**Pract 13th :**

**Programming Network Communications and Services (JSON)**

**Main Activity.xml**

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

android:gravity="center"

android:background="@color/black"

tools:context=".MainActivity">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="SENDING DATA"

android:textColor="@color/white"

android:textSize="30dp"

/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/name"

android:textSize="20dp"

android:textColor="@color/white"

android:hint="ENTER YOUR NAME"

android:textColorHint="@color/black"

android:background="@color/grey"

android:layout\_marginTop="25dp"

android:layout\_marginLeft="25dp"

android:layout\_marginRight="25dp"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/age"

android:textSize="20dp"

android:textColor="@color/white"

android:hint="ENTER YOUR AGE"

android:textColorHint="@color/black"

android:background="@color/grey"

android:layout\_marginTop="25dp"

android:layout\_marginLeft="25dp"

android:layout\_marginRight="25dp"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/submit"

android:text="SUBMIT !"

android:backgroundTint="@color/grey"

android:layout\_marginTop="25dp"

android:layout\_marginLeft="25dp"

android:layout\_marginRight="25dp"/>

</LinearLayout>

**Main Activity.kt**

package com.example.prac13

import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

import android.widget.Toast

import com.example.prac13.databinding.ActivityMainBinding

import com.google.firebase.database.DatabaseReference

import com.google.firebase.database.FirebaseDatabase

class MainActivity : AppCompatActivity() {

private lateinit var binding: ActivityMainBinding

private lateinit var database: DatabaseReference

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

binding=ActivityMainBinding.inflate(layoutInflater)

setContentView(binding.root)

binding.submit.setOnClickListener {

val name = binding.name.text.toString()

val age = binding.age.text.toString()

database=FirebaseDatabase.getInstance().getReference("Users")

val User = User(name, age)

database.child(name).setValue(User).addOnSuccessListener {

binding.name.text.clear()

binding.age.text.clear()

Toast.makeText(this,"Successfully registered",Toast.LENGTH\_SHORT).show()

}.addOnFailureListener {

Toast.makeText(this,"Failed",Toast.LENGTH\_SHORT).show()

}

}

}

}

**User.kt**

package com.example.prac13

data class User(val name:String?=null,val age:String?=null)

buildgradle:

plugins {

id 'com.android.application'

id 'org.jetbrains.kotlin.android'

id 'com.google.gms.google-services'

}

android {

namespace 'com.example.prac13'

compileSdk 33

defaultConfig {

applicationId "com.example.prac13"

minSdk 24

targetSdk 33

versionCode 1

versionName "1.0"

testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"

}

buildTypes {

release {

minifyEnabled false

proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'

}

}

buildFeatures{

viewBinding true

}

compileOptions {

sourceCompatibility JavaVersion.VERSION\_1\_8

targetCompatibility JavaVersion.VERSION\_1\_8

}

kotlinOptions {

jvmTarget = '1.8'

}

}

dependencies {

implementation 'androidx.core:core-ktx:1.7.0'

implementation 'androidx.appcompat:appcompat:1.6.1'

implementation 'com.google.android.material:material:1.8.0'

implementation 'androidx.constraintlayout:constraintlayout:2.1.4'

implementation 'com.google.firebase:firebase-database-ktx:20.2.0'

testImplementation 'junit:junit:4.13.2'

androidTestImplementation 'androidx.test.ext:junit:1.1.5'

androidTestImplementation 'androidx.test.espresso:espresso-core:3.5.1'

}