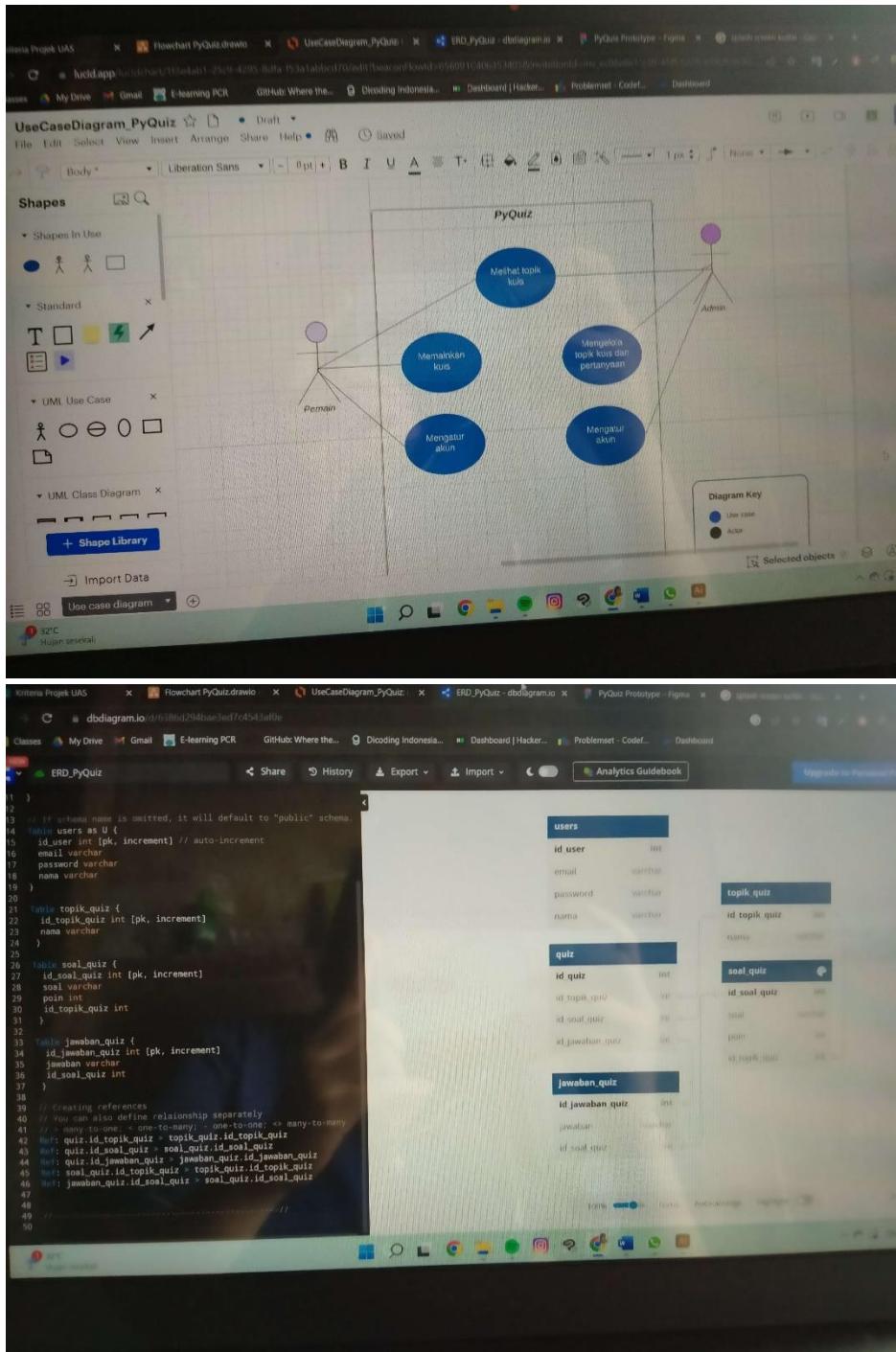
Note: Tabel bisa disesuaikan menurut kebutuhan penjelasan tim masing-masing.

## 1.7 Dokumentasi Kegiatan

30 November 2022

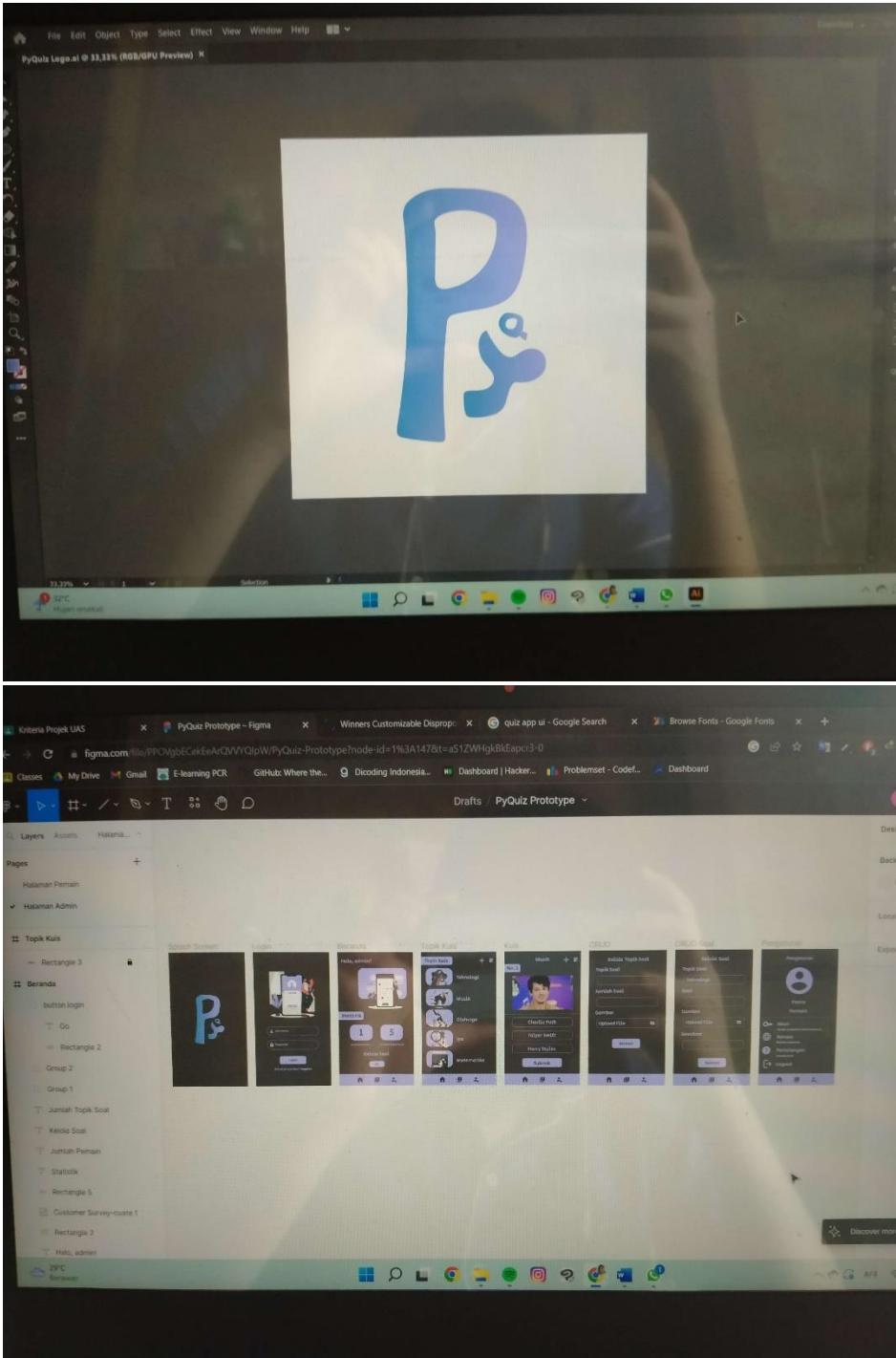


Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022



Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---

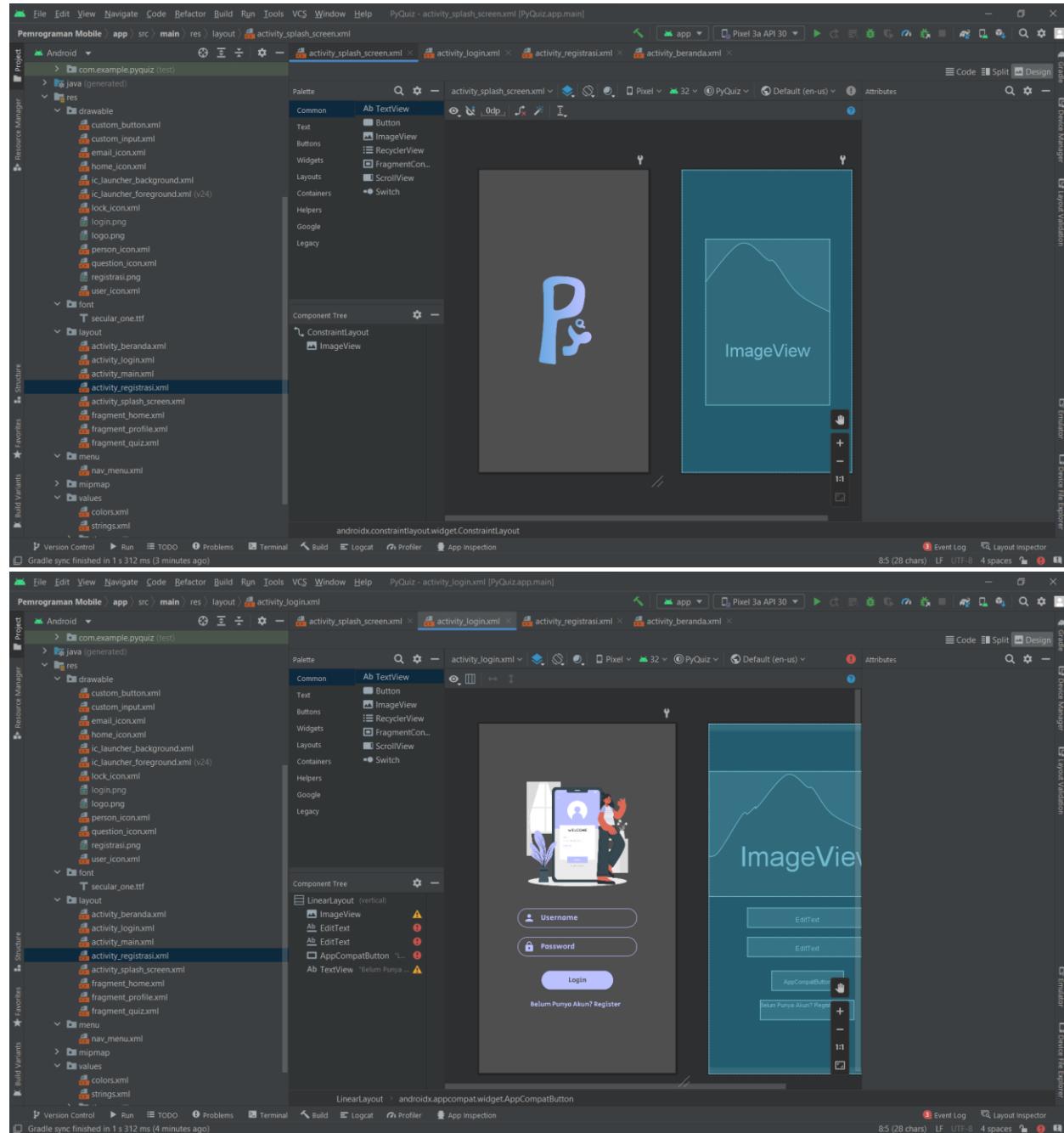


Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

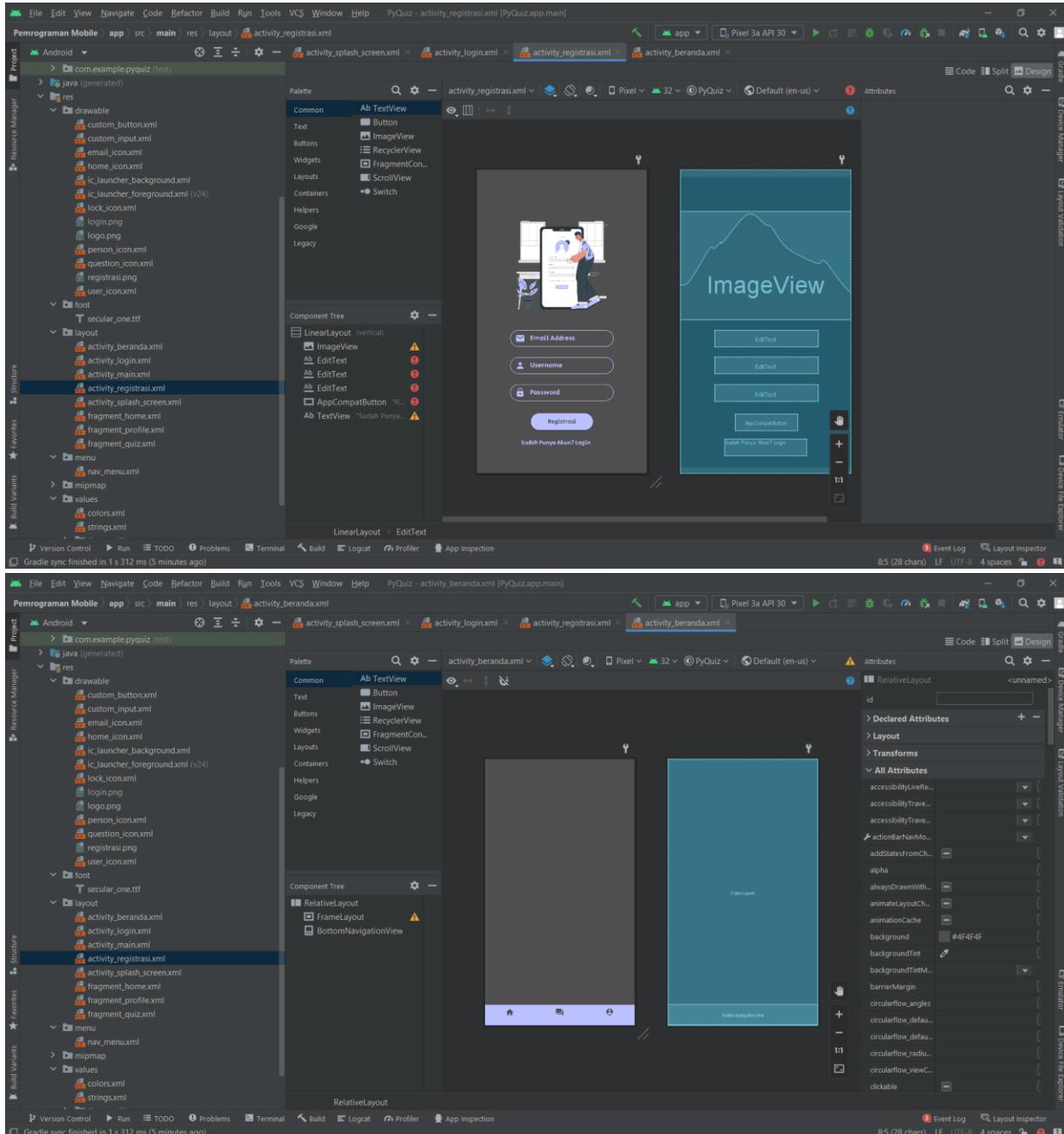
---

## 1.8 Progress Projek I

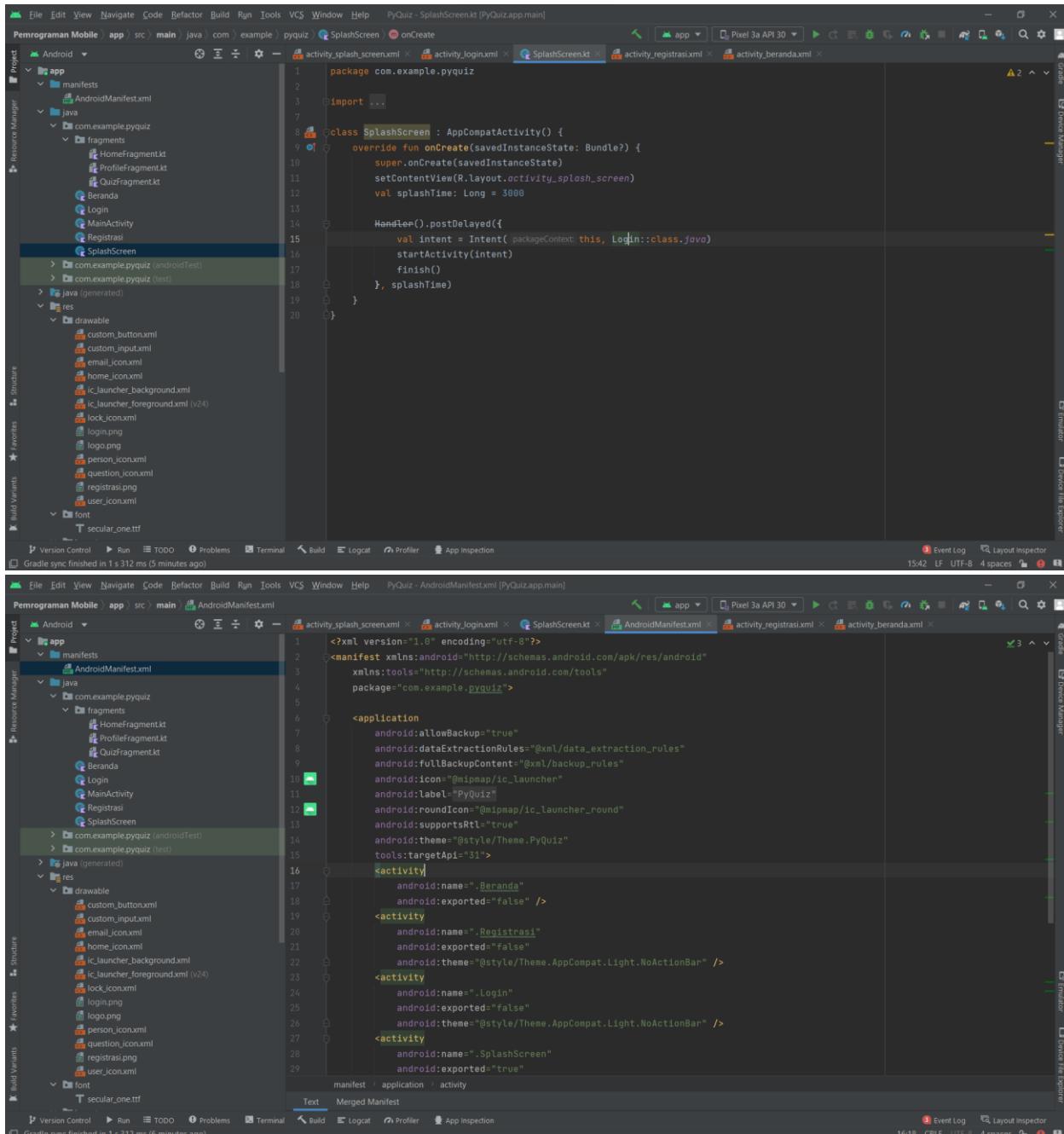
6 Desember 2022



Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022



Nama/NIM : Fanny / 2055301044  
 Kelas/Prodi : 3 TI D / Teknik Informatika  
 Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
 AIL : Puspita Aisyah Asnur, S.Tr.Kom  
 Tanggal : 30 November 2022



The image shows two screenshots of the Android Studio interface side-by-side.

**Top Screenshot (PyQuiz - SplashScreen.kt):**

```

1 package com.example.pyquiz
2
3 import ...
4
5 class SplashScreen : AppCompatActivity() {
6     override fun onCreate(savedInstanceState: Bundle?) {
7         super.onCreate(savedInstanceState)
8         setContentView(R.layout.activity_splash_screen)
9         val splashTime: Long = 3000
10
11         Handler().postDelayed({
12             val intent = Intent(packageContext, Login::class.java)
13             startActivity(intent)
14             finish()
15         }, splashTime)
16     }
17 }
18
19 }
```

**Bottom Screenshot (PyQuiz - AndroidManifest.xml):**

```

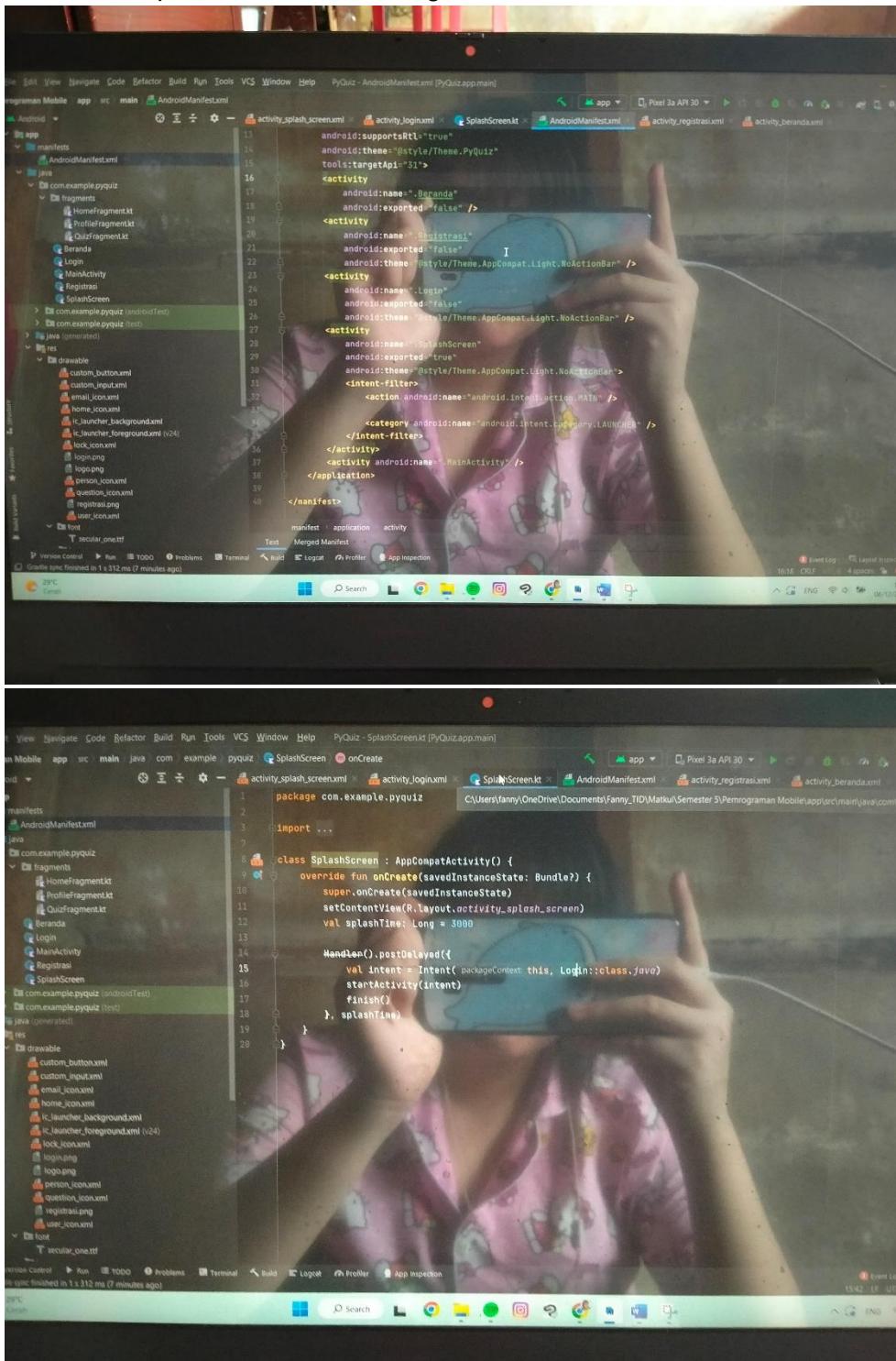
1 <?xml version="1.0" encoding="utf-8"?>
2 <manifest xmlns:android="http://schemas.android.com/apk/res/android"
3   xmlns:tools="http://schemas.android.com/tools"
4   package="com.example.pyquiz">
5
6   <application
7       android:allowBackup="true"
8       android:dataExtractionRules="@xml/data_extraction_rules"
9       android:fullBackupContent="@xml/backup_rules"
10      android:icon="@mipmap/ic_launcher"
11      android:label="PyQuiz"
12      android:roundIcon="@mipmap/ic_launcher_round"
13      android:supportsRtl="true"
14      android:theme="@style/Theme.PyQuiz"
15      tools:targetApi="31">
16
17     <activity
18         android:name=".Beranda"
19         android:exported="false" />
20
21     <activity
22         android:name=".Registrasi"
23         android:exported="false"
24         android:theme="@style/Theme.AppCompat.Light.NoActionBar" />
25
26     <activity
27         android:name=".Login"
28         android:exported="false"
29         android:theme="@style/Theme.AppCompat.Light.NoActionBar" />
30
31     <activity
32         android:name=".SplashScreen"
33         android:exported="true" />
34
35   
```

Progress yang dibuat minggu ini adalah membuat tampilan sebagian dari aplikasi menggunakan kotlin dan xml dalam pengerjaannya. Yang sudah dibuat ada splash screen, login, dan registrasi. Untuk beranda dan fragment-fragmentnya masih on-progress.

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---

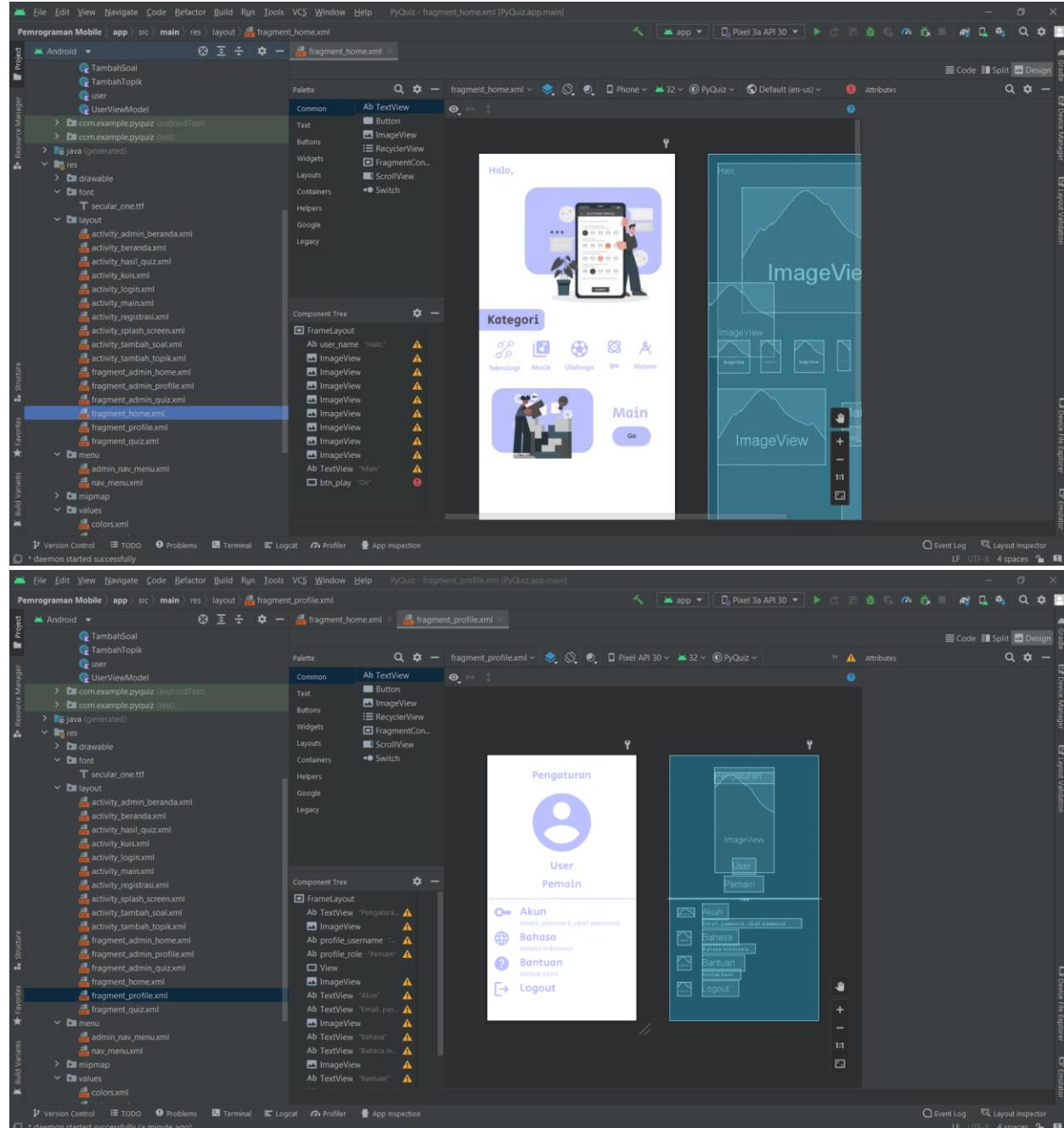
Berikut merupakan dokumentasi kegiatan



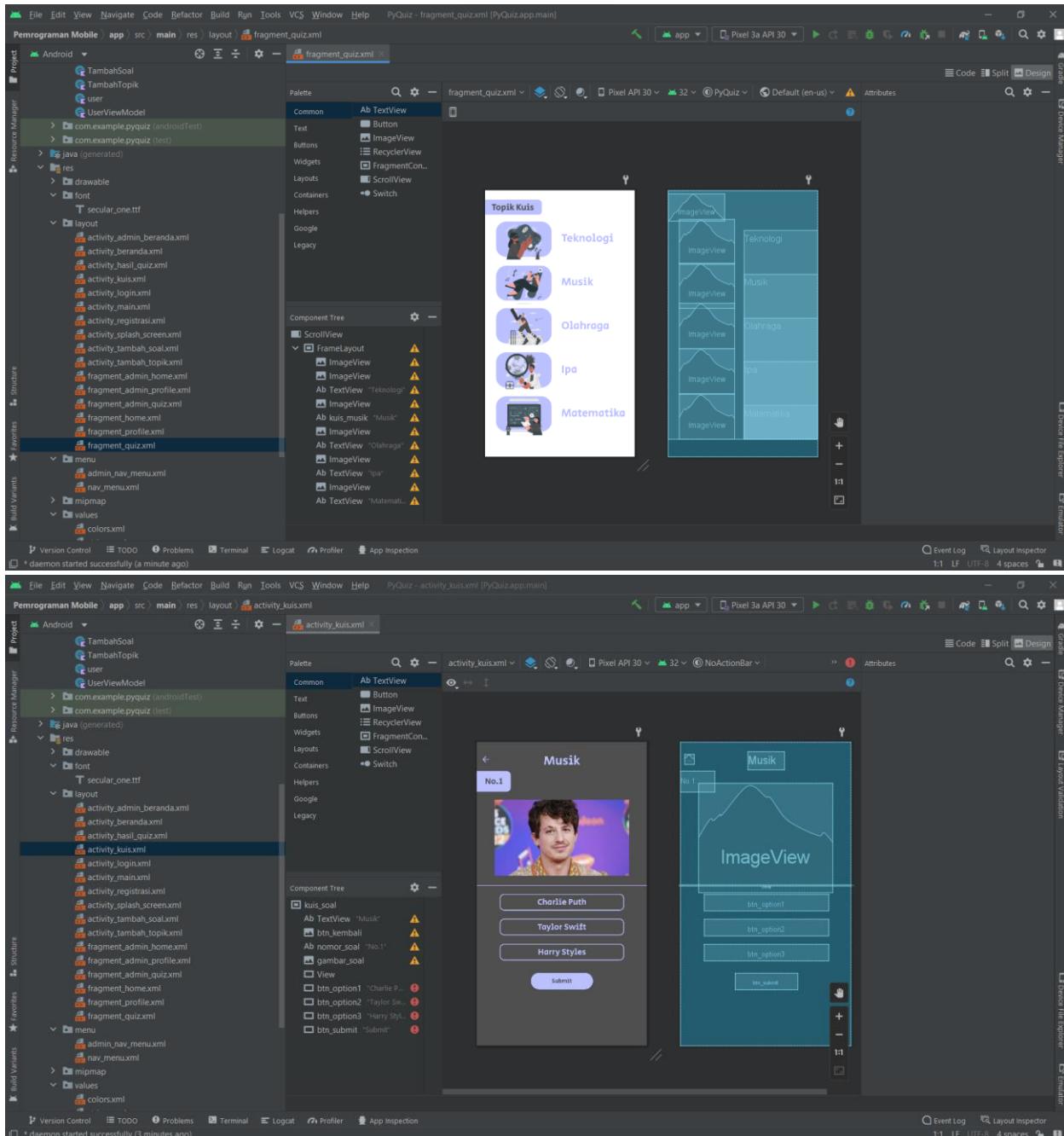
Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

## 1.9 Progress Projek II

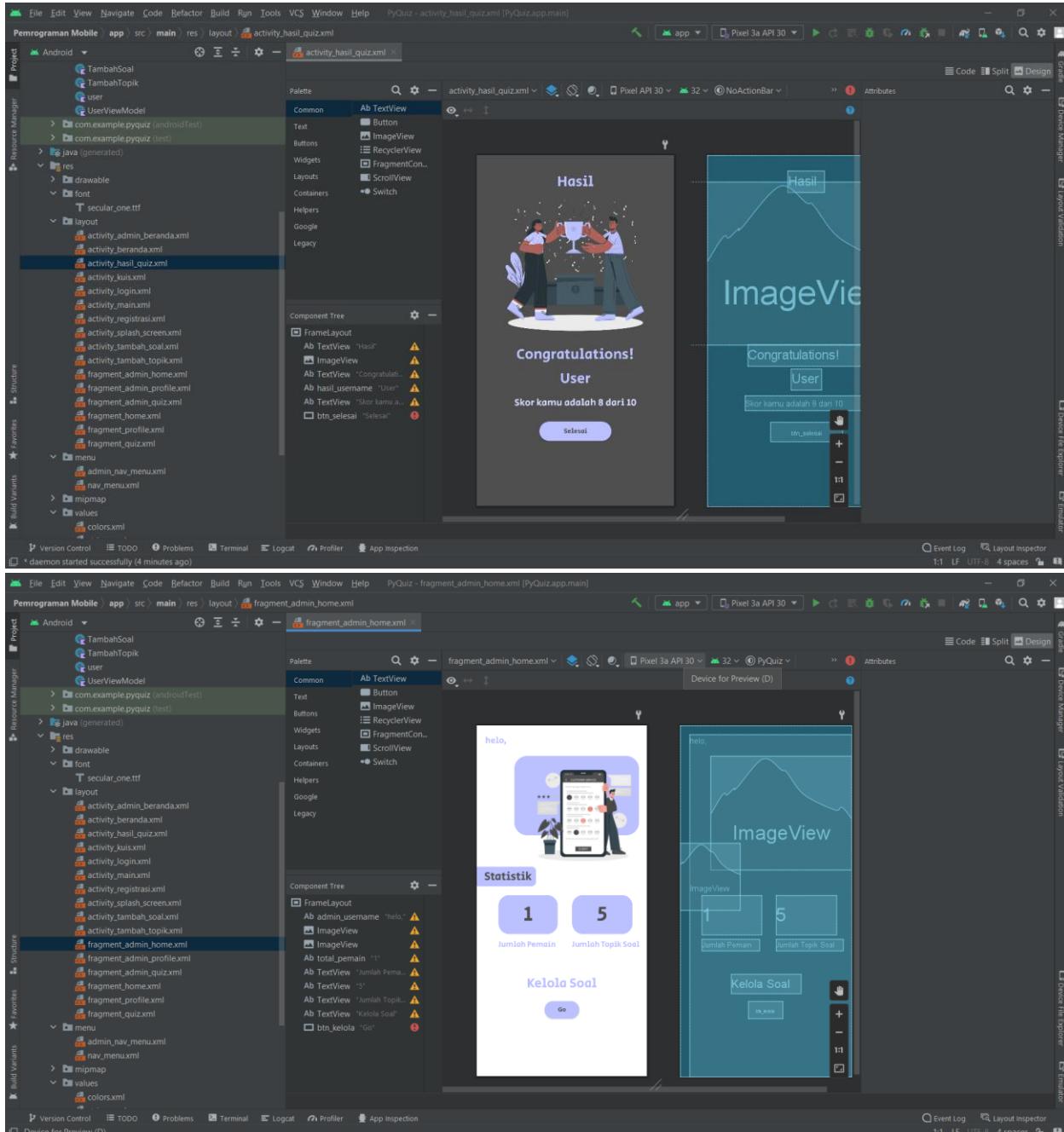
9 Januari - 15 Januari 2023



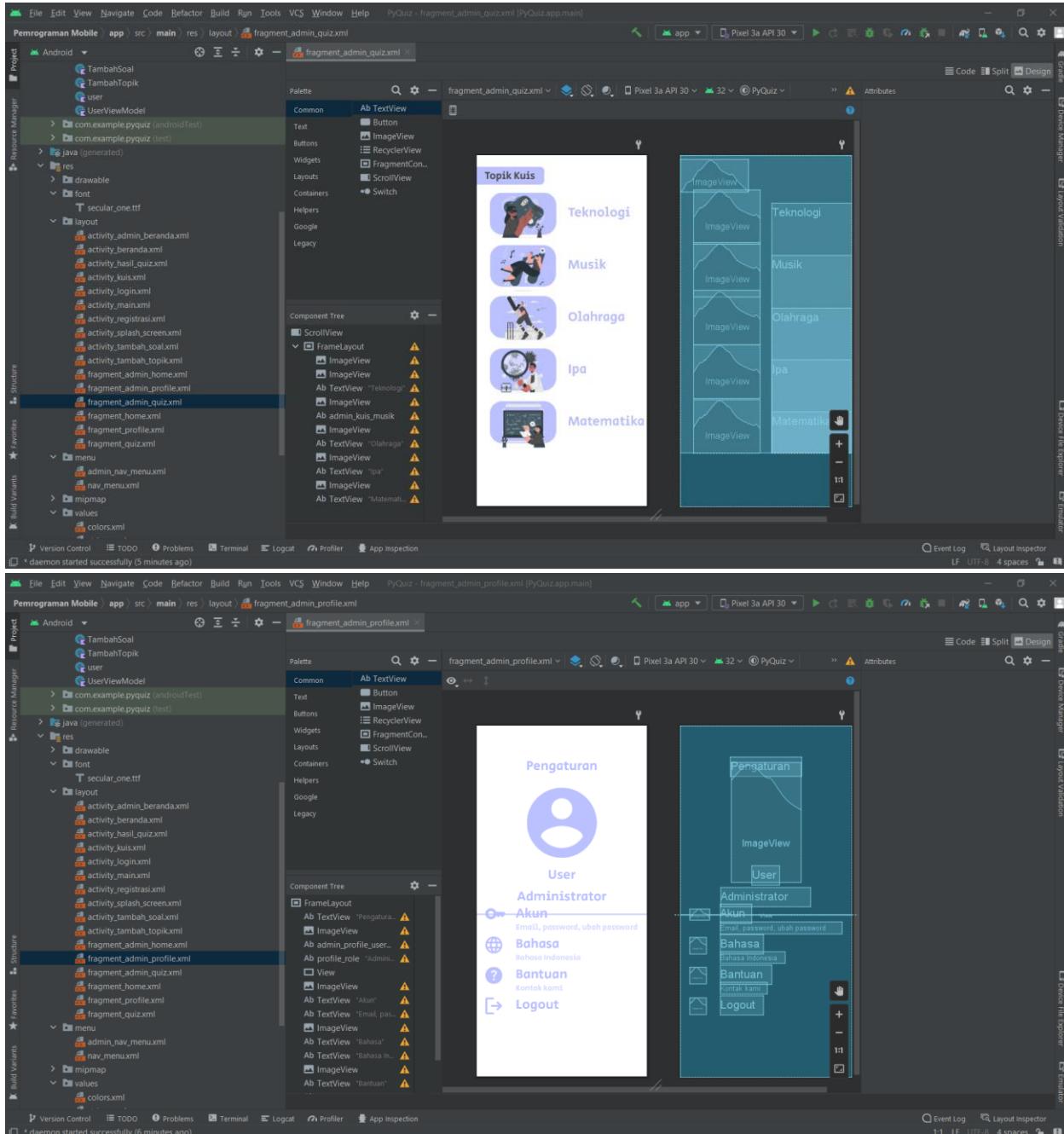
Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022



Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022



Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022



Nama/NIM : Fanny / 2055301044  
 Kelas/Prodi : 3 TI D / Teknik Informatika  
 Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
 AIL : Puspita Aisyah Asnur, S.Tr.Kom  
 Tanggal : 30 November 2022

The image shows two side-by-side screenshots of the Android Studio interface for the PyQuiz application.

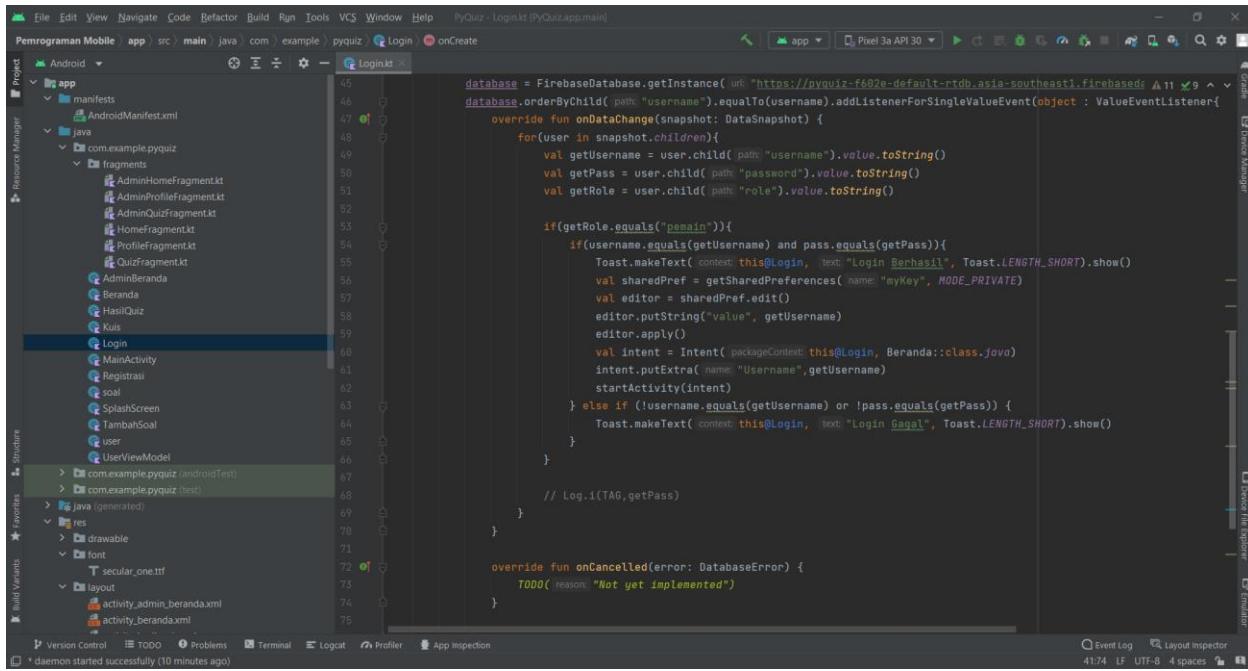
**Left Screenshot (Layout Editor):**

- Project Structure:** Shows the project tree with packages like `com.example.pyquiz` containing `TambahanSoal`, `TambahTopik`, `User`, and `UserViewModel`.
- Resource Manager:** Shows files under `res` including `layout` (e.g., `activity\_tambah\_soal.xml`), `drawable`, `font`, and `values` (e.g., `colors.xml`).
- Palette:** Displays common UI components like `Text`, `Buttons`, `Widgets`, and `Layouts`.
- Component Tree:** Shows the hierarchical structure of the XML layout file `activity\_tambah\_soal.xml`.
- Design View:** Shows the visual representation of the `Tambah Soal` screen with fields for `Gambar` (Image), `Opsi1` (Option 1), `Opsi2` (Option 2), `Opsi3` (Option 3), `Jawaban` (Answer), and a `tambah` button.

**Right Screenshot (Code Editor):**

- Project Structure:** Shows the project tree with packages like `com.example.pyquiz` containing `Login` (selected), `AdminHomeFragment`, `AdminProfileFragment`, `AdminQuizFragment`, `HomeFragment`, `ProfileFragment`, and `QuizFragment`.
- Java Code:** The `Login` class code is displayed, which handles user login logic using `DatabaseReference` and `Toast` messages for validation errors.

Nama/NIM : Fanny / 2055301044  
 Kelas/Prodi : 3 TI D / Teknik Informatika  
 Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
 AIL : Puspita Aisyah Asnur, S.Tr.Kom  
 Tanggal : 30 November 2022



```

  database = FirebaseDatabase.getInstance( url: "https://pyquiz-f602e-default.firebaseio.com/" )
  database.orderByChild( path: "username" ).equalTo(username).addListenerForSingleValueEvent(object : ValueEventListener{
    override fun onDataChange(snapshot: DataSnapshot) {
      for(user in snapshot.children){
        val getUsername = user.child( path: "username" ).value.toString()
        val getPassword = user.child( path: "password" ).value.toString()
        val getRole = user.child( path: "role" ).value.toString()

        if(getRole.equals("pemain")){
          if(username.equals(getUsername) and pass.equals(getPassword)){
            Toast.makeText( context: this@Login, text: "Login Berhasil", Toast.LENGTH_SHORT ).show()
            val sharedPref = getSharedPreferences( name: "myKey", MODE_PRIVATE )
            val editor = sharedPref.edit()
            editor.putString("value", getUsername)
            editor.apply()
            val intent = Intent( packageContext: this@Login, Beranda::class.java )
            intent.putExtra( name: "Username", getUsername )
            startActivity(intent)
          } else if (!username.equals(getUsername) or !pass.equals(getPassword)){
            Toast.makeText( context: this@Login, text: "Login gagal", Toast.LENGTH_SHORT ).show()
          }
        }
      }
      // Log.i(TAG, getPassword)
    }

    override fun onCancelled(error: DatabaseError) {
      TODO( reason: "Not yet implemented" )
    }
  })
}

Intent.putExtra( name: "username", getUsername )
startActivity(intent)
} else if (!username.equals(getUsername) or !pass.equals(getPassword)){
  Toast.makeText( context: this@Login, text: "Login gagal", Toast.LENGTH_SHORT ).show()
}

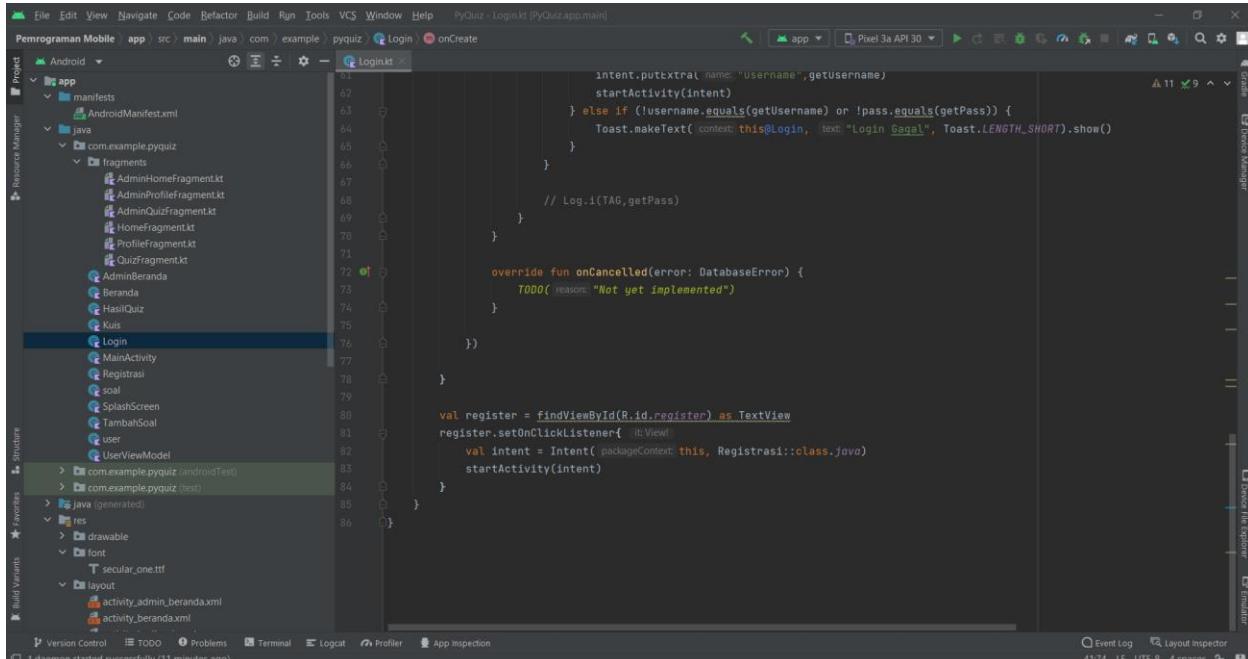
// Log.i(TAG, getPassword)
}

override fun onCancelled(error: DatabaseError) {
  TODO( reason: "Not yet implemented" )
}

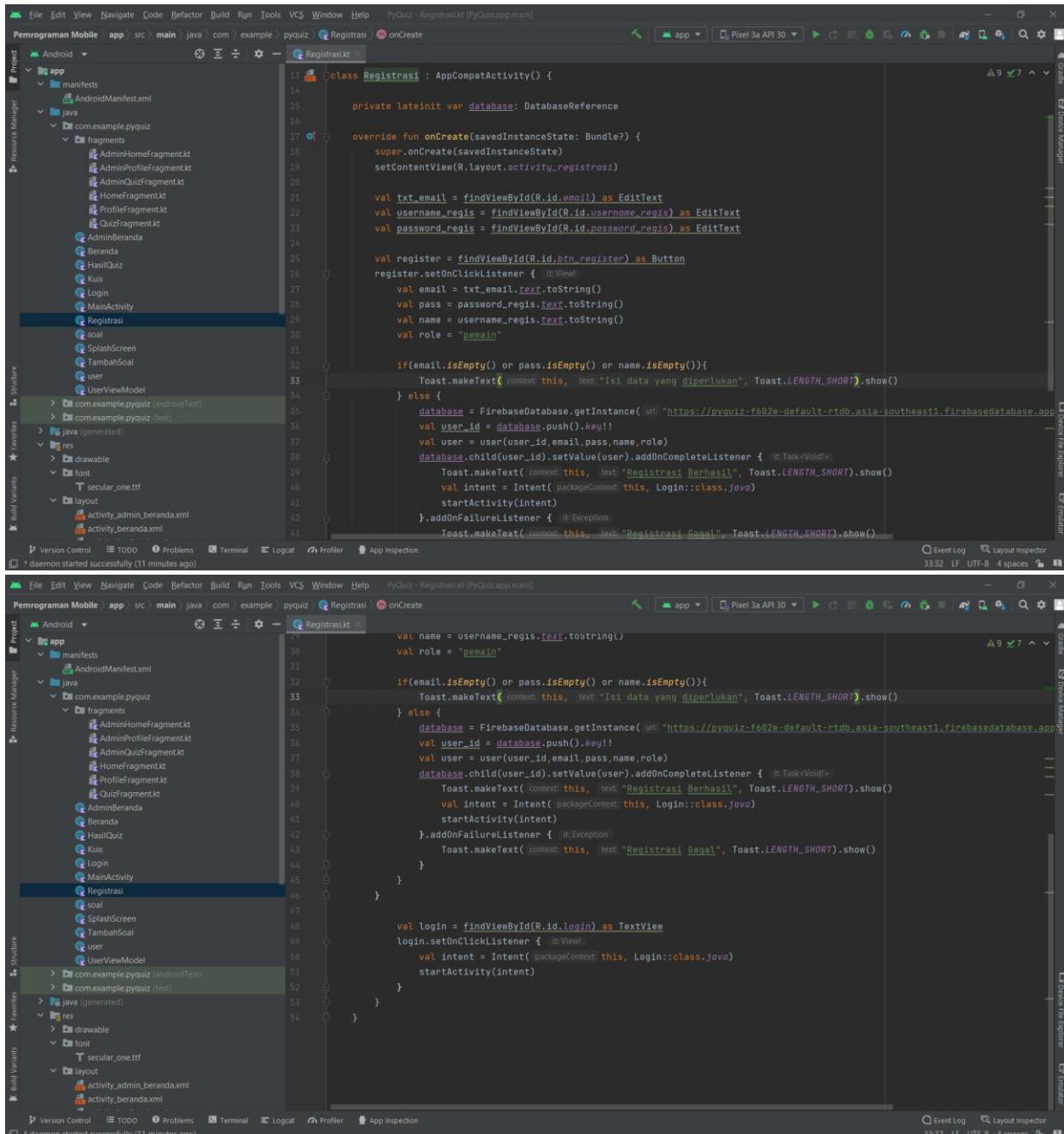
}

val register = findViewById(R.id.register) as TextView
register.setOnClickListener{ it: View!
  val intent = Intent( packageContext: this, Registrasi::class.java )
  startActivity(intent)
}
}

```



Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022



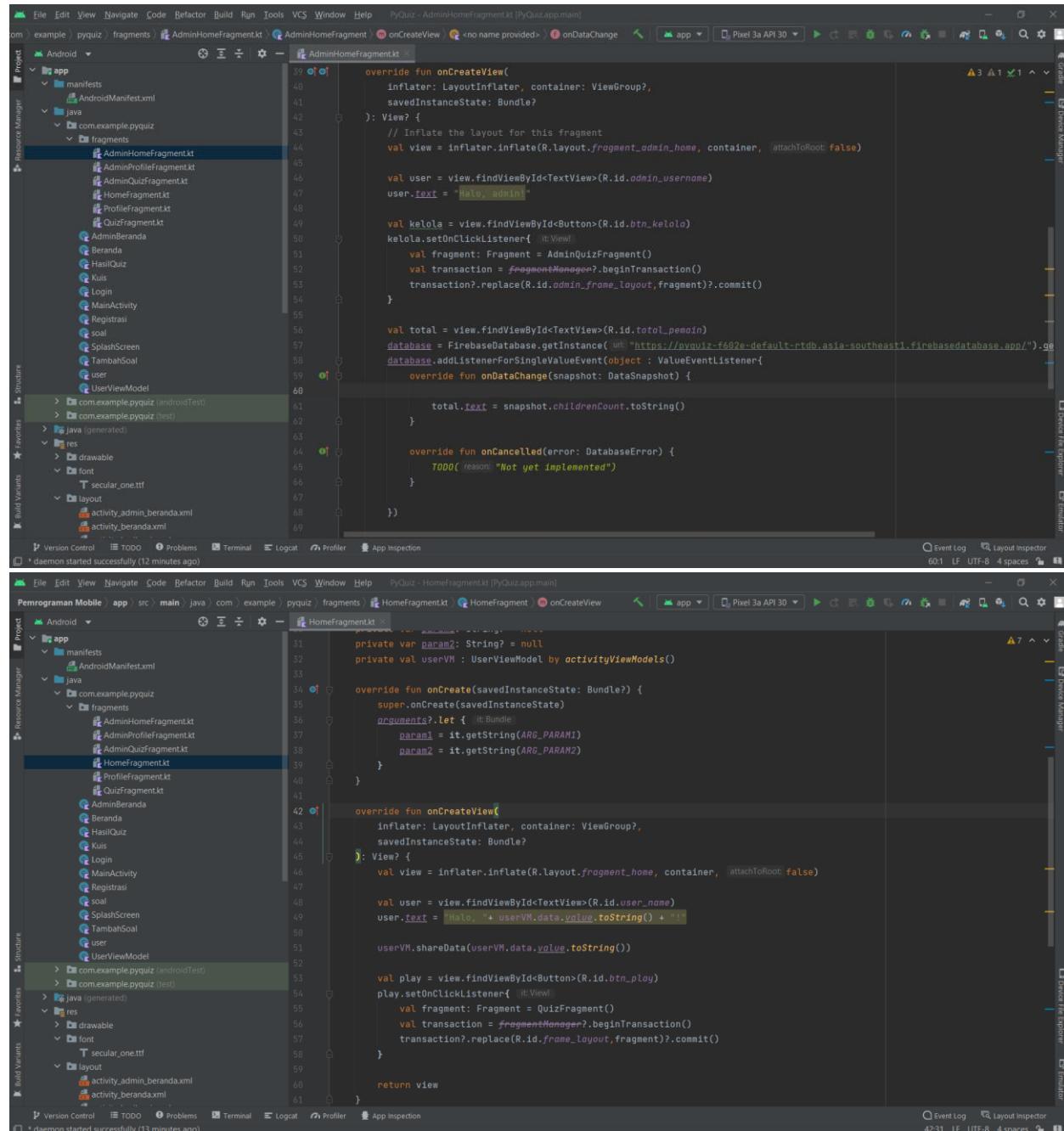
```
PyQuiz - Registrasi.kt [PyQuiz.app.main]
```

```
13 package com.example.pyquiz
14
15     private lateinit var database: DatabaseReference
16
17     override fun onCreate(savedInstanceState: Bundle?) {
18         super.onCreate(savedInstanceState)
19         setContentView(R.layout.activity_registrasi)
20
21         val txt_email = findViewById(R.id.email) as EditText
22         val username_regs = findViewById(R.id.username_regs) as EditText
23         val password_regs = findViewById(R.id.password_regs) as EditText
24
25         val register = findViewById(R.id.btn_register) as Button
26         register.setOnClickListener {
27             val email = txt_email.text.toString()
28             val pass = password_regs.text.toString()
29             val name = username_regs.text.toString()
30             val role = "pesanin"
31
32             if(email.isEmpty() || pass.isEmpty() || name.isEmpty()){
33                 Toast.makeText(context, "Isi data yang diperlukan", Toast.LENGTH_SHORT).show()
34             } else {
35                 database = FirebaseDatabase.getInstance("https://pyquiz-f602e-default-firebase.firebaseio.com")
36                 val user_id = database.push().key!
37                 val user = User(user_id, email, pass, name, role)
38                 database.child(user_id).setValue(user).addOnCompleteListener { task: Task<Void>?
39                     Toast.makeText(context, "Registrasi Berhasil", Toast.LENGTH_SHORT).show()
40                     val intent = Intent(packageContext, Login::class.java)
41                     startActivity(intent)
42                 }.addOnFailureListener { exception: Exception
43                     Toast.makeText(context, "Registrasi Gagal", Toast.LENGTH_SHORT).show()
44                 }
45             }
46
47             val login = findViewById(R.id.login) as TextView
48             login.setOnClickListener {
49                 val intent = Intent(packageContext, Login::class.java)
50                 startActivity(intent)
51             }
52         }
53     }
54 }
```

```
PyQuiz - Registrasi.kt [PyQuiz.app.main]
```

```
13 package com.example.pyquiz
14
15     private lateinit var database: DatabaseReference
16
17     override fun onCreate(savedInstanceState: Bundle?) {
18         super.onCreate(savedInstanceState)
19         setContentView(R.layout.activity_registrasi)
20
21         val txt_email = findViewById(R.id.email) as EditText
22         val username_regs = findViewById(R.id.username_regs) as EditText
23         val password_regs = findViewById(R.id.password_regs) as EditText
24
25         val register = findViewById(R.id.btn_register) as Button
26         register.setOnClickListener {
27             val email = txt_email.text.toString()
28             val pass = password_regs.text.toString()
29             val name = username_regs.text.toString()
30             val role = "pesanin"
31
32             if(email.isEmpty() || pass.isEmpty() || name.isEmpty()){
33                 Toast.makeText(context, "Isi data yang diperlukan", Toast.LENGTH_SHORT).show()
34             } else {
35                 database = FirebaseDatabase.getInstance("https://pyquiz-f602e-default-firebase.firebaseio.com")
36                 val user_id = database.push().key!
37                 val user = User(user_id, email, pass, name, role)
38                 database.child(user_id).setValue(user).addOnCompleteListener { task: Task<Void>?
39                     Toast.makeText(context, "Registrasi Berhasil", Toast.LENGTH_SHORT).show()
40                     val intent = Intent(packageContext, Login::class.java)
41                     startActivity(intent)
42                 }.addOnFailureListener { exception: Exception
43                     Toast.makeText(context, "Registrasi Gagal", Toast.LENGTH_SHORT).show()
44                 }
45             }
46
47             val login = findViewById(R.id.login) as TextView
48             login.setOnClickListener {
49                 val intent = Intent(packageContext, Login::class.java)
50                 startActivity(intent)
51             }
52         }
53     }
54 }
```

Nama/NIM : Fanny / 2055301044  
 Kelas/Prodi : 3 TI D / Teknik Informatika  
 Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
 AIL : Puspita Aisyah Asnur, S.Tr.Kom  
 Tanggal : 30 November 2022



The image shows two screenshots of the Android Studio interface, each displaying the code for a different fragment class.

**Screenshot 1 (Top): AdminHomeFragment.kt**

```

File Edit View Navigate Code Refactor Build Run Tools VCS Window Help PyQuiz - AdminHomeFragment.kt [PyQuiz.app.main]
om > example > pyquiz > fragments > AdminHomeFragment.kt > onCreateView < no name provided > onDataChange
app Pixel 3a API 30 Device Manager Device File Explorer Emulator
Project Resource Manager Build Variants Favorites Structure Version Control TODO Problems Terminal Logcat Profiler App Inspection Event Log Layout Inspector
Android app manifests AndroidManifest.xml Java com.example.pyquiz fragments AdminHomeFragment.kt AdminProfileFragment.kt AdminQuizFragment.kt HomeFragment.kt ProfileFragment.kt QuizFragment.kt AdminBeranda Beranda HasilQuiz Kuis Login MainActivity Registrasi Soal SplashScreen TambahSoal user UserViewModel
39
override fun onCreateView(
  inflator: LayoutInflater, container: ViewGroup?,
  savedInstanceState: Bundle?
): View? {
  // Inflate the layout for this fragment
  val view = inflator.inflate(R.layout.fragment_admin_home, container, false)

  val user = view.findViewById<TextView>(R.id.admin_username)
  user.text = "Halo, admin"

  val kelola = view.findViewById<Button>(R.id.btn_kelola)
  kelola.setOnClickListener {
    val fragment = AdminQuizFragment()
    val transaction = fragmentManager?.beginTransaction()
    transaction?.replace(R.id.admin_frame_layout, fragment)?.commit()
  }

  val total = view.findViewById<TextView>(R.id.total_pemain)
  database = FirebaseDatabase.getInstance(url = "https://pyquiz-f602e-default.firebaseio.com/.json")
  database.addValueEventListener(object : ValueEventListener {
    override fun onDataChange(snapshot: DataSnapshot) {
      total.text = snapshot.childrenCount.toString()
    }
  })

  override fun onCancelled(error: DatabaseError) {
    TODO("Not yet implemented")
  }
}

```

**Screenshot 2 (Bottom): HomeFragment.kt**

```

File Edit View Navigate Code Refactor Build Run Tools VCS Window Help PyQuiz - HomeFragment.kt [PyQuiz.app.main]
Pengraman Mobile > app > src > main > java > com > example > pyquiz > fragments > HomeFragment.kt > onCreateView < no name provided > onDataChange
app Pixel 3a API 30 Device Manager Device File Explorer Emulator
Project Resource Manager Build Variants Favorites Structure Version Control TODO Problems Terminal Logcat Profiler App Inspection Event Log Layout Inspector
Android app manifests AndroidManifest.xml Java com.example.pyquiz fragments AdminHomeFragment.kt AdminProfileFragment.kt AdminQuizFragment.kt HomeFragment.kt ProfileFragment.kt QuizFragment.kt AdminBeranda Beranda HasilQuiz Kuis Login MainActivity Registrasi Soal SplashScreen TambahSoal user UserViewModel
31
private var param2: String? = null
private val userVM: UserViewModel by activityViewModels()

override fun onCreate(savedInstanceState: Bundle?) {
  super.onCreate(savedInstanceState)
  arguments?.let {
    param1 = it.getStringExtra(ARG_PARAM1)
    param2 = it.getStringExtra(ARG_PARAM2)
  }
}

override fun onCreateView(
  inflator: LayoutInflater, container: ViewGroup?,
  savedInstanceState: Bundle?
): View? {
  val view = inflator.inflate(R.layout.fragment_home, container, false)

  val user = view.findViewById<TextView>(R.id.user_name)
  user.text = "Halo, " + userVM.data.value.toString() + "!"

  userVM.shareData(userVM.data.value.toString())

  val play = view.findViewById<Button>(R.id.btn_play)
  play.setOnClickListener {
    val fragment = QuizFragment()
    val transaction = fragmentManager?.beginTransaction()
    transaction?.replace(R.id.frame_layout, fragment)?.commit()
  }
}

return view
}

```

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

The image shows two side-by-side screenshots of the Android Studio IDE. Both screenshots display the same Java code for different fragments of an application named PyQuiz.

**AdminProfileFragment.kt (Top Screenshot):**

```
super.onCreate(savedInstanceState)
arguments?.let {
    param1 = it.getString(ARG_PARAM1)
    param2 = it.getString(ARG_PARAM2)
}

override fun onCreateView(
    inflater: LayoutInflater, container: ViewGroup?,
    savedInstanceState: Bundle?
): View? {
    // Inflate the layout for this fragment
    val view = inflater.inflate(R.layout.fragment_admin_profile, container, false)

    val username = view.findViewById<TextView>(R.id.admin_profile_username)
    username.text = "admin"

    val logout = view.findViewById<TextView>(R.id.admin_btn_logout)
    logout.setOnClickListener{
        val intent = Intent (getActivity(), Login::class.java)
        getActivity()?.startActivity(intent)
    }

    return view
}

companion object {
    /**
     * Use this factory method to create a new instance of
     * this fragment using the provided parameters.
     */
}
```

**ProfileFragment.kt (Bottom Screenshot):**

```
super.onCreate(savedInstanceState)
arguments?.let {
    param1 = it.getString(ARG_PARAM1)
    param2 = it.getString(ARG_PARAM2)
}

override fun onCreateView(
    inflater: LayoutInflater, container: ViewGroup?,
    savedInstanceState: Bundle?
): View? {
    // Inflate the layout for this fragment
    val view = inflater.inflate(R.layout.fragment_profile, container, false)

    val username = view.findViewById<TextView>(R.id.profile_username)
    username.text = userVM.sharedData.value.toString()

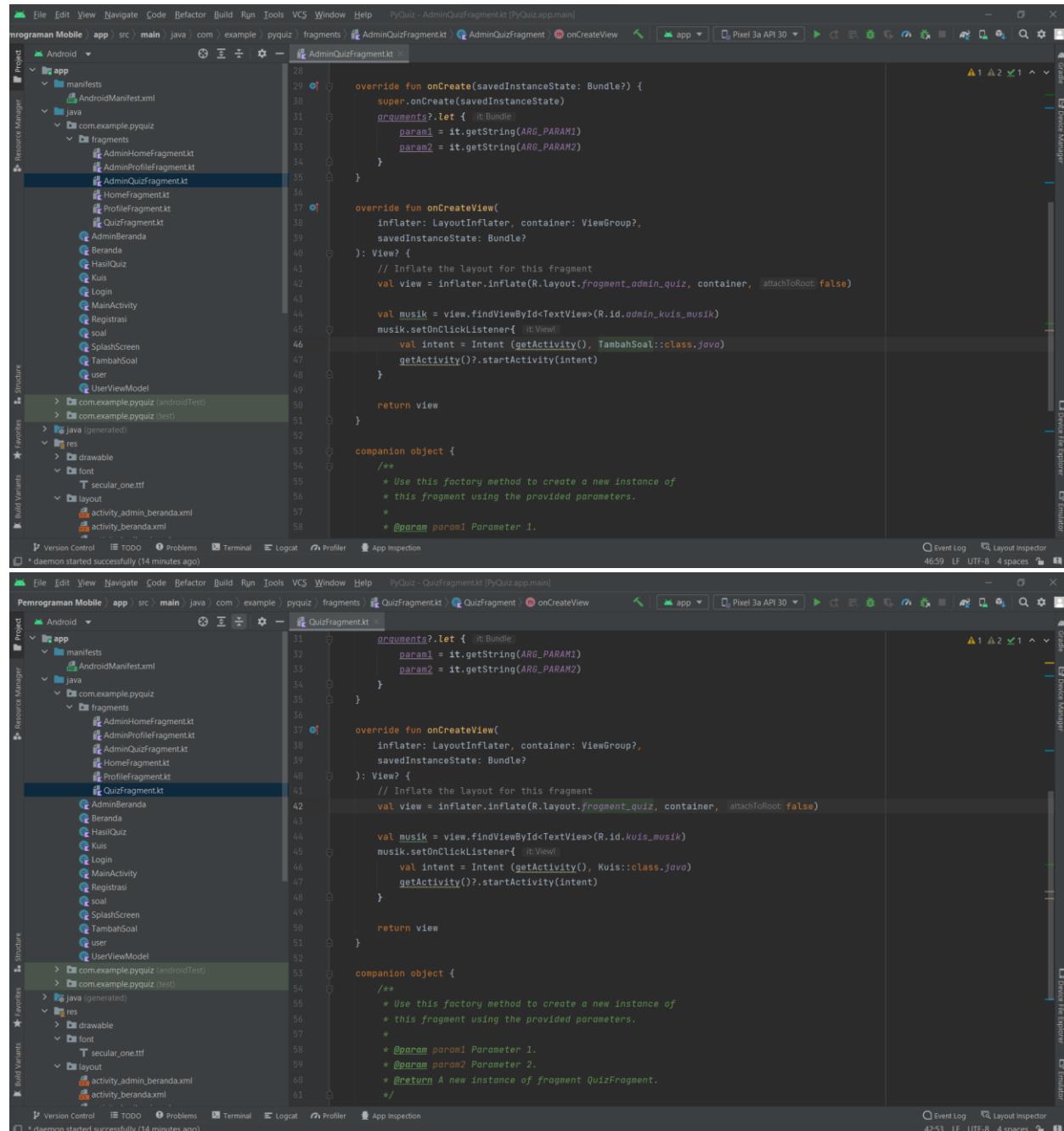
    val logout = view.findViewById<TextView>(R.id.btn_logout)
    logout.setOnClickListener{
        val intent = Intent (getActivity(), Login::class.java)
        getActivity()?.startActivity(intent)
    }

    return view
}

companion object {
    /**
     * Use this factory method to create a new instance of
     * this fragment using the provided parameters.
     */
}
```

In both screenshots, the code is identical except for the fragment names and the corresponding XML layout files being inflated. The XML files are located in the `layout` directory of the project, specifically `activity_admin_beranda.xml` and `activity_beranda.xml`.

Nama/NIM : Fanny / 2055301044  
 Kelas/Prodi : 3 TI D / Teknik Informatika  
 Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
 AIL : Puspita Aisyah Asnur, S.Tr.Kom  
 Tanggal : 30 November 2022



```

File Edit View Navigate Code Refactor Build Run Tools VCS Window Help PyQuiz - AdminQuizFragment.kt [PyQuiz.app.main]
Pengraman Mobile > app > src > main > java > com > example > pyquiz > fragments > AdminQuizFragment.kt > AdminQuizFragment > onCreateView()
AndroidManifest.xml Pixel 3a API 30
app
  manifests
    AndroidManifest.xml
  Java
    com.example.pyquiz
      fragments
        AdminHomeFragment.kt
        AdminProfileFragment.kt
        AdminQuizFragment.kt
        AdminBeranda
        Beranda
        HasilQuiz
        Kuis
        Login
        MainActivity
        Registrasi
        Soal
        SplashScreen
        TambahSoal
        user
        UserViewModel
      > com.example.pyquiz (androidTest)
      > com.example.pyquiz (test)
    java (generated)
    res
    drawable
    font
      secular_one.ttf
    layout
      activity_admin_beranda.xml
      activity_beranda.xml
  com.example.pyquiz (androidTest)
  com.example.pyquiz (test)
  java (generated)
  res
  drawable
  font
    secular_one.ttf
  layout
    activity_admin_beranda.xml
    activity_beranda.xml
  Version Control TODO Problems Terminal Logcat Profiler App Inspection Event Log Layout Inspector
  daemon started successfully (14 minutes ago)
  4659 LF UTF-8 4 spaces

override fun onCreateView(
    inflater: LayoutInflater, container: ViewGroup?,
    savedInstanceState: Bundle?
): View? {
    // Inflate the layout for this fragment
    val view = inflater.inflate(R.layout.fragment_admin_quiz, container, false)

    val musik = view.findViewById<TextView>(R.id.admin_kuis_musik)
    musik.setOnClickListener {
        val intent = Intent(getActivity(), Kuis::class.java)
        getActivity().startActivity(intent)
    }
}

return view
}

companion object {
    /**
     * Use this factory method to create a new instance of
     * this fragment using the provided parameters.
     *
     * @param param1 Parameter 1.
     * @param param2 Parameter 2.
     * @return A new instance of fragment AdminQuizFragment.
     */
    @JvmStatic
    fun newInstance(param1: String, param2: String) =
        AdminQuizFragment().apply {
            arguments?.let {
                param1 = it.getString(ARG_PARAM1)
                param2 = it.getString(ARG_PARAM2)
            }
        }
}

```

```

File Edit View Navigate Code Refactor Build Run Tools VCS Window Help PyQuiz - QuizFragment.kt [PyQuiz.app.main]
Pengraman Mobile > app > src > main > java > com > example > pyquiz > fragments > QuizFragment.kt > QuizFragment > onCreateView()
AndroidManifest.xml Pixel 3a API 30
app
  manifests
    AndroidManifest.xml
  Java
    com.example.pyquiz
      fragments
        AdminHomeFragment.kt
        AdminProfileFragment.kt
        AdminQuizFragment.kt
        HomeFragment.kt
        ProfileFragment.kt
        QuizFragment.kt
        AdminBeranda
        Beranda
        HasilQuiz
        Kuis
        Login
        MainActivity
        Registrasi
        Soal
        SplashScreen
        TambahSoal
        user
        UserViewModel
      > com.example.pyquiz (androidTest)
      > com.example.pyquiz (test)
    java (generated)
    res
    drawable
    font
      secular_one.ttf
    layout
      activity_admin_beranda.xml
      activity_beranda.xml
  com.example.pyquiz (androidTest)
  com.example.pyquiz (test)
  java (generated)
  res
  drawable
  font
    secular_one.ttf
  layout
    activity_admin_beranda.xml
    activity_beranda.xml
  Version Control TODO Problems Terminal Logcat Profiler App Inspection Event Log Layout Inspector
  daemon started successfully (14 minutes ago)
  4253 LF UTF-8 4 spaces

arguments?.let {
    param1 = it.getString(ARG_PARAM1)
    param2 = it.getString(ARG_PARAM2)
}

override fun onCreateView(
    inflater: LayoutInflater, container: ViewGroup?,
    savedInstanceState: Bundle?
): View? {
    // Inflate the layout for this fragment
    val view = inflater.inflate(R.layout.fragment_quiz, container, false)

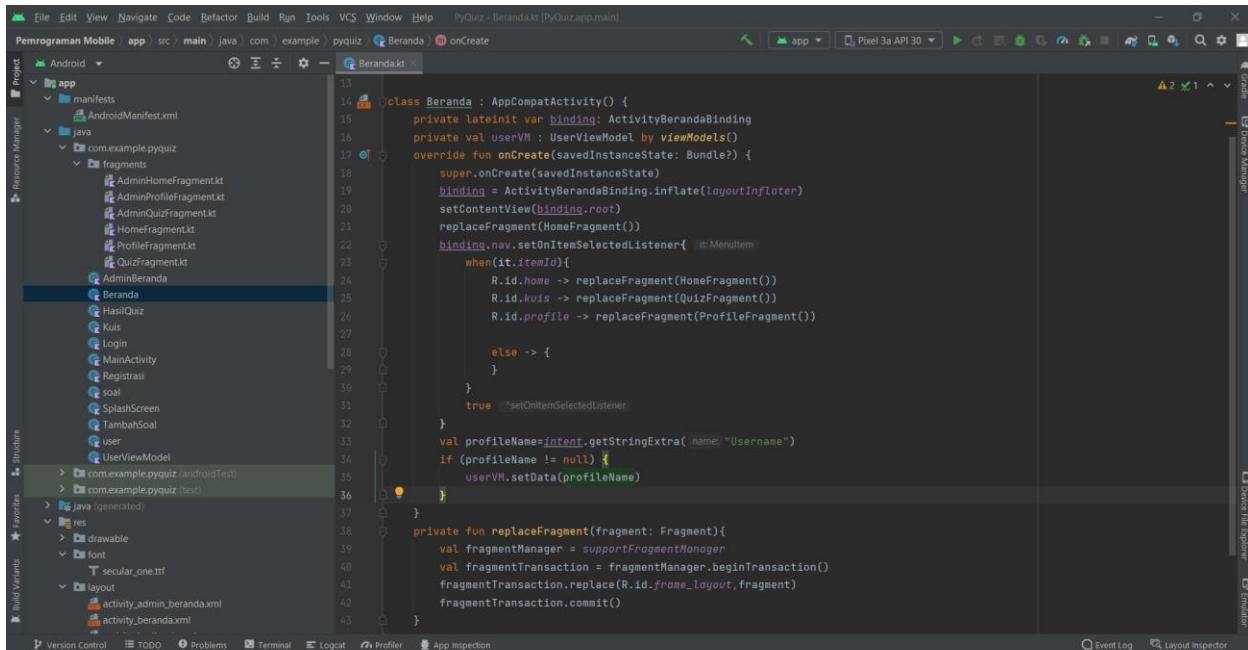
    val musik = view.findViewById<TextView>(R.id.kuis_musik)
    musik.setOnClickListener {
        val intent = Intent(getActivity(), Kuis::class.java)
        getActivity().startActivity(intent)
    }
}

return view
}

companion object {
    /**
     * Use this factory method to create a new instance of
     * this fragment using the provided parameters.
     *
     * @param param1 Parameter 1.
     * @param param2 Parameter 2.
     * @return A new instance of fragment QuizFragment.
     */
    @JvmStatic
    fun newInstance(param1: String, param2: String) =
        QuizFragment().apply {
            arguments?.let {
                param1 = it.getString(ARG_PARAM1)
                param2 = it.getString(ARG_PARAM2)
            }
        }
}

```

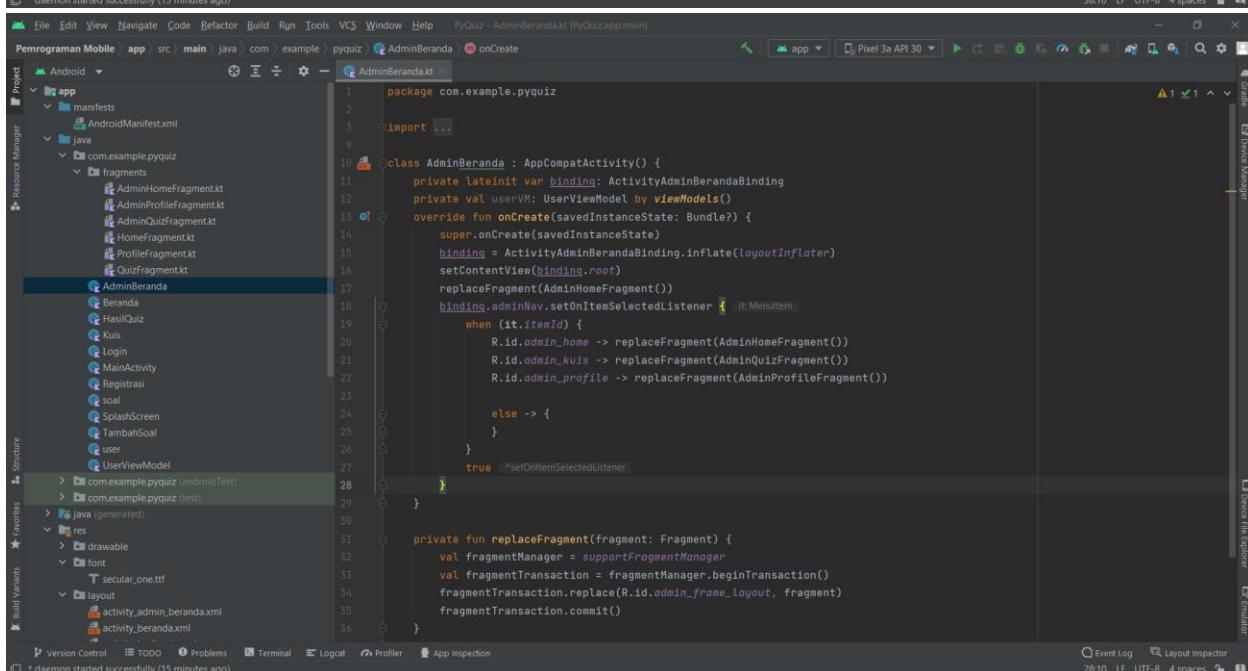
Nama/NIM : Fanny / 2055301044  
 Kelas/Prodi : 3 TI D / Teknik Informatika  
 Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
 AIL : Puspita Aisyah Asnur, S.Tr.Kom  
 Tanggal : 30 November 2022



```

13
14 class Beranda : AppCompatActivity() {
15   private lateinit var binding: ActivityBerandaBinding
16   private val userVM : UserViewModel by viewModels()
17   override fun onCreate(savedInstanceState: Bundle?) {
18     super.onCreate(savedInstanceState)
19     binding = ActivityBerandaBinding.inflate(layoutInflater)
20     setContentView(binding.root)
21     replaceFragment(HomeFragment())
22     binding.nav.setOnItemSelectedListener { item: MenuItem -
23       when (item.itemId) {
24         R.id.home -> replaceFragment(HomeFragment())
25         R.id.kuis -> replaceFragment(QuizFragment())
26         R.id.profile -> replaceFragment(ProfileFragment())
27       }
28     }
29   }
30   true /*setOnItemSelectedListener
31   */
32   val profileName: String? = intent.getStringExtra("Username")
33   if (profileName != null) {
34     userVM.setData(profileName)
35   }
36
37   private fun replaceFragment(fragment: Fragment){
38     val fragmentManager = supportFragmentManager
39     val fragmentTransaction = fragmentManager.beginTransaction()
40     fragmentTransaction.replace(R.id.frame_layout, fragment)
41     fragmentTransaction.commit()
42   }
43 }

```



```

1 package com.example.pyquiz
2
3 import ...
4
5 class AdminBeranda : AppCompatActivity() {
6   private lateinit var binding: ActivityAdminBerandaBinding
7   private val userVM: UserViewModel by viewModels()
8   override fun onCreate(savedInstanceState: Bundle?) {
9     super.onCreate(savedInstanceState)
10    binding = ActivityAdminBerandaBinding.inflate(layoutInflater)
11    setContentView(binding.root)
12    replaceFragment(AdminHomeFragment())
13    binding.adminNav.setOnItemSelectedListener { item: MenuItem -
14      when (item.itemId) {
15        R.id.admin_home -> replaceFragment(AdminHomeFragment())
16        R.id.admin_kuis -> replaceFragment(AdminQuizFragment())
17        R.id.admin_profile -> replaceFragment(AdminProfileFragment())
18      }
19    }
20  true /*setOnItemSelectedListener
21  */
22  val profileName: String? = intent.getStringExtra("Username")
23  if (profileName != null) {
24    userVM.setData(profileName)
25  }
26
27  private fun replaceFragment(fragment: Fragment) {
28    val fragmentManager = supportFragmentManager
29    val fragmentTransaction = fragmentManager.beginTransaction()
30    fragmentTransaction.replace(R.id.admin_frame_layout, fragment)
31    fragmentTransaction.commit()
32  }
33 }
34
35
36
37
38
39
40
41
42
43

```

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhan, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help PyQuiz - TambahSoal [PyQuiz.app.main]
Pemrograman Mobile app src main java com example pyquiz pyquiz < TambahSoal > onResume
AndroidManifest.xml
TambahSoal.kt

16 class TambahSoal : AppCompatActivity() {
17
18     private lateinit var database: DatabaseReference
19     var selectedPict : String = ""
20     lateinit var pictUrl : Uri
21
22     override fun onCreate(savedInstanceState: Bundle?) {
23         super.onCreate(savedInstanceState)
24         setContentView(R.layout.activity_tambah_soal)
25
26         val gambar_soal = findViewById(R.id.upload_soal) as EditText
27         val txt_ops1 = findViewById(R.id.tambah_ops1) as EditText
28         val txt_ops2 = findViewById(R.id.tambah_ops2) as EditText
29         val txt_ops3 = findViewById(R.id.tambah_ops3) as EditText
30         val txt_jwbn = findViewById(R.id.tambah_jawaban) as EditText
31         val tambah = findViewById(R.id.btn_tambah_soal) as Button
32
33         gambar_soal.setOnClickListener { it: View! }
34             val intent = Intent()
35                 .setType("image/*")
36                 .setAction(Intent.ACTION_GET_CONTENT)
37
38             startActivityForResult(Intent.createChooser(intent, title = "Pilih Gambar"), requestCode = 111)
39             gambar_soal.setText(selectedPict)
40
41         tambah.setOnClickListener { it: View! }
42             val gmr = gambar_soal.text.toString()
43             val ops1 = txt_ops1.text.toString()
44             val ops2 = txt_ops2.text.toString()
45             val ops3 = txt_ops3.text.toString()
46
47         val jwbn = txt_jwbn.text.toString()
48
49         database = FirebaseDatabase.getInstance( url = "https://pyquiz-f602e-default.firebaseio.com/" )
50         val soal_id = database.push().key!!
51         val soal = soal(soal_id, gmr, ops1, ops2, ops3, jwbn)
52         database.child(soal_id).setValue(soal).addOnCompleteListener { it: Task<Void>!
53             Toast.makeText( context = this, text = "Tambah Soal Berhasil", Toast.LENGTH_SHORT ).show()
54         }.addOnFailureListener { it: Exception
55             Toast.makeText( context = this, text = "Tambah Soal Gagal", Toast.LENGTH_SHORT ).show()
56         }
57
58         val pictStorage = FirebaseStorage.getInstance( url = "gs://pyquiz-f602e.appspot.com" ).getReference( location = "gambar_soal/" )
59         pictStorage.putFile(pictUrl).addOnSuccessListener { it: UploadTask.TaskSnapshot!
60             Toast.makeText( context = this, text = "Upload Gambar Berhasil", Toast.LENGTH_SHORT ).show()
61             val intent = Intent( packageContext = this, AdminBeranda::class.java )
62             startActivity(intent)
63         }.addOnFailureListener{ it: Exception
64             Toast.makeText( context = this, text = "Upload Gambar Gagal", Toast.LENGTH_SHORT ).show()
65         }
66
67     }
68
69     override fun onActivityResult(requestCode: Int, resultCode: Int, data: Intent?) {
70         super.onActivityResult(requestCode, resultCode, data)
71         if (requestCode == 111 && resultCode == RESULT_OK) {
72             pictUrl = data?.data!!
73             val urlString = pictUrl.toString()
74             val removedString = urlString.substring( startIndex = urlString.lastIndexOf( string = "%" ) + 1 )
75             selectedPict = removedString.replace( oldValue = "%E", newValue = "" )
76
77         }
78     }
79
80     override fun onBackPressed() {
81         super.onBackPressed()
82         finish()
83     }
84
85     companion object {
86         const val REQUEST_CODE = 111
87     }
88 }
```

Nama/NIM : Fanny / 2055301044  
Kelas/Prodi : 3 TI D / Teknik Informatika  
Dosen : Shumaya Resty Ramadhani, S.ST., M.Sc.  
AIL : Puspita Aisyah Asnur, S.Tr.Kom  
Tanggal : 30 November 2022

---

The screenshot shows the Android Studio interface with the code editor open to the file `HasilQuiz.kt`. The code is a Kotlin class named `HasilQuiz` that extends `AppCompatActivity`. It overrides the `onCreate` method to set the content view and get a profile name from the intent extra. It then creates an intent to start the `Beranda` activity, passing the profile name as an extra. The code editor has syntax highlighting and code completion suggestions visible.

```
package com.example.pyquiz

import ...

class HasilQuiz : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_hasil_quiz)

        val profileName = intent.getStringExtra("Username")
        val username = findViewById<TextView>(R.id.hasil_username)
        username.text = profileName

        val selesai = findViewById<Button>(R.id.btn_selesai)
        selesai.setOnClickListener { View.OnClickListener {
            val intent = Intent(packageContext, Beranda::class.java)
            intent.putExtra("Username", profileName)
            startActivity(intent)
        }
    }
}
```

Pada progress kali ini sudah dibuat semua tampilan pada aplikasi untuk pemain dan juga admin, kemudian membuat backend dibagian login dan register. Selain itu, menambahkan beberapa fungsi untuk mengoptimalkan penggunaan aplikasi ketika digunakan.