

## LAMPIRAN

### Source Code Program Presensi NFC

Berikut adalah beberapa *source code* program dari system presensi NFC.

```
package com.cokilabs.nfc.ui;

import android.app.PendingIntent;
import android.content.Intent;
import android.media.Ringtone;
import android.media.RingtoneManager;
import android.net.Uri;
import android.nfc.NdefMessage;
import android.nfc.NdefRecord;
import android.nfc.NfcAdapter;
import android.nfc.NfcEvent;
import android.nfc.Tag;
import android.os.Parcel;
import android.os.Parcelable;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;

import com.cokilabs.nfc.R;
import com.cokilabs.nfc.adapter.JadwalAdapter;
import com.cokilabs.nfc.model.Jadwal;
import com.cokilabs.nfc.model.Mahasiswa;
import com.cokilabs.nfc.network.APIClient;
import com.cokilabs.nfc.network.APIInterface;
import com.cokilabs.nfc.utility.SessionManager;
import com.google.gson.Gson;
import com.squareup.picasso.Picasso;

import org.json.JSONArray;
import org.json.JSONException;
import org.json.JSONObject;

import java.io.IOException;
import java.io.UnsupportedEncodingException;
import java.nio.charset.Charset;

import okhttp3.ResponseBody;
import retrofit2.Call;
import retrofit2.Callback;
import retrofit2.Response;

import static android.nfc.NdefRecord.createMime;
```

```

public class ReaderActivity extends AppCompatActivity implements
NfcAdapter.CreateNdefMessageCallback {

    NfcAdapter nfcAdapter;
    TextView textView, nama, nim, waktu;

    private PendingIntent pendingIntent;
    Jadwal jadwal;
    Button back;
    ImageView imgV;
    SessionManager sessionManager;
    Integer idPertemuan = 0;
    Intent i;

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_reader);
        imgV = findViewById(R.id.img);
        nama = findViewById(R.id.nama);
        nim = findViewById(R.id.nim);
        waktu = findViewById(R.id.waktu);
        sessionManager = new SessionManager(this);
        i = new Intent(ReaderActivity.this, StatusActivity.class);

        jadwal = (Jadwal) getIntent().getSerializableExtra("jadwal");
        if (jadwal != null) {
            sessionManager.setJadwal(jadwal.getId());
        }

        back = findViewById(R.id.back);
        back.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                finish();
            }
        });

        // Check for available NFC Adapter
        nfcAdapter = NfcAdapter.getDefaultAdapter(this);
        if (nfcAdapter == null) {
            Toast.makeText(this, "NFC is not available", Toast.LENGTH_LONG).show();
            finish();
            return;
        }

        if (getIntent().getIntExtra("state", 0) != 0) {
            idPertemuan = getIntent().getIntExtra("state", 0);
        } else {
            idPertemuan = sessionManager.getIdJadwal();
        }
    }
}

```



```
Toast.makeText(getApplicationContext(), api_message, Toast.LENGTH_SHORT).show();
finish();
sessionManager.setIdPertemuan(0);
sessionManager.setIdJadwal(0);
}else {
Toast.makeText(getApplicationContext(), api_message, Toast.LENGTH_SHORT).show();
}

                } catch (JSONException | IOException e) {
e.printStackTrace();
Toast.makeText(ReaderActivity.this, e.toString(), Toast.LENGTH_SHORT).show();
}

                }else {
Toast.makeText(getApplicationContext(),response.message()+" "+response.code(),
Toast.LENGTH_SHORT).show();
}
}

@Override
public void onFailure(Call<ResponseBody> call, Throwable t) {

}
});
}

public void getPertemuan(Integer id) {

APIInterface service = APIClient.getClient();
    final Gsongson = new Gson();

Call<ResponseBody> call = service.newPertemuan(sessionManager.getAuthToken(), id);

call.enqueue(new Callback<ResponseBody>() {
@Override
public void onResponse(Call<ResponseBody> call, Response<ResponseBody> response) {
if(response.isSuccessful()){
try {

        String res = response.body().string();

JSONObjectjson = new JSONObject(res);

String api_status = json.getString("status");
String api_message = json.getString("message");

        if(api_status.equals("success")){
Toast.makeText(getApplicationContext(), api_message, Toast.LENGTH_SHORT).show();
JSONObject data = json.getJSONObject("data");
Integer id = data.getInt("id");
idPertemuan= id;
sessionManager.setIdPertemuan(idPertemuan);
}else {
Toast.makeText(getApplicationContext(), api_message, Toast.LENGTH_SHORT).show();
```

```

}

        } catch (JSONException | IOException e) {
e.printStackTrace();
Toast.makeText(ReaderActivity.this, e.toString(), Toast.LENGTH_SHORT).show();
}

        } else {
Toast.makeText(getApplicationContext(), response.message()+" "+response.code(),
Toast.LENGTH_SHORT).show();
}
    }

@Override
public void onFailure(Call<ResponseBody> call, Throwable t) {

    }
});
}

private static NdefMessage getTestMessage() {
byte[] mimeBytes = "application/com.android.cts.verifier.nfc"
.getBytes(Charset.forName("US-ASCII"));
byte[] id = new byte[] {1, 3, 3, 7};
byte[] payload = "CTS Verifier NDEF Push Tag".getBytes(Charset.forName("US-ASCII"));
return new NdefMessage(new NdefRecord[] {
new NdefRecord(NdefRecord.TNF_MIME_MEDIA, mimeBytes, id, payload)
});
}

@Override
protected void onResume() {
super.onResume();

nfcAdapter.enableForegroundDispatch(this, mPendingIntent, null, null);
nfcAdapter.setNdefPushMessageCallback(this, this);
}

// sending message
@Override
public NdefMessage createNdefMessage(NfcEvent event) {
return getTestMessage();
}

private NdefMessage[] getNdefMessages(Intent intent) {
Parcelable[] rawMessages =
intent.getParcelableArrayExtra(NfcAdapter.EXTRA_NDEF_MESSAGES);
if (rawMessages != null) {
NdefMessage[] messages = new NdefMessage[rawMessages.length];
for (inti = 0; i<messages.length; i++) {
messages[i] = (NdefMessage) rawMessages[i];
}
}
}

```

```

}
return messages;
} else {
return null;
}
}

static String displayByteArray(byte[] bytes) {
    String res="";
    StringBuilder builder = new StringBuilder().append("");
    if(bytes != new byte[0]){
    for (byte aByte : bytes) {
        res += (char) aByte;
    }
    return res.substring(7);
}else{
return "kosong";
}

}

// displaying message
@Override
protected void onNewIntent(Intent intent) {
super.onNewIntent(intent);

NdefMessage[] messages = getNdefMessages(intent);
// Toast.makeText(this, "Read successfully", Toast.LENGTH_SHORT).show();
try {
Log.e("hasil", new String(messages != null ? messages[0].toByteArray() : new byte[0], "UTF-8").substring(7));
// textView.setText(displayByteArray(messages[0].toByteArray()));
queryAPIPostCard(displayByteArray(messages != null ? messages[0].toByteArray() : new byte[0]));
} catch (UnsupportedEncodingException e) {
e.printStackTrace();
Log.e("log", e.toString());
}
}

public void queryAPIPostCard(final String nimp) {

APIInterface service = APIClient.getClient();
final Gsongson = new Gson();

Call<ResponseBody> call = service.postKehadiran(sessionManager.getAuthToken(), nimp, idPertemuan);

call.enqueue(new Callback<ResponseBody>() {
@Override
public void onResponse(Call<ResponseBody> call, Response<ResponseBody> response) {
if(response.isSuccessful()){
try {
String res = response.body().string();

```

```

JSONObject json = new JSONObject(res);

String api_status = json.getString("status");
String api_message = json.getString("message");

        if(api_status.equals("success")){
            Uri notification =
RingtoneManager.getDefaultUri(RingtoneManager.TYPE_NOTIFICATION);
Ringtone r = RingtoneManager.getRingtone(getApplicationContext(), notification);
r.play();

JSONObject data = json.getJSONObject("data");
String names = data.getString("nama");
String nims = data.getString("nim");
String waktu = data.getString("waktu_presensi");
String photo = data.getString("photo");
//          Mahasiswa mahasiswa = gson.fromJson(data, Mahasiswa.class);

nama.setText(names);
nim.setText(nims);
waktu.setText(String.format("Waktu Presensi: %s WIB", waktu));

Picasso.get().load(photo).placeholder(R.drawable.card_scan).into(imgV);

Toast.makeText(getApplicationContext(), api_message, Toast.LENGTH_SHORT).show();

} else {
    Toast.makeText(getApplicationContext(), api_message, Toast.LENGTH_SHORT).show();
}

        } catch (JSONException | IOException e) {
            e.printStackTrace();
        }

        } else {
            Toast.makeText(getApplicationContext(), response.message()+" "+response.code(),
            Toast.LENGTH_SHORT).show();
        }
    }

    @Override
    public void onFailure(Call<ResponseBody> call, Throwable t) {

    }
});
}
}

```

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## Manajemen User

Tambah User

User Has Been Deleted!

### Daftar User

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Nama	Username	No HP	Level(s)	Aksi
Admin	admin	087830415543	Admin	<a href="#">Edit</a> <a href="#">Hapus</a>
Ananda Fuadhilah A.	mahasiswa	08976757	Mahasiswa	<a href="#">Edit</a> <a href="#">Hapus</a>
Andi Riansyah, ST, MKom	andi riansyah	0989767365656	Dosen	<a href="#">Edit</a> <a href="#">Hapus</a>
Aryo Munandar	32601400709	0878498245	Mahasiswa	<a href="#">Edit</a> <a href="#">Hapus</a>
Badie'ah, ST,MKom	badie'ah	0283838911	Dosen	<a href="#">Edit</a> <a href="#">Hapus</a>
Ika Mustika	tika	085670756812	Mahasiswa	<a href="#">Edit</a> <a href="#">Hapus</a>

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Search:

No	ID Dosen	Nama Dosen	NIP	Username	Email	Alamat	Nomor HP	Foto	Aksi
1	5	Imam Much Ibnu S, ST, M.Sc.Ph.D	0613037301	ImamMIS	imam@unissula.ac.id	Jl. HR. Hardjanto No. 6 RT.01 RW.02	08123456789		<a href="#">Edit</a> <a href="#">Delete</a>
2	11	Ir.Sri Mulyono, MEng	210616049	dosen2	dosen2@mail.com	Jl. Dosen	081234567890		<a href="#">Edit</a> <a href="#">Delete</a>
3	18	Badie'ah, ST,MKom	846466594	badie'ah	badie'ah@unissula.ac.id	Jakarta	0283838911		<a href="#">Edit</a> <a href="#">Delete</a>

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### Manajemen Mahasiswa

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No	Nama Mahasiswa	NIM	Jurusan	Username	Email	Alamat	Nomor HP	Foto	Aksi
1	Ananda Fuadhillah A.	32601400801	Teknik Informatika	mahasiswa	mahasiswa@mail.com	Jl. HR. Hardjanto No. 7 RT.01 RW.02, Jakarta Pusat	08976757		<a href="#">Edit</a> <a href="#">Delete</a>
2	Aryo Munandar	32601400709	Teknik Informatika	32601400709	anbiya@mail.co.id	Brebes	0878498245		<a href="#">Edit</a> <a href="#">Delete</a>
3	Ika Mustika	32601400817	Teknik Informatika	tika	tika.ikamustikasari@std.unissula.ac.id	Jl. Majapahit no 321	085670756812		<a href="#">Edit</a> <a href="#">Delete</a>

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## MataKuliah

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### Manajemen MataKuliah

Show  entries Search:

No	Kode Mata Kuliah	Nama Mata Kuliah	Jurusan	Dosen 1	Dosen 2	Jadwal	Aksi
1	MK001001	Algoritma dan Struktur Data	Teknik Informatika	Imam Much Ibnu S, ST,M.Sc,Ph.D (061303730)	Ir.Sri Mulyono, M.Eng (210616049)	Senin (10:00:00 - 12:00:00)   204	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Peserta</a> <a href="#">Presensi</a>
2	MKD05555	Kalkulus	Teknik Informatika	Imam Much Ibnu S, ST,M.Sc,Ph.D (061303730)	Ir.Sri Mulyono, M.Eng (210616049)	Selasa (09:00:00 - 13:00:00)   202	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Peserta</a> <a href="#">Presensi</a>
3	MKE987	Etika Profesional	Teknik Informatika	Imam Much Ibnu S, ST,M.Sc,Ph.D (061303730)	Badie'ah, ST,M.Kom (846466594)	Selasa (08:00:00 - 10:00:00)   202	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Peserta</a> <a href="#">Presensi</a>

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