

TITLE: Preventing Patient Information from Security Threats using encryption algorithms

Team members

SANTHA KUMAR REDDY . B - 17MIS0008 THATI TIRUMALAIAH 17MIS0387

Faculty: prof. Priya V

project link: https://github.com/shanureddy4/MEDAPP

ABSTRACT

These days most of the things are done through internet. Most organizations have online portals to communicate with customers. most of the medical apps like **DocsApp**, **1mg** are giving doctor consultation and medicines to door steps through their applications. These applications make life easier for users. These app give consultation fee with fancy prices and user can able to share everything easily through phones. Even though they maintain privacy still doctors able to view all details about the patient which some patients doesn't want to. As these are big organizations, there is a chance for information disclosure by their staff. A survey said that nearly 8% of patient gets leaked from hospitals. So considering these problems and pandemic situation we are trying to build an application that is able to encrypt the patient data as soon as possible patient enter details and providing most secure connection until it reaches to the corresponding doctor.

Introduction

We can imagine that there are applications for every domine. We can see that there are numerous applications even to treated by the doctor. In this project we develop an application that will Encrypt patient details as soon as patient enters and gives only necessity details to the doctor. Consultant can even schedule the consultation timings and send to the patient. A notification will be send to the patient as soon as consultant accept the request. As details are secured patient has anonymity while consulting to the doctor and able to express all his sufferings without worrying.

Literature Survey

Reference	Paper	Journal /	Proble	Algorit	Tools	Result	Drawb	Inferen
number	Title	Conference	m	hms	Used	S	ack In	ce
		Name & Year	Statem	Applie		attain	the	
			ent	d		ed	syste	
							m	

1	Techniq ues for prevent informa tion disclosu re via dynami c secure cloud resourc es	MICRO FOCUS/2011	Techniq ue to prevent informa tion pass from within the organiz ation	Dyna mic secure cloud resour ce	Cloud comput ing	These are just techni ques	None	These article shows that we can have various techniq ues to preven t inform ation disclos ure
2	Smurf-based Distributed Denial of Service (DDoS) Attack Amplification in Internet	IEEE/2007	Intrude r able to create denial of service in target device	Smufi ng techni que	Exploitt tools such as smtraffi c	Able to create servic e denial on host device	Target device do no work after this attack	These article show how to amplify the smurf attack
3	DDoS attack algorith m using ICMP flood	IEEE/2016	As this article says that we should re conside r the protoco Is like TCP and ICMP to prevent flood attack	a DDoS Attac k based algori thm on ICMP Flood ing techni que.	DDoS attack tools	Succe ssful ICMP flood attack	Protoc ols regard ing ICMP should recons ider	This researc h is aimed at giving readers a brief outline of DDoS Attack s and its constit uents, primarily the ICMP Protoc ol.

4	Applicati on check DocsApp	DocsApp.in/ 2015	Patient have no online portal to contact with doctors	In this applic ation they used lot of algorit hms to provid e seem less servic e to users	App develo pment	Able to provid e docto rs to the patien ts remot ely	Patien ts data can be seen every doctor	These site have inform ation about the app called DocsAp p and how they used to provid e seem less service s to the users.
5.	Practica I quantu m digital signatur e with a gigahert z BB84 quantu m key distribu tion system	OSAPUBLISH ING/2019	Enhanc ement needed for traditio nal digital keys	Quant um key distrib ution syste m	Tools to generat e quantu m keys.	Able to establ ish secur e conne ction betwe en server and client	Need to under stand many things just to have digital signat ure	These article shows how to genera te digital signatu re with a gigaher z BB84 quantu m key.

Refer	Paper	Journal /	Proble	Algorit	Tools	Result	Drawbac	Infere
ence	Title	Conference Name	m	hms	Used	S	k In the	nce
num		& Year	Statem	Applie		attain	system	
ber			ent	d		ed		
6	Secure	scholarworks.bois	Tampe	Algorit	Not	Able	May not	These
	Networ	estate.edu/2020	ring	hms	Mentio	to	possible	paper
	k-on-		attacks	used	ned	secure	for	tells
	Chip		make	to		netwo	impleme	how
	Against		inform	reduce		rk to	ntation	tampe
	Black		ation	backdo		maxim		ring

	Hole and Tamper ing Attacks		change during transmi ssion	or attacks		um extent		occurs on trans missio n and how to preven t them.
7.	About 1 mg	1mg.com/aboutUs / 2015	Patient have no option to contact doctor when ever possibl e	Many algorit hms applie d to develo p this applica tion	App develo pment	Provid ed online consul tation with doctor s and deliver medici nes.	This also expose all patient details to the doctor.	This is a applic ation which let's users to consul t doctor s online.
8.	Three party secure data transmi ssion in IoT network s through design of a lightwei ght authenti cated key agreem ent scheme	Science direct /2019	Need to have enhanc ement in transmi ssion of data over a networ k	Three party secure data transm ission	Not mentio ned	Able to trans mit data secure ly	Needs to optimize d for app level transmis sion	These paper will sugges to have three party secure data trans mission in IOT networking

9.	Deve	Journal.portalgaru	As	Modifi	This	Able	This is	These
	lopin	da.org	many	ed AES	can be	to	easier	paper
	g a	5	of us	algorit	develo	encryp	than	sugges
	secur		know	hm	ped in	t	original	t that
	ed		AES		any of	image	AES	we
	imag		algorit		progra	succes	algorith	need
	e file		hms it		mming	sfully	m	to
	mana		can be		langua			custo
	geme		easy to		ge			mize
	nt		unders					every
	syste		tand					algorit
	m		our					hm
	using		encrypt					accord
	modi		ion					ing to
	fied		level.					our
	AES		So we					use.
	1 ILD		need					
			to					
			custom					
			ize it					
10.	Econ	Tandfonline	Belief	Econo	None	Online	As	This
	omic		that	mically		consul	article is	paper
	Succ		online	writte		tation	theory	says
	ess of		consult	n. No		will	perspect	that
	Physi		ation	algorit		make	ive so	we
	cians		makes	hm		much	impleme	online
	in the		no profit	involve d		profit than	ntation could be	consul tation
	Onlin		profit	u			difficult.	will
	e					usual	unneun.	actuall
	Cons							у
	ultati							make
	on							profit
	Mark							for
	et: A							doctor
	Signa							S.
	ling							-
	Theo							
	ry							
	Persp							
	ectiv							
	e							

Problem Identified

Nearly 8 % of patient data is leaked from such applications. And patient gives fake identity while communicating with the doctor so it will difficult for an organization to identify him to send proper precautions and Patient want anonymity while contacting to the doctor.

Aim

We think that data is stolen directly from the database so we aim to develop an application that will encrypt the details as soon as patient enters and goes into database with encrypted and provide the patient details to the doctor as per patient needs.

Algorithm Used: Vigenere

STEPS

- 1) User need to enter personal details and his/her problem and doctor. At last user need to describe problem in brief.
- 2) After entering details the details will be encrypted and stored in firebase database.
- 3) Here for every doctor a key and credentials will be given.
- 4) On patient selecting doctor the respective key will be sent to database.
- 5) Using that key when doctor login it will display no of patients with their ID
- 6) On doctor login it will give patient ID and decrypted KEY.
- 7) Doctor need to search patient using patient ID and need to decrypt using KEY.
- 8) On patient view page doctor will able to see the information only which patient will provided for viewing.
- On consulting a link will be generated and sent to doctor and patient on doctor timings.
- 10) Therefore patient will contact at given time

Program

```
cryption.ky
package com.example.myapplication
import java.text.Normalizer
fun getRandomString(length: Int) : String {
     val allowedChars = ('A'...'Z') + ('a'...'z')
     return (1..length)
           .map { allowedChars.random() }
           .joinToString("")
}
class Vigenere(var txt: String, var key: String) {
val VIGENERE_ARRAY = arrayOf('A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J',
'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z',
'0', '1', '2', '3', '4', '5', '6', '7', '8', '9', '.', ',', '?', '!', '\'', '-',
'-', '&', '@', '#', '$', '%', '*', '(', ')', '{', '}', '[', ']', '|', '~', '\\',
';', ':', '^', '+', '=', '', '`')
     fun encodeMessage(): String {
           var txtEncoded = ""
           val keyLength: Int = key.length
           val txtFlattened = flattenToAscii(txt)
           for (i in txtFlattened.indices) {
                val x =
                       (VIGENERE_ARRAY.indexOf(txtFlattened[i].toUpperCase()) +
VIGENERE_ARRAY.indexOf(key[i.rem(keyLength)].toUpperCase())).rem(
                            VIGENERE_ARRAY.size)
                txtEncoded += VIGENERE_ARRAY[x]
           }
```

```
return txtEncoded
    }
    fun decodeMessage(): String {
        var txtDecoded = ""
        val keyLength: Int = key.length
        for (i in txt.indices) {
                (VIGENERE_ARRAY.indexOf(txt[i].toUpperCase()) -
VIGENERE_ARRAY.indexOf(key[i.rem(keyLength)].toUpperCase()) +
VIGENERE ARRAY.size).rem(
                    VIGENERE_ARRAY.size
            txtDecoded += VIGENERE ARRAY[x]
        return txtDecoded
    }
    internal fun flattenToAscii(txt: String): String {
        var string = txt
        val out = CharArray(string.length)
        string = Normalizer.normalize(string, Normalizer.Form.NFD)
        var j = 0
        var i = 0
        val n = string.length
        while (i < n) {
            val c = string[i]
            if (c \le '\u007F') out[j++] = c
            ++i
        return String(out)
    }
}
bother.kt
package com.example.myapplication
import android.os.Bundle
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.Button
import android.widget.EditText
import android.widget.ImageButton
import android.widget.Toast
import androidx.activity.OnBackPressedCallback
import androidx.fragment.app.Fragment
import com.google.firebase.database.DatabaseReference
import com.google.firebase.database.FirebaseDatabase
import com.google.firebase.database.IgnoreExtraProperties
import kotlin.math.acos
class bother : Fragment() {
    val doctors = doctors()
    val problems = problems()
```

```
//DB
    //private lateinit var rootnode: FirebaseDatabase
    //private lateinit var reference: DatabaseReference
    private lateinit var database: DatabaseReference
    @IgnoreExtraProperties
    data class newpatient(
        var Name: String?,
        var Age: String?,
        var Sex: String?,
        var Phone: String?,
        var Email: String?,
        var Address: String?,
        var Pincode: String?,
        var Privacy:String?,
        var Problem:String?,
        var DoctorId:String?,
        var Describe:String?,
        var Key:String?
    )
    private fun writeNewUser(ID:String, Name: String?, Age: String?, Sex:
String?,Phone:String?,Email:String?,Address: String?,Pincode: String?,Privacy:
String?,Problem: String?,DoctorId: String?,Describe: String?,Key:String?) {
        val Patient= newpatient(Name, Age, Sex, Phone, Email, Address, Pincode,
Privacy,Problem,DoctorId,Describe,Key)
        database = FirebaseDatabase.getInstance().getReference()
        database.child("patients").child(ID).setValue(Patient)
//
          rootnode = FirebaseDatabase.getInstance()
         reference = rootnode.getReference("patients")
         reference.setValue(Patient)
    }
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
        // Inflate the layout for this fragment
        val view:View = inflater.inflate(R.layout.fragment_bother ,container,
false)
        //get petient details with key
        val det:ArrayList<String> = arguments?.getSerializable("details") as
ArrayList<String>
        val key:String = arguments?.getSerializable("key") as String
        // got patient details
        //find consultant
        val consultant = view.findViewById<ImageButton>(R.id.imgbtn1)
```

```
consultant.setOnClickListener(object :View.OnClickListener
            override fun onClick(p0: View?) {
                val bundle = Bundle()
                doctors.arguments=bundle
                val fm = activity!!.supportFragmentManager
fm.beginTransaction().replace(R.id.nav host fragment,doctors).addToBackStack("tag4
").commit()
            }
        })
        //find pbls
        val pbls = view.findViewById<ImageButton>(R.id.imgbtn)
        pbls.setOnClickListener(object :View.OnClickListener
            override fun onClick(p0: View?) {
                val bundle = Bundle()
                doctors.arguments=bundle
                val fm = activity!!.supportFragmentManager
fm.beginTransaction().replace(R.id.nav host fragment,problems).addToBackStack("tag
4").commit()
            }
        })
        //pbl description
        var decription_reference = view.findViewById<EditText>(R.id.describe)
        //submit
        val submit = view.findViewById<Button>(R.id.button)
        submit.setOnClickListener(object :View.OnClickListener
            override fun onClick(p0: View?) {
                    //write to DB
                     val bundle = arguments
                    var problem = (activity as MainActivity).problem
                    var enProblem = Vigenere(problem as
String,key).encodeMessage()
                    var endDscription =
Vigenere(decription_reference.text.toString(),key).encodeMessage()
                    var doctorID = (activity as MainActivity).docID
                    if(problem.length<=1 || doctorID.length<=1)</pre>
                        Toast.makeText(context, "Please select your health issue
and doctor",Toast.LENGTH_SHORT).show()
                else if (endDscription.length<=1)</pre>
                        Toast.makeText(context, "Please describe your
```

```
problem", Toast.LENGTH_SHORT).show()
                                                   }
                                         else
write New User(det[0], det[1], det[2], det[3], det[4], det[5], det[6], det[7], det[8], en Problem 1999 and 1999 are the following the problem 2019 and 1999 are the problem 2019 and 1999 are the problem 2019 and 1999 are the problem 2019 a
lem,doctorID,endDscription,key)
                                                             Toast.makeText(context, "you will receive mail regarding
confirmation", Toast.LENGTH_LONG).show()
                    })
                    return view
          }
}
consultation.kt
package com.example.myapplication
import android.os.Bundle
import android.util.Log
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.*
import androidx.core.text.set
import androidx.fragment.app.Fragment
import com.google.firebase.database.DatabaseReference
import com.google.firebase.database.FirebaseDatabase
import com.google.firebase.database.IgnoreExtraProperties
import java.nio.file.Files.size
class consultation : Fragment() {
          var Bother = bother()
          public override fun onCreateView(
                     inflater: LayoutInflater,
                    container: ViewGroup?,
                    savedInstanceState: Bundle?
          ): View? {
                    val view:View =
inflater.inflate(R.layout.fragment_startconsultation,container,false)
                    //getting form fields
                    val name = view.findViewById<EditText>(R.id.Name)
                    val age=view.findViewById<EditText>(R.id.Age)
                    val rg = view.findViewById<RadioGroup>(R.id.radiogrp)
                    val phone = view.findViewById<EditText>(R.id.phone)
                    val email = view.findViewById<EditText>(R.id.email)
```

```
val address = view.findViewById<EditText>(R.id.address)
        val pincode = view.findViewById<EditText>(R.id.pincode)
        var gender = ""
        //radio
        rg.clearCheck()
        rg.setOnCheckedChangeListener { radioGroup, i ->
            gender = view.findViewById<RadioButton>(i).text.toString()
        }
        //checkbox
        var cb = view.findViewById<CheckBox>(R.id.checkBox)
        val next = view.findViewById<Button>(R.id.nxt)
        next.setOnClickListener(object :View.OnClickListener
            override fun onClick(p0: View?) {
              var details:ArrayList<String> = arrayListOf()
                details.clear()
                val key = getRandomString(7)
                val pid = getRandomString(4)
                val enName = Vigenere(name.text.toString(),key).encodeMessage()
                val enAge = Vigenere(age.text.toString(),key).encodeMessage()
                val enGender = Vigenere(gender,key).encodeMessage()
                val enMobile = Vigenere(phone.text.toString(),key).encodeMessage()
                val enEmail = Vigenere(email.text.toString(),key).encodeMessage()
                val enAddress =
Vigenere(address.text.toString(),key).encodeMessage()
                val enPincode =
Vigenere(pincode.text.toString(),key).encodeMessage()
                val CheckBox = cb.isChecked
                details =
arrayListOf(pid,enName,enAge,enGender,enMobile,enEmail,enAddress,enPincode,CheckBo
x.toString())
                if(pid.length<1 || enName.length<1 || enAge.length<1 ||</pre>
enGender.length<1 || enMobile.length<1 || enEmail.length<1 || enAddress.length<1
||enPincode.length<1)
                    Toast.makeText(context, "Please enter all the
fields", Toast.LENGTH_SHORT).show()
                else
                    val bundle = Bundle()
                    bundle.putSerializable("details",details)
                    bundle.putSerializable("key",key)
                    Bother. arguments=bundle
```

```
val fm = activity!!.supportFragmentManager
fm.beginTransaction().replace(R.id.nav_host_fragment,Bother).addToBackStack("tag2"
).commit()
                }
            }
        })
        return view
    }
docnotification.kt
package com.example.myapplication
import android.content.ContentValues.TAG
import android.content.Intent
import android.os.Bundle
import android.util.Log
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.AdapterView.OnItemClickListener
import android.widget.ArrayAdapter
import android.widget.ListView
import android.widget.TextView
import android.widget.Toast
import androidx.core.view.children
import androidx.fragment.app.Fragment
//import androidx.test.core.app.ApplicationProvider.getApplicationContext
import com.google.firebase.database.*
class docnotification: Fragment() {
    var keyfordoc = keyfordoc()
    private lateinit var database: DatabaseReference
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
        // Inflate the layout for this fragment
        val view:View = inflater.inflate(R.layout.fragment_docnotifications
,container, false)
        activity?.setTitle("Notifications")
```

```
val doctorid:String = arguments?.getSerializable("doctor") as String
        var listview = view.findViewById<ListView>(R.id.patientlist)
        database = FirebaseDatabase.getInstance().getReference().child("patients")
        var list = arrayListOf<String>()
        var adapter:ArrayAdapter<String> =
ArrayAdapter(requireActivity(),android.R.layout.simple_list_item_1,list)
        val txt = view.findViewById<TextView>(R.id.textView12)
        var Dkey = arrayListOf<String>()
        var count = 0
        val postListener = object : ValueEventListener {
            override fun onDataChange(dataSnapshot: DataSnapshot) {
                list.clear()
                for (i in dataSnapshot.children)
                    if(i.child("doctorId").value.toString().equals(doctorid))
                        list.add(i.key.toString())
                        Dkey.add(i.child("key").value.toString())
                        count++
                    }
                   // list.add(i.key.toString())
                    //list.add(i.getValue().toString()) // to print all values
                if (count==0)
                    txt.visibility = View.VISIBLE
                adapter.notifyDataSetChanged()
            }
            override fun onCancelled(databaseError: DatabaseError) {
            }
        database.addValueEventListener(postListener)
        //list items
        listview.onItemClickListener =
            OnItemClickListener { parent, view, position, id ->
                var PID = list[position]
                var DKEY = Dkey[position]
                var bundle = Bundle()
                bundle.putSerializable("PID",PID)
                bundle.putSerializable("DKEY",DKEY)
                keyfordoc.arguments=bundle
                val fm = requireActivity().supportFragmentManager
fm.beginTransaction().replace(R.id.nav host fragment,keyfordoc).addToBackStack("ta
g10").commit()
            }
        listview.adapter = adapter
        for(i in listview.children)
```

```
i.background = resources.getDrawable(R.drawable.background)
        }
        return view
    }
doctors.kt
package com.example.myapplication
import android.os.Bundle
import androidx.fragment.app.Fragment
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.Button
import android.widget.ImageButton
import android.widget.TableRow
import android.widget.Toast
class doctors: Fragment() {
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
        // Inflate the layout for this fragment
        val view:View = inflater.inflate(R.layout.fragment_doctors ,container,
false)
        return view
    }
}
GMailSender.java
package com.example.myapplication;
import java.io.ByteArrayInputStream;
import java.io.IOException;
import java.io.InputStream;
import java.io.OutputStream;
import java.security.Security;
import java.util.Properties;
```

```
import javax.activation.DataHandler;
import javax.activation.DataSource;
import javax.activation.FileDataSource;
import javax.mail.BodyPart;
import javax.mail.Message;
import javax.mail.Multipart;
import javax.mail.PasswordAuthentication;
import javax.mail.Session;
import javax.mail.Transport;
import javax.mail.internet.InternetAddress;
import javax.mail.internet.MimeBodyPart;
import javax.mail.internet.MimeMessage;
import javax.mail.internet.MimeMultipart;
public class GMailSender extends javax.mail.Authenticator {
    private String mailhost = "smtp.gmail.com";
    private String user;
    private String password;
    private Session session;
    private Multipart _ multipart = new MimeMultipart();
    static {
        Security.addProvider(new JSSEProvider());
    public GMailSender(String user, String password) {
        this.user = user;
        this.password = password;
        Properties props = new Properties();
        props.setProperty("mail.transport.protocol", "smtp");
        props.setProperty("mail.host", mailhost);
        props.put("mail.smtp.auth", "true");
        props.put("mail.smtp.port", "465");
        props.put("mail.smtp.socketFactory.port", "465");
        props.put("mail.smtp.socketFactory.class",
"javax.net.ssl.SSLSocketFactory");
        props.put("mail.smtp.socketFactory.fallback", "false");
        props.setProperty("mail.smtp.quitwait", "false");
        session = Session.getDefaultInstance(props, this);
    }
    protected PasswordAuthentication getPasswordAuthentication() {
        return new PasswordAuthentication(user, password);
    public synchronized void sendMail(String subject, String body, String sender,
String recipients) throws Exception {
        try {
            MimeMessage message = new MimeMessage(session);
            DataHandler handler = new DataHandler(new
ByteArrayDataSource(body.getBytes(), "text/plain"));
            message.setSender(new InternetAddress(sender));
            message.setSubject(subject);
            message.setDataHandler(handler);
            BodyPart messageBodyPart = new MimeBodyPart();
            messageBodyPart.setText(body);
            multipart.addBodyPart(messageBodyPart);
```

```
message.setContent(_multipart);
            if (recipients.indexOf(',') > 0)
                message.setRecipients(Message.RecipientType.TO,
InternetAddress.parse(recipients));
            else
                message.setRecipient(Message.RecipientType.TO, new
InternetAddress(recipients));
            Transport.send(message);
        } catch (Exception e) {
            e.printStackTrace();
    }
    public void addAttachment(String filename) throws Exception {
        BodyPart messageBodyPart = new MimeBodyPart();
        DataSource source = new FileDataSource(filename);
        messageBodyPart.setDataHandler(new DataHandler(source));
        messageBodyPart.setFileName("download image");
        multipart.addBodyPart(messageBodyPart);
    }
    public class ByteArrayDataSource implements DataSource {
        private byte[] data;
        private String type;
        public ByteArrayDataSource(byte[] data, String type) {
            super();
            this.data = data;
            this.type = type;
        public ByteArrayDataSource(byte[] data) {
            super();
            this.data = data;
        }
        public void setType(String type) {
            this.type = type;
        public String getContentType() {
            if (type == null)
                return "application/octet-stream";
            else
                return type;
        }
        public InputStream getInputStream() throws IOException {
            return new ByteArrayInputStream(data);
        }
```

```
public String getName() {
            return "ByteArrayDataSource";
        }
        public OutputStream getOutputStream() throws IOException {
            throw new IOException("Not Supported");
        }
    }
}
JSSEProvider.java
package com.example.myapplication;
import java.security.AccessController;
import java.security.PrivilegedAction;
import java.security.Provider;
public class JSSEProvider extends Provider {
    public JSSEProvider() {
        super("HarmonyJSSE", 1.0, "Harmony JSSE Provider");
        AccessController.doPrivileged(new PrivilegedAction<Void>() {
            @Override
            public Void run() {
                put("SSLContext.TLS",
"org.apache.harmony.xnet.provider.jsse.SSLContextImpl");
                put("Alg.Alias.SSLContext.TLSv1", "TLS");
                put("KeyManagerFactory.X509",
"org.apache.harmony.xnet.provider.jsse.KeyManagerFactoryImpl");
                put("TrustManagerFactory.X509",
"org.apache.harmony.xnet.provider.jsse.TrustManagerFactoryImpl");
                return null;
        });
    }
}
keyfordoc.kt
package com.example.myapplication
import android.R.attr.label
import android.content.ClipData
import android.content.ClipboardManager
import android.content.Context
import android.content.Context.CLIPBOARD SERVICE
import android.os.Bundle
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.EditText
import android.widget.ImageButton
```

```
import androidx.core.content.ContextCompat.getSystemService
import androidx.fragment.app.Fragment
class keyfordoc: Fragment() {
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
        // Inflate the layout for this fragment
        val view:View = inflater.inflate(R.layout.fragment keyandpatient
,container, false)
        val PID = arguments?.getSerializable("PID") as String
        val KEY = arguments?.getSerializable("DKEY") as String
        var editPID = view.findViewById<EditText>(R.id.PID)
        var editKEY = view.findViewById<EditText>(R.id.KEY)
        editPID.setText(PID)
        editKEY.setText(KEY)
        editKEY.isEnabled = false
        editPID.isEnabled = false
        var copyPID = view.findViewById<ImageButton>(R.id.imageButton)
        var copyKEY = view.findViewById<ImageButton>(R.id.imageButton2)
        val myClipboard: ClipboardManager =
activity?.getSystemService(CLIPBOARD_SERVICE) as ClipboardManager
        copyPID.setOnClickListener(object :View.OnClickListener
            override fun onClick(p0: View?) {
                val clipData = ClipData.newPlainText("PID",PID )
                myClipboard.setPrimaryClip(clipData)
        })
        copyKEY.setOnClickListener(object :View.OnClickListener
            override fun onClick(p0: View?) {
                val clipData = ClipData.newPlainText("KEY", KEY )
                myClipboard.setPrimaryClip(clipData)
            }
        })
        return view
    }
}
```

MainActivity.kt

```
package com.example.myapplication
import android.app.PendingIntent.getActivity
import android.os.Bundle
import android.view.Menu
import android.view.View
import android.widget.TableLayout
import android.widget.TableRow
import android.widget.Toast
import com.google.android.material.floatingactionbutton.FloatingActionButton
import com.google.android.material.snackbar.Snackbar
import com.google.android.material.navigation.NavigationView
import androidx.navigation.findNavController
import androidx.navigation.ui.AppBarConfiguration
import androidx.navigation.ui.navigateUp
import androidx.navigation.ui.setupActionBarWithNavController
import androidx.navigation.ui.setupWithNavController
import androidx.drawerlayout.widget.DrawerLayout
import androidx.appcompat.app.AppCompatActivity
import androidx.appcompat.widget.Toolbar
import androidx.fragment.app.FragmentTransaction
import kotlinx.android.synthetic.main.content main.*
import kotlinx.coroutines.awaitAll
class MainActivity : AppCompatActivity() {
    private lateinit var appBarConfiguration: AppBarConfiguration
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        val toolbar: Toolbar = findViewById(R.id.toolbar)
        setSupportActionBar(toolbar)
//
          val fab: FloatingActionButton = findViewById(R.id.fab)
          fab.setOnClickListener { view ->
              Snackbar.make(view, "Replace with your own action",
Snackbar.LENGTH LONG)
                      .setAction("Action", null).show()
//
        val drawerLayout: DrawerLayout = findViewById(R.id.drawer layout)
        val navView: NavigationView = findViewById(R.id.nav_view)
        val navController = findNavController(R.id.nav_host_fragment)
        // Passing each menu ID as a set of Ids because each
        // menu should be considered as top level destinations.
        appBarConfiguration = AppBarConfiguration(setOf(
                R.id.nav_home, R.id.nav_gallery, R.id.nav_slideshow),
drawerLayout)
        setupActionBarWithNavController(navController, appBarConfiguration)
        navView.setupWithNavController(navController)
    }
   var docID:String = ""
    fun getDoctor(v: View)
        docID =v.tag.toString()
```

```
onBackPressed()
    }
 var problem:String = ""
    fun getProblem(v: View)
        problem =v.tag.toString()
        onBackPressed()
    }
    override fun onCreateOptionsMenu(menu: Menu): Boolean {
        // Inflate the menu; this adds items to the action bar if it is present.
        menuInflater.inflate(R.menu.main, menu)
        return true
    }
    override fun onSupportNavigateUp(): Boolean {
        val navController = findNavController(R.id.nav host fragment)
        return navController.navigateUp(appBarConfiguration) ||
super.onSupportNavigateUp()
}
notifypatient.kt
package com.example.myapplication
import android.util.Log
import javax.activation.CommandMap
import javax.activation.MailcapCommandMap
class notifypatient(var body:String,var receipent:String)
{
    fun send()
    {
        val mc: MailcapCommandMap = CommandMap.getDefaultCommandMap() as
MailcapCommandMap
        mc.addMailcap("text/html;; x-java-content-
handler=com.sun.mail.handlers.text_html")
        mc.addMailcap("text/xml;; x-java-content-
handler=com.sun.mail.handlers.text xml")
        mc.addMailcap("text/plain;; x-java-content-
handler=com.sun.mail.handlers.text_plain")
        mc.addMailcap("multipart/*;; x-java-content-
handler=com.sun.mail.handlers.multipart_mixed")
        mc.addMailcap("message/rfc822;; x-java-content-
handler=com.sun.mail.handlers.message_rfc822")
        try {
            var sender = GMailSender("shanureddy78@gmail.com", "")
            sender.sendMail("Consultation Confirmation", body,
"shanureddy78@gmail.com", "shanureddy007@gmail.com")
        }catch (e:Exception){
            Log.e("SendMail",e.message,e)}
    }
}
```

```
fun main()
    val mc: MailcapCommandMap = CommandMap.getDefaultCommandMap() as
MailcapCommandMap
    mc.addMailcap("text/html;; x-java-content-
handler=com.sun.mail.handlers.text_html")
    mc.addMailcap("text/xml;; x-java-content-
handler=com.sun.mail.handlers.text xml")
    mc.addMailcap("text/plain;; x-java-content-
handler=com.sun.mail.handlers.text_plain")
    mc.addMailcap("multipart/*;; x-java-content-
handler=com.sun.mail.handlers.multipart_mixed")
    mc.addMailcap("message/rfc822;; x-java-content-
handler=com.sun.mail.handlers.message_rfc822")
        var sender = GMailSender("shanureddy78@gmail.com", "s81nur544y")
        sender.sendMail("Consultation Confirmation", "msg", "MEDAPP",
"shanureddy78@gmail.com")
    }catch (e:Exception){
        Log.e("SendMail",e.message,e)}
}
patient_view.kt
package com.example.myapplication
import android.os.Bundle
import androidx.fragment.app.Fragment
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.*
import androidx.core.view.isVisible
import java.io.Serializable
class patient_view: Fragment() {
var Sendinfo = sendinfo()
    var mail = ""
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
        // Inflate the layout for this fragment
        val view:View = inflater.inflate(R.layout.fragment patientview ,container,
false)
        var name = view.findViewById<TextView>(R.id.NMM)
        var age = view.findViewById<TextView>(R.id.AGG)
        var gender = view.findViewById<TextView>(R.id.GNN)
        var mobile = view.findViewById<TextView>(R.id.MBB)
        var email = view.findViewById<TextView>(R.id.EMM)
        var address = view.findViewById<TextView>(R.id.ADD)
        var problem = view.findViewById<TextView>(R.id.PBB)
        var description = view.findViewById<TextView>(R.id.DPP)
```

```
var decrypt = view.findViewById<Button>(R.id.DEC)
        var getaddress = view.findViewById<EditText>(R.id.ADD)
        getaddress.isEnabled = false
        var getDes = view.findViewById<EditText>(R.id.DPP)
        getDes.isEnabled = false
        var collection = arguments?.getSerializable("collection") as
MutableMap<String,String>
        fun decodedmessage(txt: String, key: String): String
            var vig = Vigenere(txt,key)
            return vig.decodeMessage()
        decrypt.setOnClickListener {
            var getkey =
view.findViewById<EditText>(R.id.patientKey).text.toString()
            if (getkey.equals(collection.getValue("key")))
                if (collection.getValue("privacy").toBoolean())
                    age.text = decodedmessage(collection.getValue("age"),getkey)
                    gender.text =
decodedmessage(collection.getValue("sex"),getkey)
                    email.text =
decodedmessage(collection.getValue("email"),getkey)
                    problem.text =
decodedmessage(collection.getValue("problem"),getkey)
                    description.text =
decodedmessage(collection.getValue("describe"), getkey)
                    age.visibility = View.VISIBLE
                    gender.visibility = View.VISIBLE
                    email.visibility = View.VISIBLE
                    problem.visibility = View.VISIBLE
                    description.visibility = View.VISIBLE
                }
                else
                    name.text = decodedmessage(collection.getValue("name"),getkey)
                    age.text = decodedmessage(collection.getValue("age"),getkey)
                    gender.text =
decodedmessage(collection.getValue("sex"),getkey)
                    mobile.text =
decodedmessage(collection.getValue("phone"),getkey)
                    email.text =
decodedmessage(collection.getValue("email"),getkey)
                    address.text =
decodedmessage(collection.getValue("address"),getkey)
                    problem.text =
decodedmessage(collection.getValue("problem"),getkey)
```

```
description.text =
decodedmessage(collection.getValue("describe"), getkey)
                    //to send mail
                    mail = decodedmessage(collection.getValue("email"),getkey)
                    name.visibility = View.VISIBLE
                    age.visibility = View.VISIBLE
                    gender.visibility = View.VISIBLE
                    mobile.visibility = View.VISIBLE
                    email.visibility = View.VISIBLE
                    address.visibility = View.VISIBLE
                    problem.visibility = View.VISIBLE
                    description.visibility = View.VISIBLE
                }
            }
            else
                Toast.makeText(requireContext(),"Please Enter Valid
Key", Toast.LENGTH SHORT).show()
        val next = view.findViewById<Button>(R.id.N2)
        next.setOnClickListener {
            var bundle = Bundle()
            bundle.putSerializable("mail",mail)
            bundle.putSerializable("iddoc",collection.getValue("doctorId"))
            Sendinfo. arguments=bundle
            val fm = requireActivity().supportFragmentManager
fm.beginTransaction().replace(R.id.nav_host_fragment,Sendinfo).addToBackStack("tag
2").commit()
        return view
    }
}
problems.kt
package com.example.myapplication
import android.os.Bundle
import androidx.fragment.app.Fragment
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.Button
```

```
import android.widget.ImageButton
import android.widget.TableRow
import android.widget.Toast
class problems: Fragment() {
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
    ): View? {
        // Inflate the layout for this fragment
        val view:View = inflater.inflate(R.layout.fragment_problems ,container,
false)
        return view
    }
sendinfo.kt
package com.example.myapplication
import android.app.DatePickerDialog
import android.app.TimePickerDialog
import android.content.ClipData
import android.content.ClipboardManager
import android.content.Context
import android.os.Bundle
import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.*
import androidx.fragment.app.Fragment
import java.util.*
class sendinfo: Fragment() {
    override fun onCreateView(
        inflater: LayoutInflater, container: ViewGroup?,
        savedInstanceState: Bundle?
        // Inflate the layout for this fragment
        val view:View = inflater.inflate(R.layout.fragment_sendinfo ,container,
false)
        var dateedit = view.findViewById<EditText>(R.id.editTextDate)
        var timeedit = view.findViewById<EditText>(R.id.editTextTime)
        var mail = arguments?.getSerializable("mail") as String
```

```
var iddoc = arguments?.getSerializable("iddoc") as String
       var cal = view.findViewById<ImageButton>(R.id.cal)
        cal.setOnClickListener{
           val currentDateTime = Calendar.getInstance()
           val startYear = currentDateTime.get(Calendar.YEAR)
           val startMonth = currentDateTime.get(Calendar.MONTH)
           val startDay = currentDateTime.get(Calendar.DAY_OF_MONTH)
           val startHour = currentDateTime.get(Calendar.HOUR OF DAY)
           val startMinute = currentDateTime.get(Calendar.MINUTE)
           DatePickerDialog(requireContext(), DatePickerDialog.OnDateSetListener
{ _, year, month, day ->
                TimePickerDialog(requireContext(),
TimePickerDialog.OnTimeSetListener { _, hour, minute ->
                    val pickedDateTime = Calendar.getInstance()
                    pickedDateTime.set(year, month, day, hour, minute)
                }, startHour, startMinute, false).show()
            }, startYear, startMonth, startDay).show()
dateedit.setText(startYear.toString()+"/"+startMonth.toString()+"/"+startDay)
           timeedit.setText(startHour.toString()+":"+startMinute.toString())
       }
       var link = view.findViewById<EditText>(R.id.editLink)
       var text = view.findViewById<TextView>(R.id.linkfor)
       var cp = view.findViewById<ImageButton>(R.id.cp3)
       var button = view.findViewById<Button>(R.id.button3)
       button.setOnClickListener {
            link.setText("http://bit.ly/"+iddoc)
            var message = "Your consultation requrest has been accepted by the
doctor." + "Please make your self available at " +dateedit.text.toString()+" Time
:"+timeedit.text.toString()+ " .Use the link " +link.text.toString()+ " to contact
the doctor"
            Thread(Runnable {
                var sendmsg = notifypatient(message,mail.toLowerCase())
                sendmsg.send()
            }).start()
            link.visibility = View.VISIBLE
            text.visibility = View.VISIBLE
            cp.visibility = View.VISIBLE
       val myClipboard: ClipboardManager =
activity?.getSystemService(Context.CLIPBOARD_SERVICE) as ClipboardManager
       cp.setOnClickListener{
            val clipData = ClipData.newPlainText("link",link.text.toString() )
            myClipboard.setPrimaryClip(clipData)
```

```
return view
}
```

SOME DESIGNE XML FILES

App_bar_main.xml

```
Activity_main.xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.drawerlayout.widget.DrawerLayout</pre>
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:id="@+id/drawer_layout"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:fitsSystemWindows="true"
    tools:openDrawer="start">
    <include</pre>
        layout="@layout/app_bar_main"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />
    <com.google.android.material.navigation.NavigationView</pre>
        android:id="@+id/nav_view"
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        android:layout gravity="start"
        android:fitsSystemWindows="true"
        app:headerLayout="@layout/nav_header_main"
        app:menu="@menu/activity main drawer" />
</androidx.drawerlayout.widget.DrawerLayout>
```

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.coordinatorlayout.widget.CoordinatorLayout</pre>
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"
    tools:context=".MainActivity">
    <com.google.android.material.appbar.AppBarLayout</pre>
        android:layout width="match parent"
        android:layout_height="wrap_content"
        android:theme="@style/AppTheme.AppBarOverlay">
        <androidx.appcompat.widget.Toolbar</pre>
            android:id="@+id/toolbar"
            android:layout_width="match_parent"
            android:layout_height="51dp"
            android:background="@color/colorPrimary"
            app:popupTheme="@style/AppTheme.PopupOverlay" />
    </com.google.android.material.appbar.AppBarLayout>
    <include layout="@layout/content main" />
</androidx.coordinatorlayout.widget.CoordinatorLayout>
```

SOME FRAGMENTS

Fragment_bother.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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:background="@drawable/allbackground"
    android:clickable="true">
    <ImageButton</pre>
        android:id="@+id/imgbtn"
        android:layout_width="350dp"
        android:layout height="wrap content"
        android:background="@drawable/select_healthpbl"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.262"
        app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout constraintVertical bias="0.119" />
    <EditText
        android:id="@+id/describe"
        android:layout width="wrap content"
        android:layout_height="200dp"
        android:background="@drawable/bother"
```

```
android:ems="10"
        android:gravity="start|top"
        android:inputType="textMultiLine"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.515"
        app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout constraintVertical bias="0.595" />
    <TextView
        android:id="@+id/textView9"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="Please describe your health concern"
        app:layout_constraintBottom_toTopOf="@+id/describe"
        app:layout constraintEnd toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.093"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout constraintVertical bias="0.909" />
    <Button
        android:id="@+id/button"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:background="@drawable/sumbit"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.47"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/describe"
        app:layout_constraintVertical_bias="0.263" />
    <ImageButton</pre>
        android:id="@+id/imgbtn1"
        android:layout width="350dp"
        android:layout height="wrap content"
        android:background="@drawable/consultatnt_finder"
        app:layout constraintBottom toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.278"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/imgbtn"
        app:layout_constraintVertical_bias="0.065" />
</androidx.constraintlayout.widget.ConstraintLayout>
Fragment doctor.xml
<?xml version="1.0" encoding="utf-8"?>
<TableLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:background="#FFFFFF"
    android:clickable="true"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent" android:layout height="match parent">
    <ScrollView>
```

```
<LinearLayout</pre>
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical">
    <TableRow
        android:id="@+id/e1"
        android:onClick="getDoctor"
        android:layout_width="match_parent"
        android:layout_height="150dp"
        android:background="@drawable/background"
        android:tag="mlC8IFyTyLgINc75rsJWNSpnIL12"
        android:orientation="vertical">
        <androidx.constraintlayout.widget.ConstraintLayout</pre>
            android:layout width="match parent"
            android:layout_height="150dp">
            <TextView
                android:id="@+id/textView1"
                android:layout width="wrap content"
                android:layout_height="wrap_content"
                android:layout marginBottom="4dp"
                android:fontFamily="@font/aller bdlt"
                android:text="(Orthopedist)"
                android:textColor="#000000"
                app:layout constraintBottom toTopOf="@+id/ratingBar1"
                app:layout_constraintEnd_toEndOf="parent"
                app:layout constraintHorizontal bias="0.321"
                app:layout constraintStart toStartOf="parent"
                app:layout_constraintTop_toTopOf="parent"
                app:layout_constraintVertical_bias="1.0" />
            <TextView
                android:id="@+id/no.ofratings1"
                android:layout_width="130dp"
                android:layout_height="50dp"
                android:ems="10"
                android:fontFamily="@font/aller_bdlt"
                android:inputType="number"
                android:padding="15dp"
                android:text="3325 ratings"
                android:textColor="#000000"
                app:layout_constraintBottom_toBottomOf="parent"
                app:layout_constraintEnd_toEndOf="parent"
                app:layout_constraintHorizontal_bias="0.868"
                app:layout_constraintStart_toStartOf="parent"
                app:layout_constraintTop_toTopOf="parent"
                app:layout constraintVertical bias="0.9" />
            <TextView
                android:id="@+id/docdegree1"
                android:layout width="wrap content"
                android:layout_height="wrap_content"
                android:fontFamily="@font/aller_bd"
                android:text="MBBS,MS-Orthopaedics"
                android:textColor="#000000"
```

```
app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.284"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.676" />
        <TextView
            android:id="@+id/docname1"
            android:layout_width="wrap_content"
            android:layout height="wrap content"
            android:layout_marginTop="16dp"
            android:fontFamily="@font/aller_bd"
            android:text="Dr.J Surya Chandra"
            android:textColor="#000000"
            android:textSize="22dp"
            app:layout constraintBottom toTopOf="@+id/docdegree1"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout constraintHorizontal bias="0.244"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout constraintVertical bias="1.0" />
        <RatingBar
            android:id="@+id/ratingBar1"
            android:layout width="wrap content"
            android:layout_height="wrap_content"
            android:layout_marginStart="4dp"
            app:layout constraintBottom toBottomOf="parent"
            app:layout_constraintEnd_toStartOf="@+id/no.ofratings1"
            app:layout constraintHorizontal bias="0.985"
            android:stepSize="0.1"
            android:rating="4.7"
            android:isIndicator="true"
            android:theme="@style/RatingBar"
            app:layout constraintStart toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout constraintVertical bias="0.967" />
        <de.hdodenhof.circleimageview.CircleImageView</pre>
            android:id="@+id/docimage1"
            android:layout_width="100dp"
            android:layout_height="90dp"
            android:src="@drawable/doc1"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.881"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e2"
    android:onClick="getDoctor"
    android:layout_width="match_parent"
    android:layout_height="150dp"
    android:background="@drawable/background"
```

app:layout constraintBottom toTopOf="@+id/ratingBar1"

```
android:tag="qQr4ISbEkRWrfA2Eji1xssfzsBg1"
android:orientation="vertical">
<androidx.constraintlayout.widget.ConstraintLayout</pre>
    android:layout_width="match_parent"
    android:layout_height="150dp">
    <TextView
        android:id="@+id/textView2"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout marginBottom="4dp"
        android:fontFamily="@font/aller_bdlt"
        android:text="(General Physician)"
        android:textColor="#000000"
        app:layout constraintBottom toTopOf="@+id/ratingBar2"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal bias="0.28"
        app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout constraintVertical bias="1.0" />
    <TextView
        android:id="@+id/no.ofratings2"
        android:layout_width="130dp"
        android:layout_height="50dp"
        android:ems="10"
        android:fontFamily="@font/aller_bdlt"
        android:inputType="number"
        android:padding="15dp"
        android:text="2350 ratings"
        android:textColor="#000000"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout constraintEnd toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.868"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.9" />
    <TextView
        android:id="@+id/docdegree2"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:fontFamily="@font/aller_bd"
        android:text="MBBS, MD-General Medicine"
        android:textColor="#000000"
        app:layout constraintBottom toTopOf="@+id/ratingBar2"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.254"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.676" />
    <TextView
        android:id="@+id/docname2"
        android:layout_width="205dp"
        android:layout_height="35dp"
        android:layout marginTop="16dp"
```

```
android:fontFamily="@font/aller_bd"
            android:text="Dr.Tejaswi Konidela"
            android:textColor="#000000"
            android:textSize="22dp"
            app:layout_constraintBottom_toTopOf="@+id/docdegree2"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.23"
            app:layout constraintStart toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout constraintVertical bias="0.0" />
        <RatingBar
            android:id="@+id/ratingBar2"
            android:layout width="wrap content"
            android:layout_height="wrap_content"
            android:layout_marginStart="4dp"
            app:layout constraintBottom toBottomOf="parent"
            app:layout_constraintEnd_toStartOf="@+id/no.ofratings2"
            app:layout constraintHorizontal bias="0.985"
            android:stepSize="0.1"
            android:rating="3.9"
            android:isIndicator="true"
            android:theme="@style/RatingBar"
            app:layout constraintStart toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout constraintVertical bias="0.967" />
        <de.hdodenhof.circleimageview.CircleImageView
            android:id="@+id/docimage2"
            android:layout_width="100dp"
            android:layout height="90dp"
            android:src="@drawable/doc2"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal bias="0.881"
            app:layout constraintStart toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout constraintVertical bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e3"
    android:onClick="getDoctor"
    android:layout_width="match_parent"
    android:layout_height="150dp"
    android:background="@drawable/background"
    android:tag="ijt4ynpap4UuyFC6TY9PwAjpsng1"
    android:orientation="vertical">
    <androidx.constraintlayout.widget.ConstraintLayout</pre>
        android:layout width="match parent"
        android:layout_height="150dp">
        <TextView
            android:id="@+id/textView3"
            android:layout_width="wrap_content"
            android:layout height="wrap content"
```

```
android:layout marginBottom="4dp"
    android:fontFamily="@font/aller bdlt"
    android:text="(Pulmonologist)"
    android:textColor="#000000"
    app:layout_constraintBottom_toTopOf="@+id/ratingBar3"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.372"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout constraintVertical bias="1.0" />
<TextView
    android:id="@+id/no.ofratings3"
    android:layout_width="130dp"
    android:layout_height="50dp"
    android:ems="10"
    android:fontFamily="@font/aller_bdlt"
    android:inputType="number"
    android:padding="15dp"
    android:text="1552 ratings"
    android:textColor="#000000"
    app:layout constraintBottom toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.868"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="0.9" />
<TextView
    android:id="@+id/docdegree3"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:fontFamily="@font/aller_bd"
    android:text="MBBS, MD-Pulmonary Medicine"
    android:textColor="#000000"
    app:layout constraintBottom toTopOf="@+id/ratingBar3"
    app:layout constraintEnd toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.268"
    app:layout_constraintStart_toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout_constraintVertical_bias="0.676" />
<TextView
    android:id="@+id/docname3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:fontFamily="@font/aller_bd"
    android:text="Dr.Sravani"
    android:textSize="22dp"
    android:textColor="#000000"
    app:layout constraintBottom toTopOf="@+id/docdegree3"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintHorizontal bias="0.372"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="1.0" />
<RatingBar
```

```
android:id="@+id/ratingBar3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginStart="4dp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toStartOf="@+id/no.ofratings3"
            app:layout_constraintHorizontal_bias="0.985"
            android:stepSize="0.1"
            android:rating="4.3"
            android:isIndicator="true"
            android:theme="@style/RatingBar"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout constraintVertical bias="0.967" />
        <de.hdodenhof.circleimageview.CircleImageView</pre>
            android:id="@+id/docimage3"
            android:layout_width="100dp"
            android:layout height="90dp"
            android:src="@drawable/doc3"
            app:layout constraintBottom toBottomOf="parent"
            app:layout constraintEnd toEndOf="parent"
            app:layout constraintHorizontal bias="0.881"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e4"
    android:onClick="getDoctor"
    android:layout_width="match_parent"
    android:layout_height="150dp"
    android:background="@drawable/background"
    android:tag="amGlTLAHQ0WpMJfhKJsiUzKevNg2"
    android:orientation="vertical">
    <androidx.constraintlayout.widget.ConstraintLayout</pre>
        android:layout width="match parent"
        android:layout_height="150dp">
        <TextView
            android:id="@+id/textView4"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="4dp"
            android:fontFamily="@font/aller_bdlt"
            android:text="(Dentist)"
            android:textColor="#000000"
            app:layout constraintBottom toTopOf="@+id/ratingBar4"
            app:layout constraintEnd toEndOf="parent"
            app:layout constraintHorizontal bias="0.372"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="1.0" />
        <TextView
```

```
android:id="@+id/no.ofratings4"
    android:layout_width="130dp"
    android:layout_height="50dp"
    android:ems="10"
    android:fontFamily="@font/aller_bdlt"
    android:inputType="number"
    android:padding="15dp"
    android:text="5545 ratings"
    android:textColor="#000000"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.868"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.9" />
<TextView
    android:id="@+id/docdegree4"
    android:layout width="wrap content"
    android:layout_height="wrap content"
    android:fontFamily="@font/aller_bd"
    android:text="BDS, MDS"
    android:textColor="#000000"
    app:layout constraintBottom toTopOf="@+id/ratingBar4"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.385"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="0.676" />
<TextView
    android:id="@+id/docname4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout marginTop="16dp"
    android:fontFamily="@font/aller bd"
    android:text="Dr.Harshini"
    android:textSize="22dp"
    android:textColor="#000000"
    app:layout constraintBottom toTopOf="@+id/docdegree4"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout constraintHorizontal bias="0.372"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="1.0" />
<RatingBar
    android:id="@+id/ratingBar4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout marginStart="4dp"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintEnd toStartOf="@+id/no.ofratings4"
    app:layout constraintHorizontal bias="0.985"
    android:stepSize="0.1"
    android:rating="4.5"
    android:isIndicator="true"
    android:theme="@style/RatingBar"
    app:layout_constraintStart_toStartOf="parent"
```

```
app:layout constraintTop toTopOf="parent"
            app:layout_constraintVertical_bias="0.967" />
        <de.hdodenhof.circleimageview.CircleImageView
            android:id="@+id/docimage4"
            android:layout_width="100dp"
            android:layout_height="90dp"
            android:src="@drawable/doc4"
            app:layout constraintBottom toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal bias="0.881"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout constraintVertical bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e5"
    android:onClick="getDoctor"
    android:layout width="match parent"
    android:layout_height="150dp"
    android:background="@drawable/background"
    android:tag="wGzRfNPdZuef5dVZv4yM01NmuzC3"
    android:orientation="vertical">
    <androidx.constraintlayout.widget.ConstraintLayout</pre>
        android:layout_width="match_parent"
        android:layout_height="150dp">
        <TextView
            android:id="@+id/textView5"
            android:layout_width="wrap_content"
            android:layout height="wrap content"
            android:layout marginBottom="4dp"
            android:fontFamily="@font/aller bdlt"
            android:text="(Neprologist)"
            android:textColor="#000000"
            app:layout constraintBottom toTopOf="@+id/ratingBar5"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.289"
            app:layout constraintStart toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="1.0" />
        <TextView
            android:id="@+id/no.ofratings5"
            android:layout_width="130dp"
            android:layout_height="50dp"
            android:ems="10"
            android:fontFamily="@font/aller bdlt"
            android:inputType="number"
            android:padding="15dp"
            android:text="7201 ratings"
            android:textColor="#000000"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout constraintHorizontal bias="0.868"
```

```
app:layout constraintStart toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.9" />
<TextView
    android:id="@+id/docdegree5"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:fontFamily="@font/aller bd"
    android:text="MBBS, Fellowship in Nephrology"
    android:textColor="#000000"
    app:layout_constraintBottom_toTopOf="@+id/ratingBar5"
    app:layout constraintEnd toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.222"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.676" />
<TextView
    android:id="@+id/docname5"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout marginTop="16dp"
    android:fontFamily="@font/aller_bd"
    android:text="Dr.A.N. Priyatham Reddy"
    android:textColor="#000000"
    android:textSize="22dp"
    app:layout_constraintBottom_toTopOf="@+id/docdegree5"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.098"
    app:layout constraintStart toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="1.0" />
<RatingBar
    android:id="@+id/ratingBar5"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout_marginStart="4dp"
    app:layout constraintBottom toBottomOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/no.ofratings5"
    app:layout constraintHorizontal bias="0.985"
    android:stepSize="0.1"
    android:rating="3.8"
    android:isIndicator="true"
    android:theme="@style/RatingBar"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.967" />
<de.hdodenhof.circleimageview.CircleImageView
    android:id="@+id/docimage5"
    android:layout_width="100dp"
    android:layout height="90dp"
    android:src="@drawable/doc5"
    app:layout constraintBottom toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.881"
    app:layout constraintStart toStartOf="parent"
```

```
app:layout constraintTop toTopOf="parent"
            app:layout constraintVertical bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e6"
    android:onClick="getDoctor"
    android:layout width="match parent"
    android:layout height="150dp"
    android:background="@drawable/background"
    android:tag="P4LbMQwDXXf0F4W3Y7xAqpFFc2E3"
    android:orientation="vertical">
    <androidx.constraintlayout.widget.ConstraintLayout</pre>
        android:layout_width="match_parent"
        android:layout_height="150dp">
        <TextView
            android:id="@+id/textView6"
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:layout marginBottom="4dp"
            android:fontFamily="@font/aller_bdlt"
            android:text="(Urologist)"
            android:textColor="#000000"
            app:layout_constraintBottom_toTopOf="@+id/ratingBar6"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.372"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="1.0" />
        <TextView
            android:id="@+id/no.ofratings6"
            android:layout width="130dp"
            android:layout_height="50dp"
            android:ems="10"
            android:fontFamily="@font/aller_bdlt"
            android:inputType="number"
            android:padding="15dp"
            android:text="55525 ratings"
            android:textColor="#000000"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.868"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.9" />
        <TextView
            android:id="@+id/docdegree6"
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:fontFamily="@font/aller bd"
            android:text="MBBS, MS, MCh-Urology"
            android:textColor="#000000"
            app:layout_constraintBottom_toTopOf="@+id/ratingBar6"
            app:layout constraintEnd toEndOf="parent"
```

```
app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.676" />
        <TextView
            android:id="@+id/docname6"
            android:layout width="wrap content"
            android:layout_height="wrap_content"
            android:layout_marginTop="16dp"
            android:fontFamily="@font/aller_bd"
            android:text="Dr.Ginka Dileep"
            android:textSize="22dp"
            android:textColor="#000000"
            app:layout_constraintBottom_toTopOf="@+id/docdegree6"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.372"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout_constraintVertical_bias="1.0" />
        <RatingBar
            android:id="@+id/ratingBar6"
            android:layout width="wrap content"
            android:layout_height="wrap_content"
            android:layout marginStart="4dp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toStartOf="@+id/no.ofratings6"
            app:layout_constraintHorizontal_bias="0.985"
            android:stepSize="0.1"
            android:rating="3.0"
            android:isIndicator="true"
            android:theme="@style/RatingBar"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout constraintVertical bias="0.967" />
        <de.hdodenhof.circleimageview.CircleImageView
            android:id="@+id/docimage6"
            android:layout_width="100dp"
            android:layout_height="90dp"
            android:src="@drawable/doc6"
            app:layout constraintBottom toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.881"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout constraintVertical bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e7"
    android:onClick="getDoctor"
    android:layout_width="match_parent"
    android:layout_height="150dp"
    android:background="@drawable/background"
    android:tag="8Ekc3A3375eqN2pUhG5oHmy5SWp2"
    android:orientation="vertical">
```

app:layout constraintHorizontal bias="0.385"

```
<androidx.constraintlayout.widget.ConstraintLayout</pre>
    android:layout width="match parent"
    android:layout_height="150dp">
    <TextView
        android:id="@+id/textView7"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="4dp"
        android:fontFamily="@font/aller_bdlt"
        android:text="(General Physician)"
        android:textColor="#000000"
        app:layout_constraintBottom_toTopOf="@+id/ratingBar7"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.372"
        app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout_constraintVertical_bias="1.0" />
    <TextView
        android:id="@+id/no.ofratings7"
        android:layout width="130dp"
        android:layout_height="50dp"
        android:ems="10"
        android:fontFamily="@font/aller_bdlt"
        android:inputType="number"
        android:padding="15dp"
        android:text="5421 ratings"
        android:textColor="#000000"
        app:layout constraintBottom toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.868"
        app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout_constraintVertical_bias="0.9" />
    <TextView
        android:id="@+id/docdegree7"
        android:layout_width="wrap_content"
        android:layout height="wrap content"
        android:fontFamily="@font/aller_bd"
        android:text="MBBS"
        android:textColor="#000000"
        app:layout_constraintBottom_toTopOf="@+id/ratingBar7"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.385"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout constraintVertical bias="0.676" />
    <TextView
        android:id="@+id/docname7"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:fontFamily="@font/aller_bd"
        android:text="Dr.Amar Babu"
```

```
android:textSize="22dp"
            android:textColor="#000000"
            app:layout_constraintBottom_toTopOf="@+id/docdegree7"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.372"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout constraintVertical bias="1.0" />
        <RatingBar
            android:id="@+id/ratingBar7"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout marginStart="4dp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toStartOf="@+id/no.ofratings7"
            app:layout constraintHorizontal bias="0.985"
            android:stepSize="0.1"
            android:rating="4.2"
            android:isIndicator="true"
            android:theme="@style/RatingBar"
            app:layout constraintStart toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout constraintVertical bias="0.967" />
        <de.hdodenhof.circleimageview.CircleImageView</pre>
            android:id="@+id/docimage7"
            android:layout_width="100dp"
            android:layout_height="90dp"
            android:src="@drawable/doc7"
            app:layout constraintBottom toBottomOf="parent"
            app:layout constraintEnd toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.881"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout_constraintVertical_bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e8"
    android:onClick="getDoctor"
    android:layout width="match parent"
    android:layout_height="150dp"
    android:background="@drawable/background"
    android:tag="tMvTstx0HEOz0nj79EPXBVmaFUs1"
    android:orientation="vertical">
    <androidx.constraintlayout.widget.ConstraintLayout</pre>
        android:layout width="match parent"
        android:layout_height="150dp">
        <TextView
            android:id="@+id/textView8"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="4dp"
            android:fontFamily="@font/aller_bdlt"
```

```
android:text="(Opthalmologist/Eye Surgeon)"
    android:textColor="#000000"
    app:layout_constraintBottom_toTopOf="@+id/ratingBar8"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.372"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="1.0" />
<TextView
    android:id="@+id/no.ofratings8"
    android:layout_width="130dp"
    android:layout_height="50dp"
    android:ems="10"
    android:fontFamily="@font/aller_bdlt"
    android:inputType="number"
    android:padding="15dp"
    android:text="1225 ratings"
    android:textColor="#000000"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintHorizontal bias="0.868"
    app:layout_constraintStart_toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout constraintVertical bias="0.9" />
<TextView
    android:id="@+id/docdegree8"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:fontFamily="@font/aller bd"
    android:text="MBBS, DNB-Opthalmology"
    android:textColor="#000000"
    app:layout_constraintBottom_toTopOf="@+id/ratingBar8"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintHorizontal bias="0.385"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.676" />
<TextView
    android:id="@+id/docname8"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:fontFamily="@font/aller_bd"
    android:text="Dr.M.Veerendra"
    android:textSize="22dp"
    android:textColor="#000000"
    app:layout_constraintBottom_toTopOf="@+id/docdegree8"
    app:layout constraintEnd toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.372"
    app:layout_constraintStart_toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout_constraintVertical_bias="1.0" />
<RatingBar
    android:id="@+id/ratingBar8"
    android:layout width="wrap content"
```

```
android:layout height="wrap content"
            android:layout marginStart="4dp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toStartOf="@+id/no.ofratings8"
            app:layout_constraintHorizontal_bias="0.985"
            android:stepSize="0.1"
            android:rating="4.3"
            android:isIndicator="true"
            android:theme="@style/RatingBar"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout_constraintVertical_bias="0.967" />
        <de.hdodenhof.circleimageview.CircleImageView
            android:id="@+id/docimage8"
            android:layout_width="100dp"
            android:layout_height="90dp"
            android:src="@drawable/doc8"
            app:layout constraintBottom toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout constraintHorizontal bias="0.881"
            app:layout constraintStart toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e9"
    android:onClick="getDoctor"
    android:layout width="match parent"
    android:layout_height="150dp"
    android:background="@drawable/background"
    android:tag="PnaRiSFwKhYksC0d00rdXHQfAHd2"
    android:orientation="vertical">
    <androidx.constraintlayout.widget.ConstraintLayout</pre>
        android:layout width="match parent"
        android:layout_height="150dp">
        <TextView
            android:id="@+id/textView9"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="4dp"
            android:fontFamily="@font/aller_bdlt"
            android:text="(Neurologist)"
            android:textColor="#000000"
            app:layout_constraintBottom_toTopOf="@+id/ratingBar9"
            app:layout constraintEnd toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.372"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout_constraintVertical_bias="1.0" />
        <TextView
            android:id="@+id/no.ofratings9"
            android:layout_width="130dp"
```

```
android:layout_height="50dp"
    android:ems="10"
    android:fontFamily="@font/aller_bdlt"
    android:inputType="number"
    android:padding="15dp"
    android:text="1356 ratings"
    android:textColor="#000000"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.868"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="0.9" />
<TextView
    android:id="@+id/docdegree9"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:fontFamily="@font/aller_bd"
    android:text="MBBS, MS, MCh"
    android:textColor="#000000"
    app:layout constraintBottom toTopOf="@+id/ratingBar9"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.385"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="0.676" />
<TextView
    android:id="@+id/docname9"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:fontFamily="@font/aller_bd"
    android:text="Dr.R Ram Naik"
    android:textSize="22dp"
    android:textColor="#000000"
    app:layout constraintBottom toTopOf="@+id/docdegree9"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.372"
    app:layout_constraintStart_toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout constraintVertical bias="1.0" />
<RatingBar
    android:id="@+id/ratingBar9"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="4dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout constraintEnd toStartOf="@+id/no.ofratings9"
    app:layout_constraintHorizontal_bias="0.985"
    android:stepSize="0.1"
    android:rating="4.3"
    android:isIndicator="true"
    android:theme="@style/RatingBar"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="0.967" />
```

```
<de.hdodenhof.circleimageview.CircleImageView</pre>
            android:id="@+id/docimage9"
            android:layout_width="100dp"
            android:layout_height="90dp"
            android:src="@drawable/doc9"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout constraintEnd toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.881"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout_constraintVertical_bias="0.266" />
    </androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
<TableRow
    android:id="@+id/e10"
    android:onClick="getDoctor"
    android:layout width="match parent"
    android:layout_height="150dp"
    android:background="@drawable/background"
    android:tag="UEcDuxKOU9WS44c1KfRNVbZCdX02"
    android:orientation="vertical">
    <androidx.constraintlayout.widget.ConstraintLayout</pre>
        android:layout width="match parent"
        android:layout_height="150dp">
        <TextView
            android:id="@+id/textView10"
            android:layout width="wrap content"
            android:layout_height="wrap_content"
            android:layout_marginBottom="4dp"
            android:fontFamily="@font/aller_bdlt"
            android:text="(Cardiologist)"
            android:textColor="#000000"
            app:layout constraintBottom toTopOf="@+id/ratingBar10"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.372"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
            app:layout_constraintVertical_bias="1.0" />
        <TextView
            android:id="@+id/no.ofratings10"
            android:layout_width="130dp"
            android:layout_height="50dp"
            android:ems="10"
            android:fontFamily="@font/aller bdlt"
            android:inputType="number"
            android:padding="15dp"
            android:text="753 ratings"
            android:textColor="#000000"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.868"
            app:layout_constraintStart_toStartOf="parent"
            app:layout constraintTop toTopOf="parent"
```

```
app:layout constraintVertical bias="0.9" />
<TextView
    android:id="@+id/docdegree10"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:fontFamily="@font/aller_bd"
    android:text="MBBS, MD, DM-Cardiology"
    android:textColor="#000000"
    app:layout_constraintBottom_toTopOf="@+id/ratingBar10"
    app:layout constraintEnd toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.385"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.676" />
<TextView
    android:id="@+id/docname10"
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:layout marginTop="16dp"
    android:fontFamily="@font/aller_bd"
    android:text="Dr.Bala Chandra"
    android:textSize="22dp"
    android:textColor="#000000"
    app:layout_constraintBottom_toTopOf="@+id/docdegree10"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.372"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="1.0" />
<RatingBar
    android:id="@+id/ratingBar10"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:layout marginStart="4dp"
    app:layout constraintBottom toBottomOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/no.ofratings10"
    app:layout constraintHorizontal bias="0.985"
    android:stepSize="0.1"
    android:rating="4.7"
    android:isIndicator="true"
    android:theme="@style/RatingBar"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.967" />
<de.hdodenhof.circleimageview.CircleImageView</pre>
    android:id="@+id/docimage10"
    android:layout width="100dp"
    android:layout height="90dp"
    android:src="@drawable/doc10"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.881"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="0.266" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
</TableRow>
        </LinearLayout>
    </ScrollView>
</TableLayout>
```

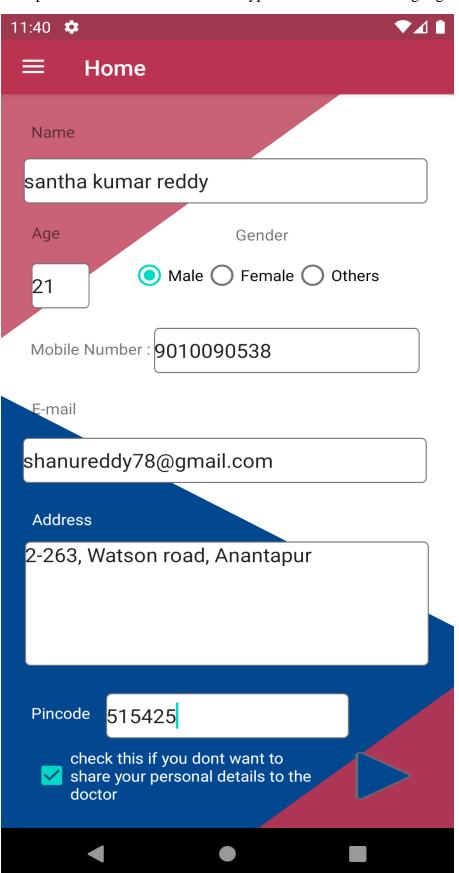
Results

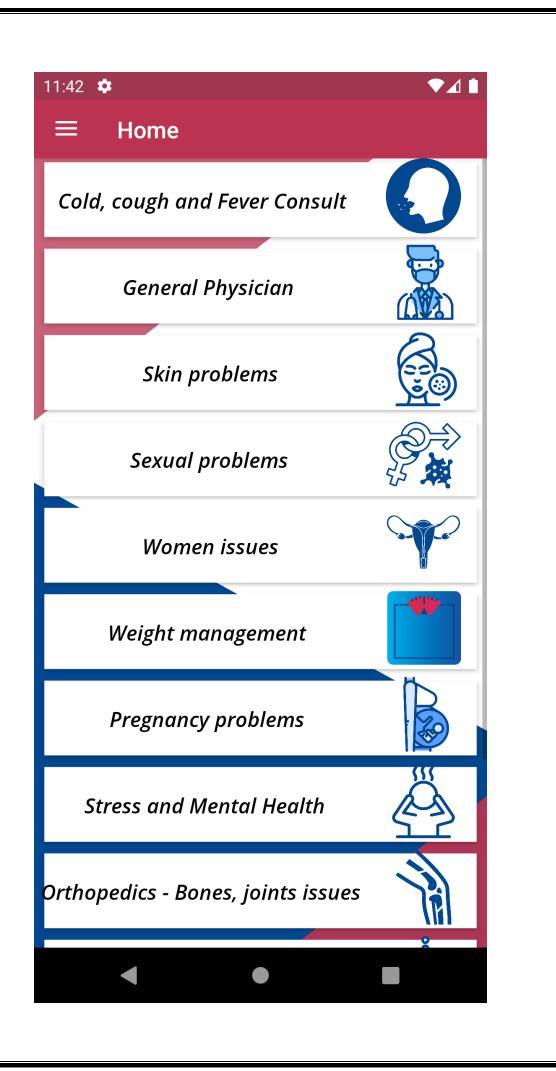
Home page

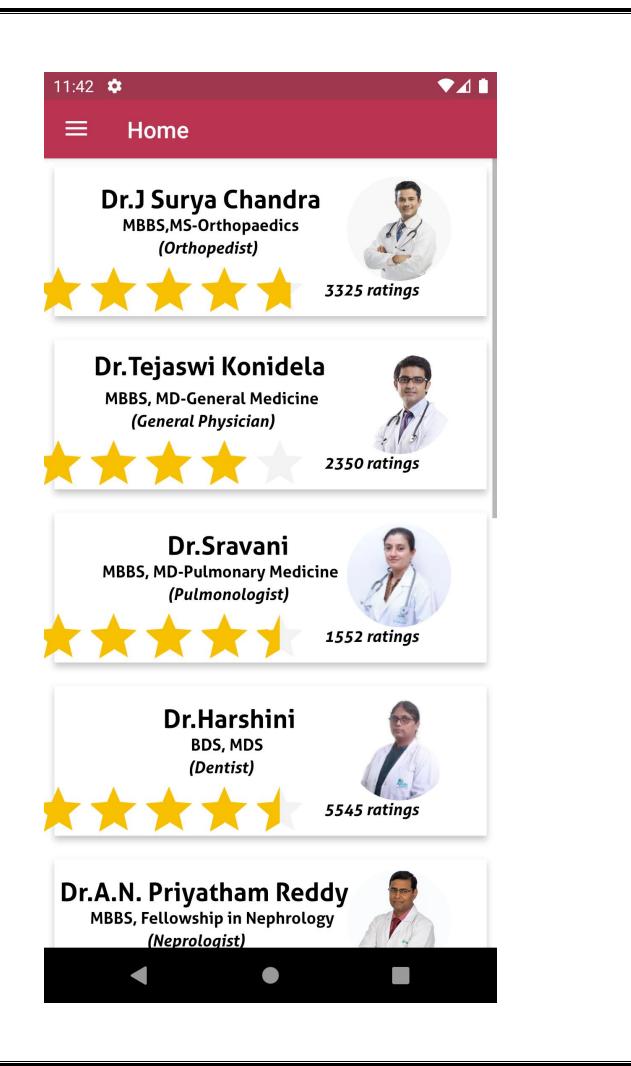


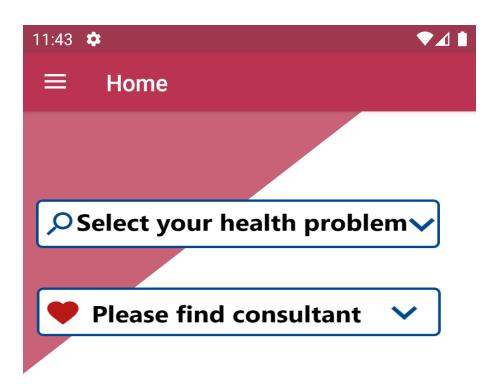
Patient details

Here patient will enter details and encrypted on submission using vigenere algorithm

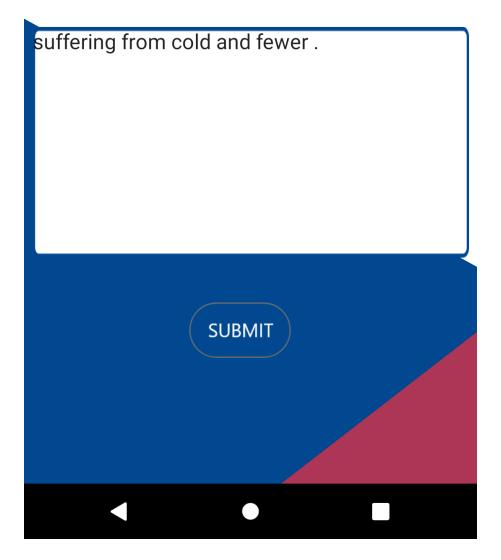




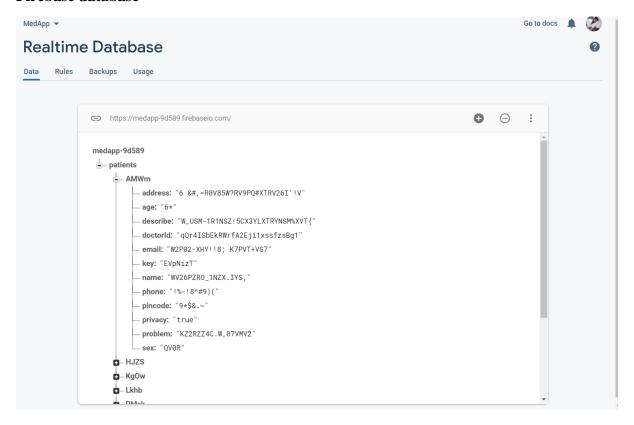




Please describe your health concern



Firebase database

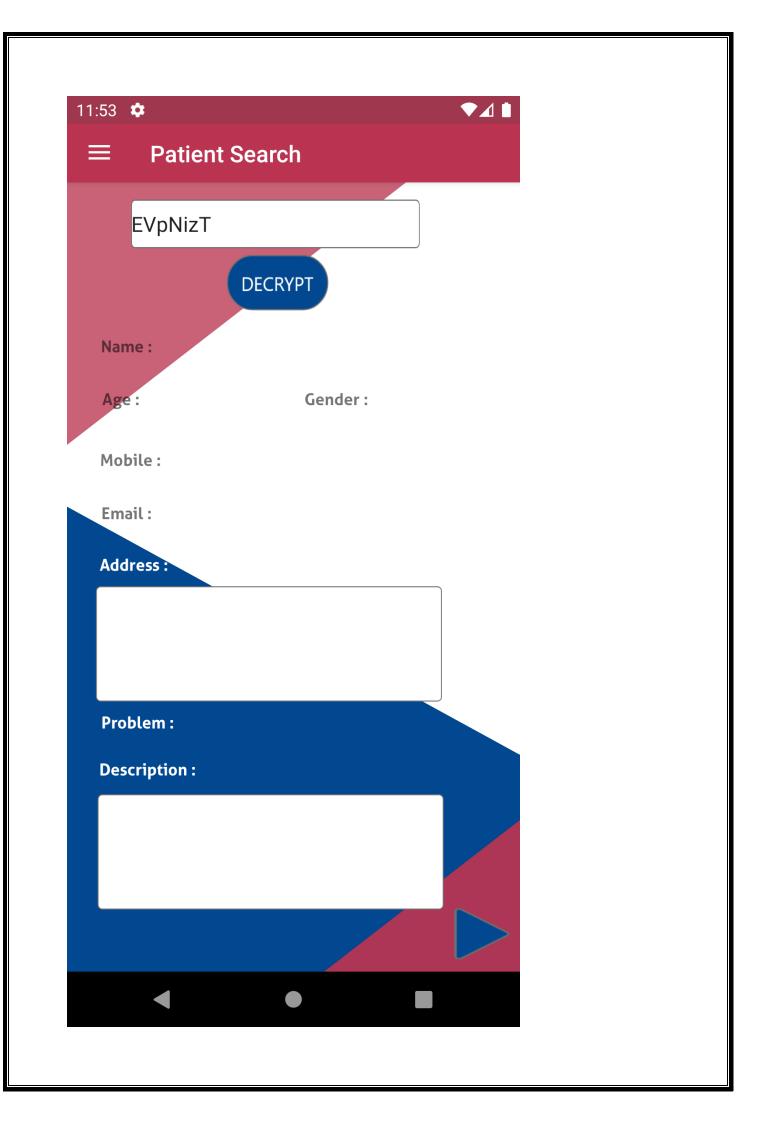


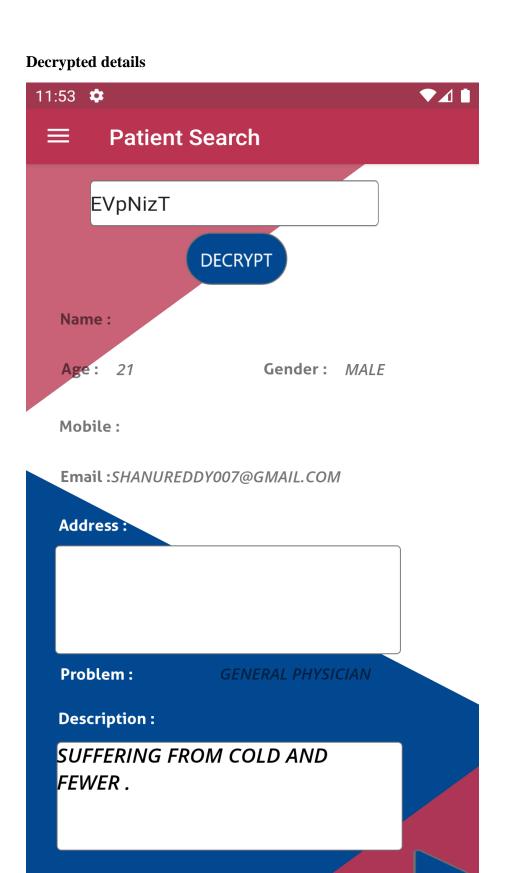
Doctor Login 11:49 🌣 **▼**⊿ **1** Login \equiv doc2@gmail.com **ੵ** Log In

Patient view for doctors ▼⊿ **1** 11:50 🌣 Login AMWm RMxk Rcbv Sbdz lqkq znhi

Patient ID and KEY **▼**⊿ **1** 11:52 🌣 Login Patient ID AMWm Key EVpNizT

Patient Search ▼⊿ **1** 11:53 🌣 **Patient Search** AMWm SEARCH





Data and time allocation for patient and sent to email 11:54 **V**11 **Patient Search** Please choose date and time to call patient 2020/10/5 11:53 **SUBMIT** link to meet http://bit.ly/qQr4ISbEkRWrfA2E



10:26 (1 hour ago) 🛕 🤸





Your consultation requrest has been accepted by the doctor. Please make your self available at 2020/10/5 Time :10:26 . Use the link http://bit.ly/ijt4ynpap4UuyFC6TY9PwAjpsng1 to contact the doctor

