Assignment – 2

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Blood Donation App

DonorDetails.kt –

package com.example.blooddonationapp

import android.os.Bundle

import androidx.fragment.app.Fragment

import android.view.LayoutInflater

import android.view.View

import android.view.ViewGroup

import android.widget.Toast

import androidx.navigation.fragment.findNavController

import com.google.firebase.firestore.FirebaseFirestore

import kotlinx.android.synthetic.main.fragment_donor_details.*

import kotlinx.android.synthetic.main.fragment_donor_details.view.*

class DonorDetails : Fragment() {

   private lateinit var db:FirebaseFirestore

   override fun onCreate(savedInstanceState: Bundle?) {

      super.onCreate(savedInstanceState)

   }

   override fun onCreateView(

      inflater: LayoutInflater, container: ViewGroup?,

      savedInstanceState: Bundle?

```kotlin
): View? {
    val view= inflater.inflate(R.layout.fragment_donor_details, container, false)
    val Continue=view.Continue
    db= FirebaseFirestore.getInstance()
    Continue.setOnClickListener {
        if(checking()){
            val name=name.text.toString()
            val phone=phone.text.toString()
            val location=location.text.toString()
            val bgroup=bgroup.text.toString()
            val donor= hashMapOf(
                "Name" to name,
                "Phone" to phone,
                "Location" to location,
                "Bgroup" to bgroup
            )
            val Donors=db.collection("DONORS")
            Donors.document(name).set(donor)
            Toast.makeText(activity?.applicationContext,"Donor Successfully added to Database",Toast.LENGTH_SHORT).show()
            findNavController().navigate(R.id.action_donorDetails_to_donorThankyou)
        }
        else{
            Toast.makeText(activity?.applicationContext,"Fill the Fiels Correctly",Toast.LENGTH_SHORT).show()
        }
    }
    return view
}
private fun checking():Boolean{
    if(name.text.toString().trim { it<=' '}.isNotEmpty()
        && phone.text.toString().trim { it<=' '}.isNotEmpty()
        && location.text.toString().trim { it<=' '}.isNotEmpty()
```

```kotlin
            && bgroup.text.toString().trim { it<=' '}.isNotEmpty()) {

            return true

        }

        return false

    }
}
```

MainActivity.kt –

```kotlin
package com.example.blooddonationapp


import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

import androidx.navigation.NavController


class MainActivity : AppCompatActivity() {

    private lateinit var navController: NavController


    override fun onCreate(savedInstanceState: Bundle?) {

        super.onCreate(savedInstanceState)

        setContentView(R.layout.activity_main)

    }
}
```

ListOfDonors.kt –

```kotlin
package com.example.blooddonationapp


import android.os.Bundle

import android.util.Log

import androidx.fragment.app.Fragment

import android.view.LayoutInflater

import android.view.View

import android.view.ViewGroup
```

```kotlin
import android.widget.Toast
import androidx.navigation.fragment.findNavController
import androidx.recyclerview.widget.LinearLayoutManager
import androidx.recyclerview.widget.RecyclerView
import com.google.firebase.firestore.*
import kotlinx.android.synthetic.main.donor_card.*
import kotlinx.android.synthetic.main.donor_card.view.*
import kotlinx.android.synthetic.main.fragment_list_of_donors.view.*

class ListOfDonors : Fragment() {
    private lateinit var recyclerView: RecyclerView
    private lateinit var donorarraylist:ArrayList<donor>
    private lateinit var myadapter:Adapter
    private lateinit var db:FirebaseFirestore
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)

    }

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

        recyclerView=view.recycler_view
        recyclerView.layoutManager=LinearLayoutManager(this.context)
        recyclerView.setHasFixedSize(true)
        donorarraylist= arrayListOf()

        myadapter=Adapter(donorarraylist)
        recyclerView.adapter=myadapter
```

```kotlin
        EventChangeListener()

        return view
    }


    private fun EventChangeListener(){
        db= FirebaseFirestore.getInstance()
        db.collection("DONORS")
            .addSnapshotListener(object :EventListener<QuerySnapshot>{
                override fun onEvent(
                    value: QuerySnapshot?,
                    error: FirebaseFirestoreException?
                ) {
                    if(error!=null){
                        Log.e("Firestore",error.message.toString())
                        return
                    }
                    for(dc:DocumentChange in value?.documentChanges!!){
                        if(dc.type==DocumentChange.Type.ADDED){
                            donorarraylist.add(dc.document.toObject(donor::class.java))
                        }
                    }
                    myadapter.notifyDataSetChanged()
                }
            })
    }
}
```

LoginScreen.kt –

package com.example.blooddonationapp

```kotlin
import android.os.Bundle
import androidx.fragment.app.Fragment
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.Toast
import androidx.navigation.fragment.findNavController
import com.google.firebase.auth.FirebaseAuth
import kotlinx.android.synthetic.main.fragment_login_screen.*
import kotlinx.android.synthetic.main.fragment_login_screen.view.*

class login_screen : Fragment() {
    private lateinit var auth:FirebaseAuth
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)

    }
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
        val view= inflater.inflate(R.layout.fragment_login_screen, container, false)
        val login=view.login
        val register=view.register
        auth= FirebaseAuth.getInstance()
        register.setOnClickListener {

            findNavController().navigate(R.id.action_login_screen_to_existin_Login)
        }
        login.setOnClickListener {
            if(checking()){
```

```kotlin
        val email=email.text.toString()

        val password=password.text.toString()

        auth.signInWithEmailAndPassword(email, password)

            .addOnCompleteListener(requireActivity()){ task->

                if(task.isSuccessful){

                    Toast.makeText(activity?.applicationContext,"Login
Succesful",Toast.LENGTH_SHORT).show()

                        findNavController().navigate(R.id.action_login_screen_to_optionPage)

                }

                else{

                    Toast.makeText(activity?.applicationContext,"Wrong
Details",Toast.LENGTH_SHORT).show()

                }

            }

        }

        else{

            Toast.makeText(activity?.applicationContext,"Enter the
Details",Toast.LENGTH_SHORT).show()

        }

    }

    return view

}
    private fun checking(): Boolean {

        if(email.text.toString().trim { it<=' ' }.isNotEmpty()

            && password.text.toString().trim { it<=' ' }.isNotEmpty()){

            return true

        }

        return false

    }
}
```

Existing_Login.kt –

package com.example.blooddonationapp

```kotlin
import android.os.Bundle
import androidx.fragment.app.Fragment
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.Toast
import androidx.navigation.fragment.findNavController
import com.google.firebase.auth.FirebaseAuth
import com.google.firebase.firestore.FirebaseFirestore
import kotlinx.android.synthetic.main.fragment_existin__login.*
import kotlinx.android.synthetic.main.fragment_existin__login.view.*

class existin_Login : Fragment() {
    private lateinit var auth:FirebaseAuth
    private lateinit var db: FirebaseFirestore
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)


    }
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
        val view=inflater.inflate(R.layout.fragment_existin__login, container, false)
        val Continue=view.Continue
        auth= FirebaseAuth.getInstance()
        db= FirebaseFirestore.getInstance()
        Continue.setOnClickListener {
            if (checking()){
                val email=email.text.toString()
                val password=password.text.toString()
```

```kotlin
                val name=name.text.toString()

                val phone=phone.text.toString()

                val user= hashMapOf(

                    "Name" to name,

                    "Phone" to phone,

                    "email" to email

                )

                val Users=db.collection("USERS")

                val query=Users.whereEqualTo("email",email).get()

                    .addOnSuccessListener {

                        task->

                        if(task.isEmpty){

                            auth.createUserWithEmailAndPassword(email,password)

                                .addOnCompleteListener(requireActivity()){

                                    task->

                                    if(task.isSuccessful){

                                        Users.document(email).set(user)

                                        findNavController().navigate(R.id.action_existin_Login_to_login_screen)

                                    }

                                    else{

                                        Toast.makeText(activity?.applicationContext,"Authentication Failed",
Toast.LENGTH_SHORT).show()

                                    }

                                }

                        }

                        else{

                            Toast.makeText(activity?.applicationContext,"User Already Exists",
Toast.LENGTH_SHORT).show()

                            findNavController().navigate(R.id.action_existin_Login_to_login_screen)

                        }

                    }

            }

            else{
```

```kotlin
            Toast.makeText(activity?.applicationContext,"Enter the Details",
Toast.LENGTH_SHORT).show()

        }

    }


    return view

}

private fun checking(): Boolean {

    if(name.text.toString().trim { it<=' ' }.isNotEmpty()

        && phone.text.toString().trim { it<=' ' }.isNotEmpty()

        && email.text.toString().trim { it<=' ' }.isNotEmpty()

        && password.text.toString().trim { it<=' ' }.isNotEmpty()){

        return true

    }

    return false

}
}
```

ThankYou.kt –

```kotlin
package com.example.blooddonationapp


import android.os.Bundle

import androidx.fragment.app.Fragment

import android.view.LayoutInflater

import android.view.View

import android.view.ViewGroup


// TODO: Rename parameter arguments, choose names that match

// the fragment initialization parameters, e.g. ARG_ITEM_NUMBER

private const val ARG_PARAM1 = "param1"

private const val ARG_PARAM2 = "param2"
```

```kotlin
/**
 * A simple [Fragment] subclass.
 * Use the [thankyou.newInstance] factory method to
 * create an instance of this fragment.
 */
class thankyou : Fragment() {
    // TODO: Rename and change types of parameters
    private var param1: String? = null
    private var param2: String? = null

    override fun onCreate(savedInstanceState: Bundle?) {
        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
        return inflater.inflate(R.layout.fragment_thankyou, container, false)
    }

    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 thankyou.
 */
// TODO: Rename and change types and number of parameters
@JvmStatic
fun newInstance(param1: String, param2: String) =
    thankyou().apply {
        arguments = Bundle().apply {
            putString(ARG_PARAM1, param1)
            putString(ARG_PARAM2, param2)
        }
    }
}
}
```

Output Screenshot –