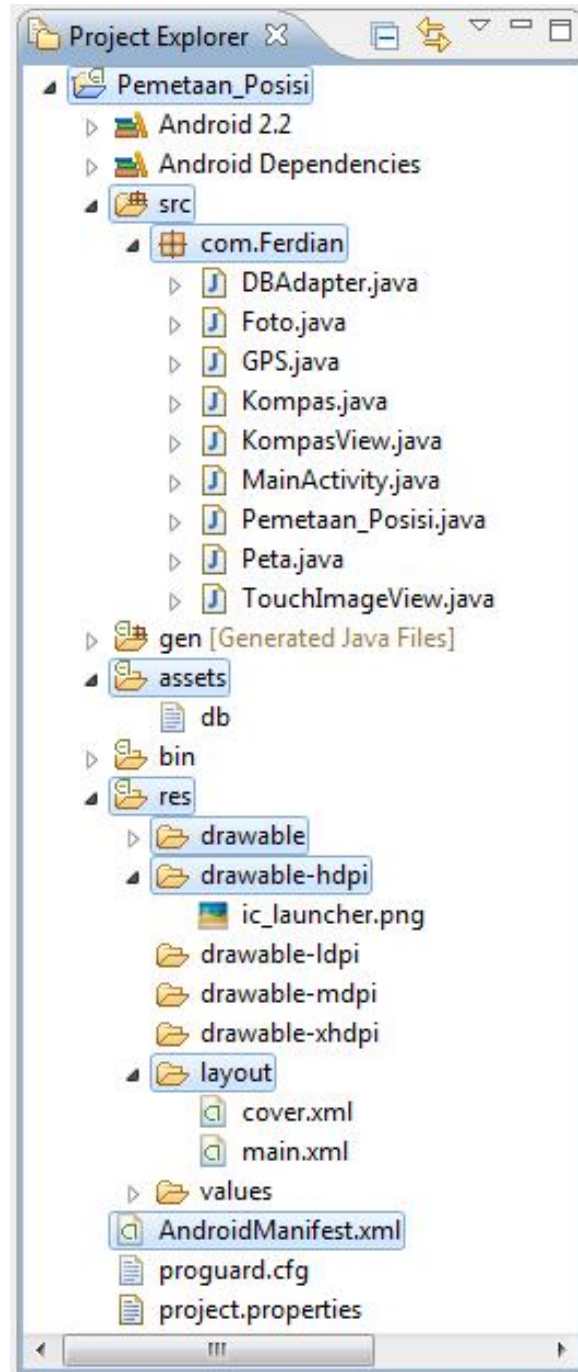


LAMPIRAN A



Eclipse - Project Explorer

❖ Folder src → com.Ferdian :

➤ DBAdapter.java

```
package com.Ferdian;

import android.content.Context;
import android.database.Cursor;
import android.database.SQLException;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import android.util.Log;

public class DBAdapter {
    public static final String KEY_ROWID = "id";
    public static final String KEY_PETA = "peta";
    public static final String KEY_FOTO = "foto";
    public static final String TAG = "DBAdapter";
    public static final String DATABASE_NAME = "DB";
    public static final String DATABASE_TABLE = "database";
    public static final int DATABASE_VERSION = 1;
    public static final String DATABASE_CREATE =
        "create table database (_id integer primary key autoincrement, "
        + "latitude text not null, longitude text not null, peta text not null, "
        + "foto text not null);";

    private final Context context;
    private DatabaseHelper DBHelper;
    private SQLiteDatabase db;
    public DBAdapter(Context ctx)
    { this.context = ctx;
      DBHelper = new DatabaseHelper(context);
    }

    private static class DatabaseHelper extends SQLiteOpenHelper
    { DatabaseHelper(Context context)
      { super(context, DATABASE_NAME, null, DATABASE_VERSION);
      }

      @Override
      public void onCreate(SQLiteDatabase db)
      { try
        { db.execSQL(DATABASE_CREATE); }
        catch (SQLException e)
        { e.printStackTrace(); }
      }

      @Override
      public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion)
      { Log.w(TAG, "Upgrade database dari versi " + oldVersion + " ke "
        + newVersion + ", yang akan menghapus semua data lama");
        db.execSQL("DROP TABLE IF EXISTS database");
        onCreate(db);
      }
    }
}
```

```

//---membuka database---
public DBAdapter open() throws SQLException
{ db = DBHelper.getWritableDatabase();
  return this;
}

//---menutup database---
public void close()
{ DBHelper.close();
}

//---menampilkan data dari database---
public Cursor getDB(long rowId) throws SQLException
{ Cursor mCursor = db.query(true, DATABASE_TABLE, new String[] {KEY_ROWID,
  KEY_PETA, KEY_FOTO}, KEY_ROWID + "=" + rowId, null, null, null, null);
  if (mCursor != null)
  { mCursor.moveToFirst();
  }
  return mCursor;
}
}

```

➤ Foto.java

```
package com.Ferdian;

import android.app.Activity;
import android.content.Context;
import android.database.Cursor;
import android.location.Location;
import android.location.LocationListener;
import android.location.LocationManager;
import android.os.Bundle;

public class Foto extends Activity
{
    private LocationManager LM;
    private LocationListener locLis;
    double latitude, hasilLatitude, longitude, hasilLongitude;
    int posisi;

    @Override
    public void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);

        LM = (LocationManager) getSystemService(Context.LOCATION_SERVICE);
        locLis = new GPSAdapter();
        LM.requestLocationUpdates(LocationManager.GPS_PROVIDER,0,0,locLis);
    }

    public class GPSAdapter implements LocationListener
    {
        public void onLocationChanged(Location loc)
        {
            if (loc != null)
            {
                latitude = loc.getLatitude(); //latitude
                hasilLatitude = cekLatitude();
                longitude = loc.getLongitude(); //longitude
                hasilLongitude = cekLongitude();
                posisi=cekDB();
                foto();
            }
        }
        public void onProviderDisabled(String provider) {}
        public void onProviderEnabled(String provider) {}
        public void onStatusChanged(String provider, int status, Bundle extras) {}
    }

    public int cekLatitude()
    {
        int id=0;
        if (-6.885<=latitude & latitude<-6.884722222){id=1;}
        else if (-6.885277778<=latitude & latitude<-6.885){id=2;}
        else if (-6.885555556<=latitude & latitude<-6.885277778){id=3;}
        else if (-6.885833333<=latitude & latitude<-6.885555556){id=4;}
        else if (-6.886111111<=latitude & latitude<-6.885833333){id=5;}
        else if (-6.886388889<=latitude & latitude<-6.886111111){id=6;}
        else if (-6.886666667<=latitude & latitude<-6.886388889){id=7;}
        else if (-6.886944444<=latitude & latitude<-6.886666667){id=8;}
        else if (-6.887222222<=latitude & latitude<-6.886944444){id=9;}
        else if (-6.8875<=latitude & latitude<-6.887222222){id=10;}
        else if (-6.887777778<=latitude & latitude<-6.8875){id=11;}
        else if (-6.888055556<=latitude & latitude<-6.887777778){id=12;}
    }
}
```

```

    else if (-6.888333333<=latitude & latitude<-6.888055556){id=13;}
    else if (-6.888611111<=latitude & latitude<-6.888333333){id=14;}
    else { id=0;}
    return id;
}

public int cekLongitude ()
{
    int id=0;
    if (107.5794444<longitude & longitude<=107.5797222){id=1;}
    else if (107.5797222<longitude & longitude<=107.58){id=2;}
    else if (107.58<longitude & longitude<=107.5802778){id=3;}
    else if (107.5802778<longitude & longitude<=107.5805556){id=4;}
    else if (107.5805556<longitude & longitude<=107.5808333){id=5;}
    else if (107.5808333<longitude & longitude<=107.5811111){id=6;}
    else if (107.5811111<longitude & longitude<=107.5813889){id=7;}
    else { id=0;}
    return id;
}

public int cekDB ()
{
    int id=0;
    if (hasilLatitude==1 & hasilLongitude==2){id=1;}
    else if (hasilLatitude==1 & hasilLongitude==3){id=2;}
    else if (hasilLatitude==1 & hasilLongitude==4){id=3;}
    else if (hasilLatitude==2 & hasilLongitude==2){id=4;}
    else if (hasilLatitude==2 & hasilLongitude==3){id=5;}
    else if (hasilLatitude==2 & hasilLongitude==4){id=6;}
    else if (hasilLatitude==2 & hasilLongitude==5){id=7;}
    else if (hasilLatitude==2 & hasilLongitude==6){id=8;}
    else if (hasilLatitude==3 & hasilLongitude==1){id=9;}
    else if (hasilLatitude==3 & hasilLongitude==2){id=10;}
    else if (hasilLatitude==3 & hasilLongitude==3){id=11;}
    else if (hasilLatitude==3 & hasilLongitude==4){id=12;}
    else if (hasilLatitude==3 & hasilLongitude==5){id=13;}
    else if (hasilLatitude==3 & hasilLongitude==6){id=14;}
    else if (hasilLatitude==3 & hasilLongitude==7){id=15;}
    else if (hasilLatitude==4 & hasilLongitude==1){id=16;}
    else if (hasilLatitude==4 & hasilLongitude==2){id=17;}
    else if (hasilLatitude==4 & hasilLongitude==3){id=18;}
    else if (hasilLatitude==4 & hasilLongitude==4){id=19;}
    else if (hasilLatitude==4 & hasilLongitude==5){id=20;}
    else if (hasilLatitude==4 & hasilLongitude==6){id=21;}
    else if (hasilLatitude==4 & hasilLongitude==7){id=22;}
    else if (hasilLatitude==5 & hasilLongitude==2){id=23;}
    else if (hasilLatitude==5 & hasilLongitude==3){id=24;}
    else if (hasilLatitude==5 & hasilLongitude==4){id=25;}
    else if (hasilLatitude==5 & hasilLongitude==5){id=26;}
    else if (hasilLatitude==5 & hasilLongitude==7){id=27;}
    else if (hasilLatitude==6 & hasilLongitude==2){id=28;}
    else if (hasilLatitude==6 & hasilLongitude==3){id=29;}
    else if (hasilLatitude==6 & hasilLongitude==4){id=30;}
    else if (hasilLatitude==6 & hasilLongitude==5){id=31;}
    else if (hasilLatitude==6 & hasilLongitude==6){id=32;}
    else if (hasilLatitude==6 & hasilLongitude==7){id=33;}
    else if (hasilLatitude==7 & hasilLongitude==2){id=34;}
    else if (hasilLatitude==7 & hasilLongitude==3){id=35;}
    else if (hasilLatitude==7 & hasilLongitude==4){id=36;}
    else if (hasilLatitude==7 & hasilLongitude==5){id=37;}
    else if (hasilLatitude==7 & hasilLongitude==6){id=38;}
}

```

```

        else if (hasilLatitude==7 & hasilLongitude==7){id=39;}
        else if (hasilLatitude==8 & hasilLongitude==2){id=40;}
        else if (hasilLatitude==8 & hasilLongitude==3){id=41;}
        else if (hasilLatitude==8 & hasilLongitude==4){id=42;}
        else if (hasilLatitude==8 & hasilLongitude==5){id=43;}
        else if (hasilLatitude==8 & hasilLongitude==6){id=44;}
        else if (hasilLatitude==8 & hasilLongitude==7){id=45;}
        else if (hasilLatitude==9 & hasilLongitude==3){id=46;}
        else if (hasilLatitude==9 & hasilLongitude==4){id=47;}
        else if (hasilLatitude==9 & hasilLongitude==5){id=48;}
        else if (hasilLatitude==9 & hasilLongitude==6){id=49;}
        else if (hasilLatitude==10 & hasilLongitude==3){id=50;}
        else if (hasilLatitude==10 & hasilLongitude==4){id=51;}
        else if (hasilLatitude==10 & hasilLongitude==5){id=52;}
        else if (hasilLatitude==10 & hasilLongitude==6){id=53;}
        else if (hasilLatitude==11 & hasilLongitude==4){id=54;}
        else if (hasilLatitude==11 & hasilLongitude==5){id=55;}
        else if (hasilLatitude==11 & hasilLongitude==6){id=56;}
        else if (hasilLatitude==12 & hasilLongitude==5){id=57;}
        else if (hasilLatitude==12 & hasilLongitude==6){id=58;}
        else if (hasilLatitude==12 & hasilLongitude==7){id=59;}
        else if (hasilLatitude==13 & hasilLongitude==5){id=60;}
        else if (hasilLatitude==13 & hasilLongitude==6){id=61;}
        else if (hasilLatitude==13 & hasilLongitude==7){id=62;}
        else if (hasilLatitude==14 & hasilLongitude==5){id=63;}
        else if (hasilLatitude==14 & hasilLongitude==6){id=64;}
        else if (hasilLatitude==14 & hasilLongitude==7){id=65;}
        else { id=0;}
        return id;
    }

    public void foto()
    { //Database
        DBAdapter db = new DBAdapter(this);
        db.open();
        Cursor c = db.getDB(posisi);
        c.moveToFirst();
        db.close();

        // Tampilkan foto dari Database(c);
        String pic = c.getString(2);
        int imageResource = getResources().getIdentifier(pic,"drawable","com.Ferdian");
        TouchImageView foto = (TouchImageView) findViewById(R.id.zoom); // untuk zoom
        foto.setImageResource(imageResource);
        foto.setMaxZoom(4f);
    }
}

```

➤ GPS.java

```
package com.Ferdian;

import android.app.AlertDialog;
import android.app.Service;
import android.content.Context;
import android.content.DialogInterface;
import android.content.Intent;
import android.location.Location;
import android.location.LocationListener;
import android.location.LocationManager;
import android.os.Bundle;
import android.os.IBinder;
import android.provider.Settings;

public class GPS extends Service implements LocationListener
{   private final Context _context;

    // cek apakah GPS aktif ?
    boolean isGPSEnable = false;
    boolean canGetLocation = false;
    Location location;
    public LocationManager locationManager;
    public GPS(Context context)
    {   _context = context;
        getLocation();
    }

    private Location getLocation()
    {   try
        {   locationManager = (LocationManager) _context.getSystemService(LOCATION_SERVICE);
            // cek GPS status
            isGPSEnable = locationManager.isProviderEnabled(LocationManager.GPS_PROVIDER);

            if (!isGPSEnable) // tidak ada koneksi ke GPS dan Jaringan
            {}
            else // bisa dapatkan lokasi
            {canGetLocation = true;}
        }
        catch (Exception e)
        {e.printStackTrace();}
        return location;
    }

    public void onLocationChanged(Location location){}
    public void onProviderDisabled(String provider){}
    public void onProviderEnabled(String provider){}
    public void onStatusChanged(String provider, int status, Bundle extras){}

    @Override
    public IBinder onBind(Intent intent)
    {return null;}

    public boolean canGetLocation()
    {   return this.canGetLocation;
    }
}
```

```

    public void showSettingAlert()
    { AlertDialog.Builder alertDialog = new AlertDialog.Builder(_context);

        // title Alertnya
        alertDialog.setTitle("GPS Setting");
        // pesan alert
        alertDialog.setMessage("GPS tidak aktif. Masuk ke Menu Setting?");
        alertDialog.setPositiveButton("Setting", new
DialogInterface.OnClickListener()
        { public void onClick(DialogInterface dialog, int which)
            { Intent intent = new Intent(Settings.ACTION_LOCATION_SOURCE_SETTINGS);
              _context.startActivity(intent);
            }
        });

        alertDialog.setNegativeButton("Cancel", new
DialogInterface.OnClickListener()
        { public void onClick(DialogInterface dialog, int which)
            { dialog.cancel();
            }
        });
        alertDialog.show();
    }

    public void stopUsingGPS()
    { if (locManager != null)
        locManager.removeUpdates(GPS.this);
    }
}

```

➤ Kompas.java

```
package com.Ferdian;

import android.app.Activity;
import android.content.Context;
import android.hardware.Sensor;
import android.hardware.SensorEvent;
import android.hardware.SensorEventListener;
import android.hardware.SensorManager;
import android.os.Bundle;
import android.util.Log;
import android.widget.Toast;

public class Kompas extends Activity
{ private static SensorManager sensorService;
  private KompasView compassView;
  private Sensor sensor;

  @Override
  public void onCreate(Bundle savedInstanceState)
  { super.onCreate(savedInstanceState);
    compassView = new KompasView(this);
    setContentView(compassView);

    sensorService = (SensorManager) getSystemService(Context.SENSOR_SERVICE);
    sensor = sensorService.getDefaultSensor(Sensor.TYPE_ORIENTATION);
    if (sensor != null)
    { sensorService.registerListener(mySensorEventListener, sensor,
      SensorManager.SENSOR_DELAY_NORMAL);
      Log.i("Compass MainActivity", "Registered for ORIENTATION Sensor");
    }
    else
    { Log.e("Compass MainActivity", "Registered for ORIENTATION Sensor");
      Toast.makeText(this, "ORIENTATION Sensor not found",
        Toast.LENGTH_LONG).show();
      finish();
    }
  }

  private SensorEventListener mySensorEventListener = new SensorEventListener()
  { public void onAccuracyChanged(Sensor sensor, int accuracy) {}
    public void onSensorChanged(SensorEvent event)
    { float azimuth = event.values[0];
      compassView.updateData((int)azimuth);
    }
  };

  @Override
  protected void onDestroy()
  { super.onDestroy();
    if (sensor != null)
    { sensorService.unregisterListener(mySensorEventListener);
    }
  }
}
```

➤ KompasView.java

```
package com.Ferdian;

import android.content.Context;
import android.graphics.Canvas;
import android.graphics.Color;
import android.graphics.Paint;
import android.view.View;

public class KompasView extends View
{
    private Paint paint;
    private int position = 0;
    public KompasView(Context context)
    {
        super(context);
        set();
    }

    private void set()
    {
        paint = new Paint();
        paint.setAntiAlias(true);
        paint.setStrokeWidth(2);
        paint.setTextSize(25);
        paint.setStyle(Paint.Style.STROKE);
        paint.setColor(Color.BLACK);
    }

    @Override
    protected void onDraw(Canvas canvas)
    {
        canvas.drawColor(Color.WHITE);
        int xPoint = getMeasuredWidth() / 2;
        int yPoint = getMeasuredHeight() / 2;

        float radius = (float) (Math.max(xPoint, yPoint) * 0.6);
        canvas.drawCircle(xPoint, yPoint, radius, paint);
        canvas.drawRect(0, 0, getMeasuredWidth(), getMeasuredHeight(), paint);

        canvas.drawLine(xPoint, yPoint,
            (float) (xPoint + radius * Math.sin((double) (-position) / 180 * 3.143)),
            (float) (yPoint - radius * Math.cos((double) (-position) / 180 * 3.143)),
            paint);

        canvas.drawText(String.valueOf(position+"°"), xPoint, yPoint, paint);
    }

    public void updateData(int position)
    {
        this.position = position;
        invalidate();
    }
}
```

➤ MainActivity.java

```
package com.Ferdian;

import android.app.TabActivity;
import android.content.Context;
import android.content.Intent;
import android.content.res.Resources;
import android.location.Location;
import android.location.LocationListener;
import android.location.LocationManager;
import android.os.Bundle;
import android.widget.TabHost;
import android.view.Window;
import android.widget.TextView;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.InputStream;
import java.io.OutputStream;
import java.text.DecimalFormat;

public class MainActivity extends TabActivity
{ private LocationManager lm;
  private LocationListener locListener;

@Override
public void onCreate(Bundle savedInstanceState)
{ super.onCreate(savedInstanceState);
  requestWindowFeature(Window.FEATURE_NO_TITLE);
  setContentView(R.layout.main);

  lm = (LocationManager) getSystemService(Context.LOCATION_SERVICE);
  locListener = new MyLocationListener();
  lm.requestLocationUpdates(LocationManager.GPS_PROVIDER,0,0,locListener);

  try { String pathTujuan = "/data/data/" + getPackageName() + "/databases/DB";
    CopyDB(getBaseContext().getAssets().open("db"),
    new FileOutputStream(pathTujuan));
  }

  catch (FileNotFoundException e)
  {e.printStackTrace(); }
  catch (IOException e)
  {e.printStackTrace(); }

  Resources res = getResources();
  TabHost tab = getTabHost();
  TabHost.TabSpec spec;
  Intent inten;

  //Peta
  inten = new Intent().setClass(this, Peta.class);
  spec = tab.newTabSpec("tab1").setIndicator("Tampilan Peta",
    res.getDrawable(R.drawable.peta)).setContent(inten);
  tab.addTab(spec);
```

```

//Foto
    inten = new Intent().setClass(this, Foto.class);
    spec = tab.newTabSpec("tab2").setIndicator("Tampilan Foto",
        res.getDrawable(R.drawable.foto)).setContent(inten);
    tab.addTab(spec);

//Kompas
    inten = new Intent().setClass(this, Kompas.class);
    spec = tab.newTabSpec("tab3").setIndicator("Kompas",
        res.getDrawable(R.drawable.kompas)).setContent(inten);
    tab.addTab(spec);
    tab.setCurrentTab(0);

//cek GPS
    GPS gps = new GPS(MainActivity.this);
    if (gps.canGetLocation()) // dicek apakah GPSnya hidup
    {
    }
    else
    { // jika GPS tidak aktif
        gps.showSettingAlert();
    }
}

public void CopyDB(InputStream inputStream, OutputStream outputStream)
    throws IOException
{
    byte[] buffer = new byte[1024];
    int length;
    while ((length = inputStream.read(buffer))>0)
    {
        outputStream.write(buffer, 0, length);
    }
    inputStream.close();
    outputStream.close();
}

private class MyLocationListener implements LocationListener
{
    public void onLocationChanged(Location loc)
    {
        if (loc != null)
        {
            TextView viewLatitude = (TextView)findViewById(R.id.viewLatitude);
            TextView viewLongitude = (TextView)findViewById(R.id.viewLongitude);
            TextView textLatitude = (TextView)findViewById(R.id.textLatitude);
            TextView textLongitude = (TextView)findViewById(R.id.textLongitude);
            DecimalFormat formatData = new DecimalFormat("#.###");

            double latitude = loc.getLatitude(); //latitude
            double menit1, totalDetik1, sisa1;
            int derajat1 = (int) latitude;
            totalDetik1 = (latitude-derajat1)*3600;
            totalDetik1 = Math.abs(totalDetik1);
            sisa1 = totalDetik1 % 60; //% = mod
            menit1 = (totalDetik1 - sisa1) / 60;
            String detik1 = String.valueOf(formatData.format(sisa1));
            String viewLat = String.valueOf(derajat1+"° "+(int)menit1+"
"+detik1+"'' ");
            textLatitude.setText("Latitude :");
            viewLatitude.setText(viewLat);

            double longitude = loc.getLongitude(); //longitude
            double menit2, totalDetik2, sisa2;
            int derajat2 = (int) longitude;

```

```

        totalDetik2 = (longitude-derajat2)*3600;
        totalDetik2 = Math.abs(totalDetik2);
        sisa2 = totalDetik2 % 60;    //% = mod
        menit2 = (totalDetik2 - sisa2) / 60;
        String detik2 = String.valueOf(formatData.format(sisa2));
        String viewLong = String.valueOf(derajat2+"° "+(int)menit2+"'"
        "+detik2+"'" ");
        textLongitude.setText("Longitude :");
        viewLongitude.setText(viewLong);
    }
}
public void onProviderDisabled(String provider) {}
public void onProviderEnabled(String provider) {}
public void onStatusChanged(String provider, int status, Bundle extras) {}
}
}

```

➤ Pemetaan_Posisi.java

```
package com.Ferdian;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.Window;

public class SplashtActivity extends Activity
{ @Override
  protected void onCreate(Bundle savedInstanceState)
  { super.onCreate(savedInstanceState);
    requestWindowFeature(Window.FEATURE_NO_TITLE);
    setContentView(R.layout.cover);
    Thread timer = new Thread()
    { public void run()
      { try
        { sleep(3000);} //berapa lama splash screen muncul dalam satuan
        milisecond
        catch (Exception e)
        { e.printStackTrace();}
        finally
        { //activity yang akan dijalankan setelah splash screen selesai
          Intent intent = new Intent(getApplicationContext(),
MainActivity.class);
          startActivity(intent);
          finish(); //finish agar splash screen tidak bisa diakses kembali dengan
          tombol back
        }
      };
    timer.start();
  }
}
```

➤ Peta.java

```
package com.Ferdian;

import android.app.Activity;
import android.content.Context;
import android.database.Cursor;
import android.location.Location;
import android.location.LocationListener;
import android.location.LocationManager;
import android.os.Bundle;

public class Peta extends Activity
{
    private LocationManager LM;
    private LocationListener locLis;
    double latitude, hasilLatitude, longitude, hasilLongitude;
    int posisi;

    @Override
    public void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);

        LM = (LocationManager) getSystemService(Context.LOCATION_SERVICE);
        locLis = new GPSAdapter();
        LM.requestLocationUpdates(LocationManager.GPS_PROVIDER,0,0,locLis);
    }

    public class GPSAdapter implements LocationListener
    {
        public void onLocationChanged(Location loc)
        {
            if (loc != null)
            {
                latitude = loc.getLatitude(); //latitude
                hasilLatitude = cekLatitude();
                longitude = loc.getLongitude(); //longitude
                hasilLongitude = cekLongitude();
                posisi=cekDB();
                peta();
            }
        }
        public void onProviderDisabled(String provider) {}
        public void onProviderEnabled(String provider) {}
        public void onStatusChanged(String provider, int status, Bundle extras) {}
    }

    public int cekLatitude()
    {
        int id=0;
        if (-6.885<=latitude & latitude<-6.884722222){id=1;}
        else if (-6.885277778<=latitude & latitude<-6.885){id=2;}
        else if (-6.885555556<=latitude & latitude<-6.885277778){id=3;}
        else if (-6.885833333<=latitude & latitude<-6.885555556){id=4;}
        else if (-6.886111111<=latitude & latitude<-6.885833333){id=5;}
        else if (-6.886388889<=latitude & latitude<-6.886111111){id=6;}
        else if (-6.886666667<=latitude & latitude<-6.886388889){id=7;}
        else if (-6.886944444<=latitude & latitude<-6.886666667){id=8;}
        else if (-6.887222222<=latitude & latitude<-6.886944444){id=9;}
        else if (-6.8875<=latitude & latitude<-6.887222222){id=10;}
        else if (-6.887777778<=latitude & latitude<-6.8875){id=11;}
        else if (-6.888055556<=latitude & latitude<-6.887777778){id=12;}
    }
}
```

```

        else if (-6.888333333<=latitude & latitude<-6.888055556){id=13;}
        else if (-6.888611111<=latitude & latitude<-6.888333333){id=14;}
        else { id=0;}
        return id;
    }

    public int cekLongitude ()
    {
        int id=0;
        if (107.5794444<longitude & longitude<=107.5797222){id=1;}
        else if (107.5797222<longitude & longitude<=107.58){id=2;}
        else if (107.58<longitude & longitude<=107.5802778){id=3;}
        else if (107.5802778<longitude & longitude<=107.5805556){id=4;}
        else if (107.5805556<longitude & longitude<=107.5808333){id=5;}
        else if (107.5808333<longitude & longitude<=107.5811111){id=6;}
        else if (107.5811111<longitude & longitude<=107.5813889){id=7;}
        else { id=0;}
        return id;
    }

    public int cekDB ()
    {
        int id=0;
        if (hasilLatitude==1 & hasilLongitude==2){id=1;}
        else if (hasilLatitude==1 & hasilLongitude==3){id=2;}
        else if (hasilLatitude==1 & hasilLongitude==4){id=3;}
        else if (hasilLatitude==2 & hasilLongitude==2){id=4;}
        else if (hasilLatitude==2 & hasilLongitude==3){id=5;}
        else if (hasilLatitude==2 & hasilLongitude==4){id=6;}
        else if (hasilLatitude==2 & hasilLongitude==5){id=7;}
        else if (hasilLatitude==2 & hasilLongitude==6){id=8;}
        else if (hasilLatitude==3 & hasilLongitude==1){id=9;}
        else if (hasilLatitude==3 & hasilLongitude==2){id=10;}
        else if (hasilLatitude==3 & hasilLongitude==3){id=11;}
        else if (hasilLatitude==3 & hasilLongitude==4){id=12;}
        else if (hasilLatitude==3 & hasilLongitude==5){id=13;}
        else if (hasilLatitude==3 & hasilLongitude==6){id=14;}
        else if (hasilLatitude==3 & hasilLongitude==7){id=15;}
        else if (hasilLatitude==4 & hasilLongitude==1){id=16;}
        else if (hasilLatitude==4 & hasilLongitude==2){id=17;}
        else if (hasilLatitude==4 & hasilLongitude==3){id=18;}
        else if (hasilLatitude==4 & hasilLongitude==4){id=19;}
        else if (hasilLatitude==4 & hasilLongitude==5){id=20;}
        else if (hasilLatitude==4 & hasilLongitude==6){id=21;}
        else if (hasilLatitude==4 & hasilLongitude==7){id=22;}
        else if (hasilLatitude==5 & hasilLongitude==2){id=23;}
        else if (hasilLatitude==5 & hasilLongitude==3){id=24;}
        else if (hasilLatitude==5 & hasilLongitude==4){id=25;}
        else if (hasilLatitude==5 & hasilLongitude==5){id=26;}
        else if (hasilLatitude==5 & hasilLongitude==7){id=27;}
        else if (hasilLatitude==6 & hasilLongitude==2){id=28;}
        else if (hasilLatitude==6 & hasilLongitude==3){id=29;}
        else if (hasilLatitude==6 & hasilLongitude==4){id=30;}
        else if (hasilLatitude==6 & hasilLongitude==5){id=31;}
        else if (hasilLatitude==6 & hasilLongitude==6){id=32;}
        else if (hasilLatitude==6 & hasilLongitude==7){id=33;}
        else if (hasilLatitude==7 & hasilLongitude==2){id=34;}
        else if (hasilLatitude==7 & hasilLongitude==3){id=35;}
        else if (hasilLatitude==7 & hasilLongitude==4){id=36;}
        else if (hasilLatitude==7 & hasilLongitude==5){id=37;}
        else if (hasilLatitude==7 & hasilLongitude==6){id=38;}
    }

```

```

        else if (hasilLatitude==7 & hasilLongitude==7){id=39;}
        else if (hasilLatitude==8 & hasilLongitude==2){id=40;}
        else if (hasilLatitude==8 & hasilLongitude==3){id=41;}
        else if (hasilLatitude==8 & hasilLongitude==4){id=42;}
        else if (hasilLatitude==8 & hasilLongitude==5){id=43;}
        else if (hasilLatitude==8 & hasilLongitude==6){id=44;}
        else if (hasilLatitude==8 & hasilLongitude==7){id=45;}
        else if (hasilLatitude==9 & hasilLongitude==3){id=46;}
        else if (hasilLatitude==9 & hasilLongitude==4){id=47;}
        else if (hasilLatitude==9 & hasilLongitude==5){id=48;}
        else if (hasilLatitude==9 & hasilLongitude==6){id=49;}
        else if (hasilLatitude==10 & hasilLongitude==3){id=50;}
        else if (hasilLatitude==10 & hasilLongitude==4){id=51;}
        else if (hasilLatitude==10 & hasilLongitude==5){id=52;}
        else if (hasilLatitude==10 & hasilLongitude==6){id=53;}
        else if (hasilLatitude==11 & hasilLongitude==4){id=54;}
        else if (hasilLatitude==11 & hasilLongitude==5){id=55;}
        else if (hasilLatitude==11 & hasilLongitude==6){id=56;}
        else if (hasilLatitude==12 & hasilLongitude==5){id=57;}
        else if (hasilLatitude==12 & hasilLongitude==6){id=58;}
        else if (hasilLatitude==12 & hasilLongitude==7){id=59;}
        else if (hasilLatitude==13 & hasilLongitude==5){id=60;}
        else if (hasilLatitude==13 & hasilLongitude==6){id=61;}
        else if (hasilLatitude==13 & hasilLongitude==7){id=62;}
        else if (hasilLatitude==14 & hasilLongitude==5){id=63;}
        else if (hasilLatitude==14 & hasilLongitude==6){id=64;}
        else if (hasilLatitude==14 & hasilLongitude==7){id=65;}
        else { id=0;}
        return id;
    }

    public void peta()
    { //Database
        DBAdapter db = new DBAdapter(this);
        db.open();

        Cursor c = db.getDB(posisi);
        c.moveToFirst();
        db.close();

        // Tampilkan Peta dari Database(c);
        String pic = c.getString(1);
        int imageResource = getResources().getIdentifier(pic,"drawable","com.Ferdian");
        TouchImageView peta = (TouchImageView) findViewById(R.id.zoom); // untuk zoom
        peta.setImageResource(imageResource);
        peta.setMaxZoom(4f);
    }
}

```

➤ TouchImageView.java

```
package com.Ferdian;

import android.content.Context;
import android.graphics.Matrix;
import android.graphics.PointF;
import android.graphics.drawable.Drawable;
import android.util.AttributeSet;
import android.util.Log;
import android.view.MotionEvent;
import android.view.ScaleGestureDetector;
import android.view.View;
import android.widget.ImageView;

public class TouchImageView extends ImageView
{
    Matrix matrix;

    // We can be in one of these 3 states
    static final int NONE = 0;
    static final int DRAG = 1;
    static final int ZOOM = 2;
    int mode = NONE;

    // Remember some things for zooming
    PointF last = new PointF();
    PointF start = new PointF();
    float minScale = 1f;
    float maxScale = 3f;
    float[] m;

    int viewWidth, viewHeight;
    static final int CLICK = 3;
    float saveScale = 1f;
    protected float origWidth, origHeight;
    int oldMeasuredWidth, oldMeasuredHeight;

    ScaleGestureDetector mScaleDetector;
    Context context;

    public TouchImageView(Context context)
    {
        super(context);
        sharedConstructing(context);
    }

    public TouchImageView(Context context, AttributeSet attrs)
    {
        super(context, attrs);
        sharedConstructing(context);
    }

    private void sharedConstructing(Context context)
    {
        super.setClickable(true);
        this.context = context;
        mScaleDetector = new ScaleGestureDetector(context, new ScaleListener());
        matrix = new Matrix();
        m = new float[9];
        setImageMatrix(matrix);
        setScaleType(ScaleType.MATRIX);
    }
}
```

```

setOnTouchListener(new OnTouchListener()
{ public boolean onTouch(View v, MotionEvent event)
{ mScaleDetector.onTouchEvent(event);
  PointF curr = new PointF(event.getX(), event.getY());

  switch (event.getAction())
  { case MotionEvent.ACTION_DOWN:
    last.set(curr);
    start.set(last);
    mode = DRAG;
    break;

    case MotionEvent.ACTION_MOVE:
    if (mode == DRAG)
    { float deltaX = curr.x - last.x;
      float deltaY = curr.y - last.y;
      float fixTransX = getFixDragTrans(deltaX, viewWidth, origWidth *
saveScale);
      float fixTransY = getFixDragTrans(deltaY, viewHeight, origHeight *
saveScale);
      matrix.postTranslate(fixTransX, fixTransY);
      fixTrans();
      last.set(curr.x, curr.y);
    }
    break;

    case MotionEvent.ACTION_UP:
    mode = NONE;
    int xDiff = (int) Math.abs(curr.x - start.x);
    int yDiff = (int) Math.abs(curr.y - start.y);
    if (xDiff < CLICK && yDiff < CLICK)
    performClick();
    break;

    case MotionEvent.ACTION_POINTER_UP:
    mode = NONE;
    break;
  }

  setImageMatrix(matrix);
  invalidate();
  return true; // indicate event was handled
}
});
}

public void setMaxZoom(float x)
{ maxScale = x;
}

private class ScaleListener extends
ScaleGestureDetector.SimpleOnScaleGestureListener {
  @Override
  public boolean onScaleBegin(ScaleGestureDetector detector)
  { mode = ZOOM;
    return true;
  }
}

```

```

@Override
public boolean onScale(ScaleGestureDetector detector)
{
    float mScaleFactor = detector.getScaleFactor();
    float origScale = saveScale;
    saveScale *= mScaleFactor;

    if (saveScale > maxScale)
    {
        saveScale = maxScale;
        mScaleFactor = maxScale / origScale;
    }
    else if (saveScale < minScale)
    {
        saveScale = minScale;
        mScaleFactor = minScale / origScale;
    }

    if (origWidth*saveScale<=viewWidth||origHeight*saveScale<=viewHeight)
        matrix.postScale(mScaleFactor,mScaleFactor,viewWidth/2,viewHeight/2);
    else matrix.postScale(mScaleFactor, mScaleFactor, detector.getFocusX(),
detector.getFocusY());
    fixTrans();
    return true;
}

void fixTrans()
{
    matrix.getValues(m);
    float transX = m[Matrix.MTRANS_X];
    float transY = m[Matrix.MTRANS_Y];
    float fixTransX = getFixTrans(transX, viewWidth, origWidth * saveScale);
    float fixTransY = getFixTrans(transY, viewHeight, origHeight * saveScale);
    if (fixTransX != 0 || fixTransY != 0)
        matrix.postTranslate(fixTransX, fixTransY);
}

float getFixTrans(float trans, float viewSize, float contentSize)
{
    float minTrans, maxTrans;
    if (contentSize <= viewSize)
    {
        minTrans = 0;
        maxTrans = viewSize - contentSize;
    }
    else
    {
        minTrans = viewSize - contentSize;
        maxTrans = 0;
    }
    if (trans < minTrans)
        return -trans + minTrans;
    if (trans > maxTrans)
        return -trans + maxTrans;
    return 0;
}

float getFixDragTrans(float delta, float viewSize, float contentSize)
{
    if (contentSize <= viewSize)
    {
        return 0;
    }
    return delta;
}

```

```

@Override
protected void onMeasure(int widthMeasureSpec, int heightMeasureSpec)
{
    super.onMeasure(widthMeasureSpec, heightMeasureSpec);
    viewWidth = MeasureSpec.getSize(widthMeasureSpec);
    viewHeight = MeasureSpec.getSize(heightMeasureSpec);

    // Rescales image on rotation
    if (oldMeasuredHeight == viewWidth && oldMeasuredHeight == viewHeight
        || viewWidth == 0 || viewHeight == 0)
        return;
    oldMeasuredHeight = viewHeight;
    oldMeasuredWidth = viewWidth;

    if (saveScale == 1)
    {
        //Fit to screen.
        float scale;
        Drawable drawable = getDrawable();

        if (drawable == null || drawable.getIntrinsicWidth() == 0 ||
drawable.getIntrinsicHeight() == 0)
            return;
        int bmWidth = drawable.getIntrinsicWidth();
        int bmHeight = drawable.getIntrinsicHeight();

        Log.d("bmSize", "bmWidth: " + bmWidth + " bmHeight : " + bmHeight);

        float scaleX = (float) viewWidth / (float) bmWidth;
        float scaleY = (float) viewHeight / (float) bmHeight;
        scale = Math.min(scaleX, scaleY);
        matrix.setScale(scale, scale);

        // Center the image
        float redundantYSpace=(float) viewHeight - (scale * (float) bmHeight);
        float redundantXSpace=(float) viewWidth - (scale * (float) bmWidth);
        redundantYSpace /= (float) 2;
        redundantXSpace /= (float) 2;

        matrix.postTranslate(redundantXSpace, redundantYSpace);
        origWidth = viewWidth - 2 * redundantXSpace;
        origHeight = viewHeight - 2 * redundantYSpace;
        setImageMatrix(matrix);
    }
    fixTrans();
}
}

```

❖ **Folder assets :**

File db (database SQLite) berisi :

id	Gambar Peta	Gambar Foto
0	peta0	foto0
1	peta1	foto1
2	peta2	foto2
3	peta3	foto3
4	peta4	foto4
5	peta5	foto5
6	peta6	foto6
7	peta7	foto7
8	peta8	foto8
9	peta9	foto9
10	peta10	foto10
11	peta11	foto11
12	peta12	foto12
13	peta13	foto13
14	peta14	foto14
15	peta15	foto15
16	peta16	foto16
17	peta17	foto17
18	peta18	foto18
19	peta19	foto19
20	peta20	foto20
21	peta21	foto21
22	peta22	foto22
23	peta23	foto23
24	peta24	foto24
25	peta25	foto25
26	peta26	foto26
27	peta27	foto27
28	peta28	foto28
29	peta29	foto29
30	peta30	foto30
31	peta31	foto31
32	peta32	foto32

id	Gambar Peta	Gambar Foto
33	peta33	foto33
34	peta34	foto34
35	peta35	foto35
36	peta36	foto36
37	peta37	foto37
38	peta38	foto38
39	peta39	foto39
40	peta40	foto40
41	peta41	foto41
42	peta42	foto42
43	peta43	foto43
44	peta44	foto44
45	peta45	foto45
46	peta46	foto46
47	peta47	foto47
48	peta48	foto48
49	peta49	foto49
50	peta50	foto50
51	peta51	foto51
52	peta52	foto52
53	peta53	foto53
54	peta54	foto54
55	peta55	foto55
56	peta56	foto56
57	peta57	foto57
58	peta58	foto58
59	peta59	foto59
60	peta60	foto60
61	peta61	foto61
62	peta62	foto62
63	peta63	foto63
64	peta64	foto64
65	peta65	foto65

❖ Folder res → drawable :

➤ Foto.xml

```
<?xml version="1.0" encoding="utf-8"?>
<selector xmlns:android="http://schemas.android.com/apk/res/android">
    <!-- Menentukan gambar saat posisi OFF -->
    <item
        android:drawable="@drawable/fototab"
    />
    <!-- Menentukan gambar saat posisi ON -->
    <item
        android:drawable="@drawable/fototab"
        android:state_selected="true"
    />
</selector>
```

➤ Kompas.xml

```
<?xml version="1.0" encoding="utf-8"?>
<selector xmlns:android="http://schemas.android.com/apk/res/android">
    <!-- Menentukan gambar saat posisi OFF -->
    <item
        android:drawable="@drawable/kompastab"
    />
    <!-- Menentukan gambar saat posisi ON -->
    <item
        android:drawable="@drawable/kompastab"
        android:state_selected="true"
    />
</selector>
```

➤ Peta.xml

```
<?xml version="1.0" encoding="utf-8"?>
<selector xmlns:android="http://schemas.android.com/apk/res/android">
    <!-- Menentukan gambar saat posisi OFF -->
    <item
        android:drawable="@drawable/petatab"
    />
    <!-- Menentukan gambar saat posisi ON -->
    <item
        android:drawable="@drawable/petatab"
        android:state_selected="true"
    />
</selector>
```

➤ File :



petatab.jpg



fototab.jpg



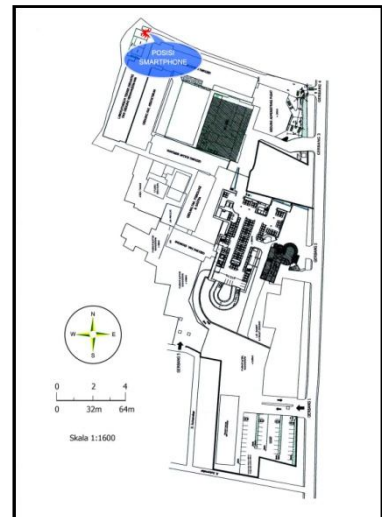
kompastab.jpg



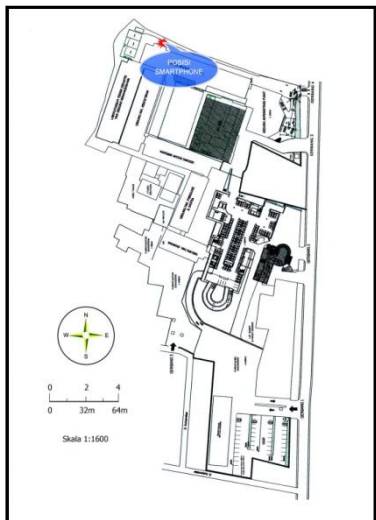
cover.jpg



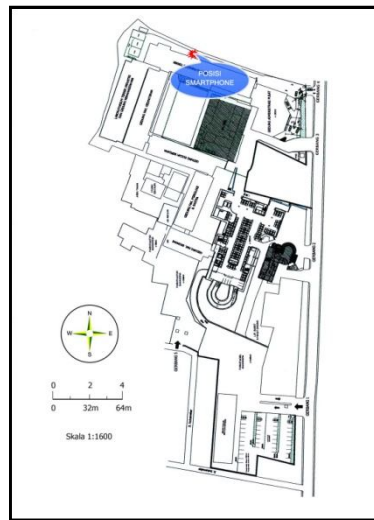
peta0.jpg



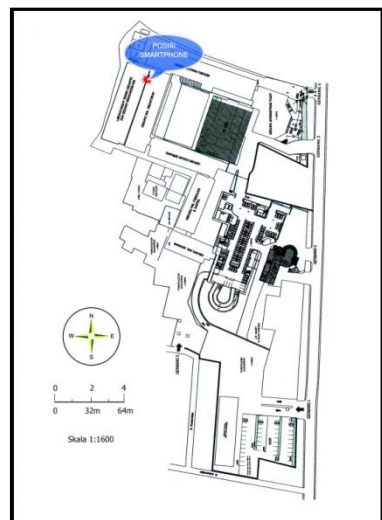
peta1.jpg



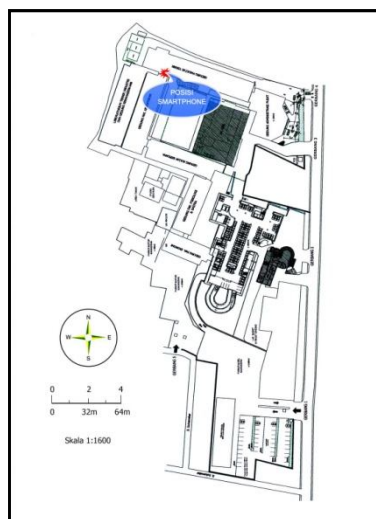
peta2.jpg



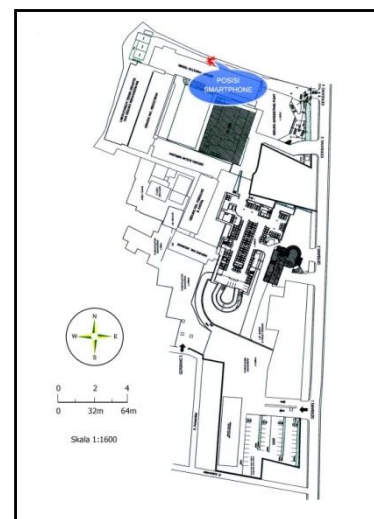
peta3.jpg



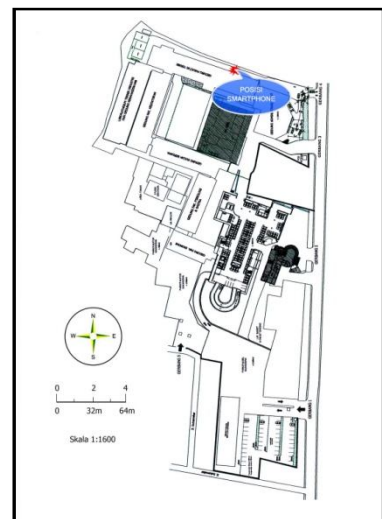
peta4.jpg



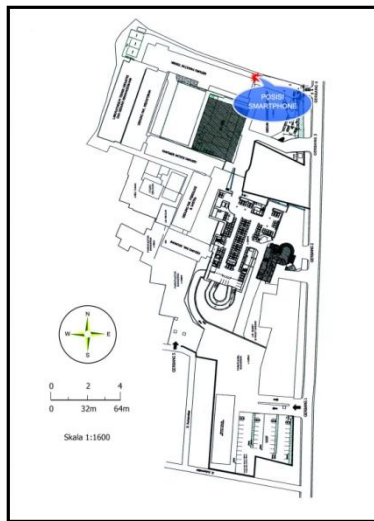
peta5.jpg



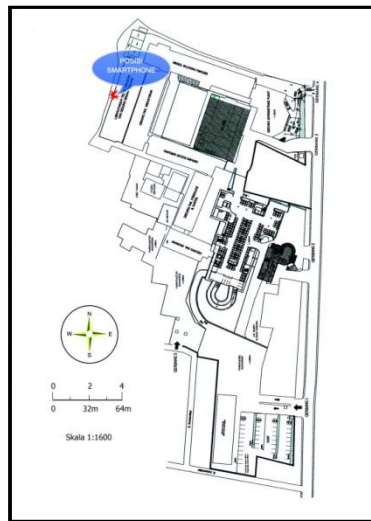
peta6.jpg



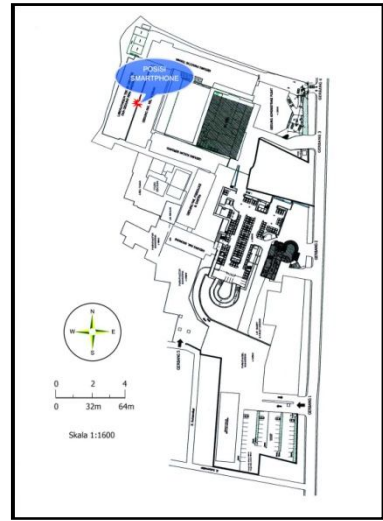
peta7.jpg



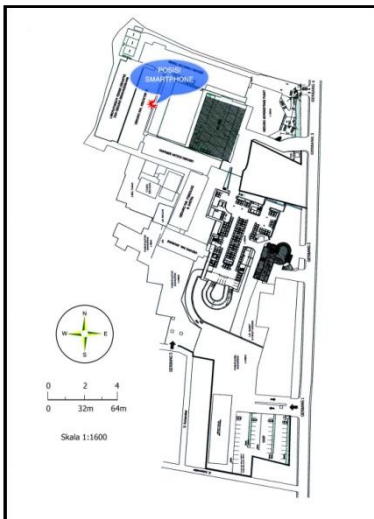
peta8.jpg



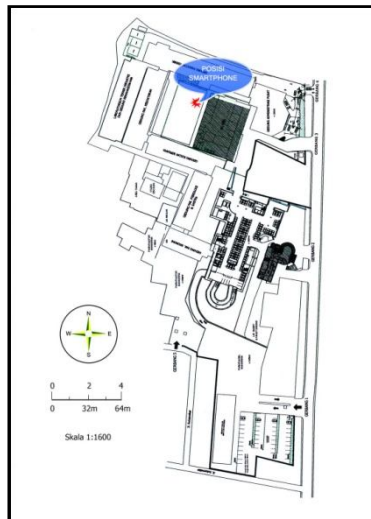
peta9.jpg



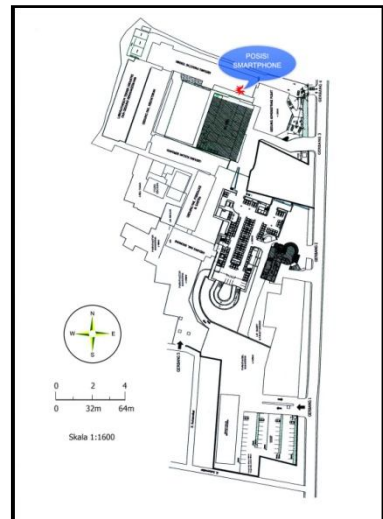
peta10.jpg



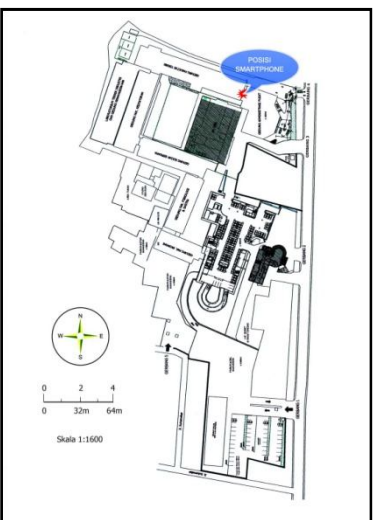
peta11.jpg



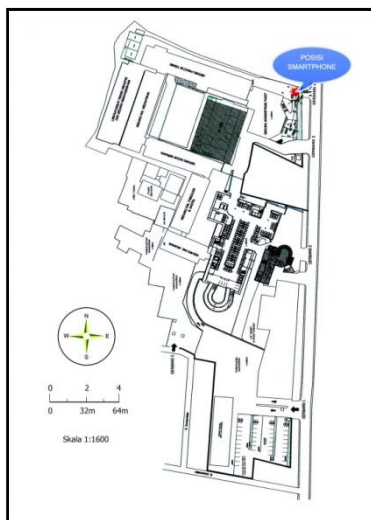
peta12.jpg



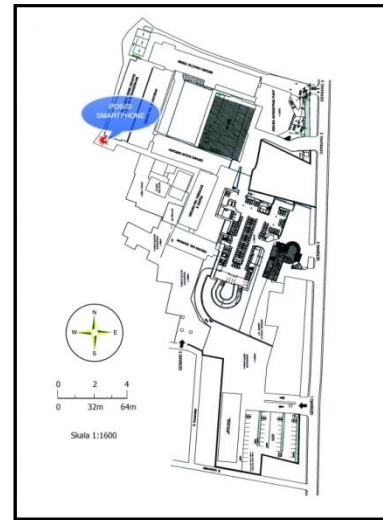
peta13.jpg



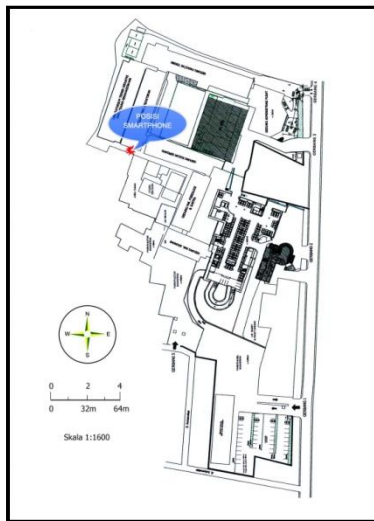
peta14.jpg



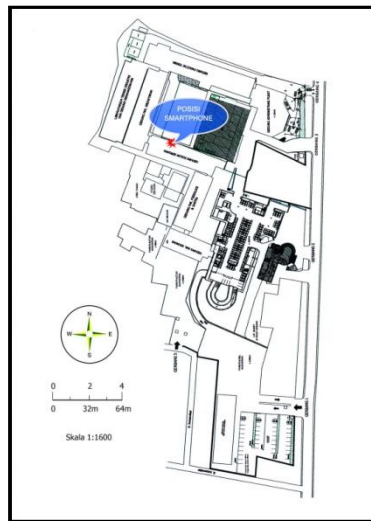
peta15.jpg



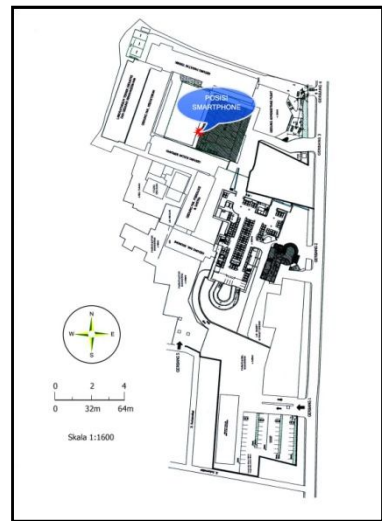
peta16.jpg



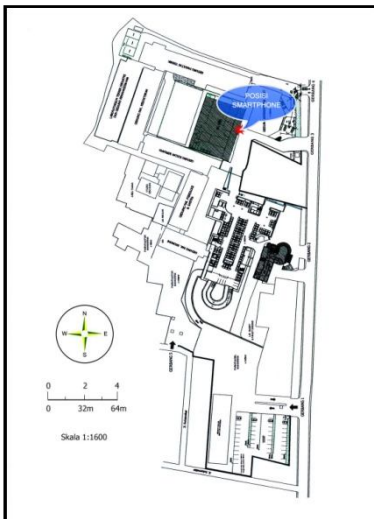
peta17.jpg



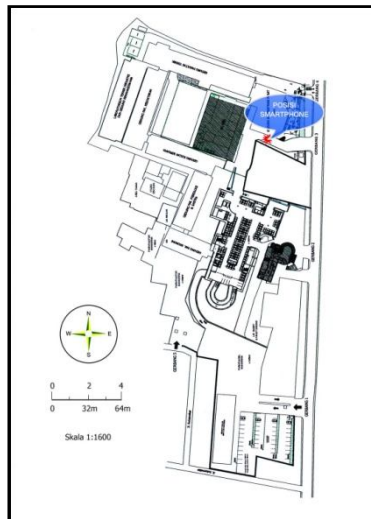
peta18.jpg



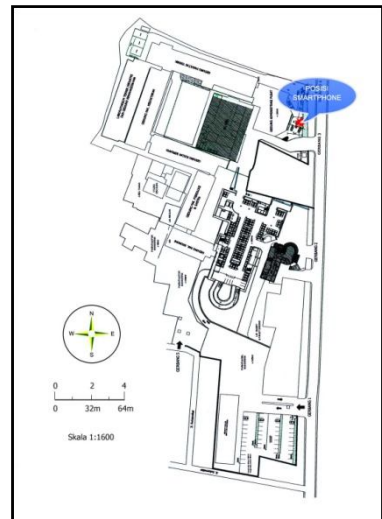
peta19.jpg



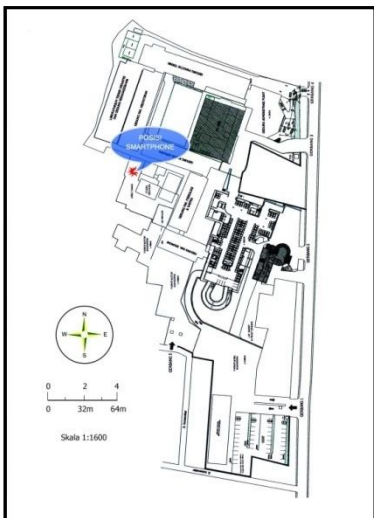
peta20.jpg



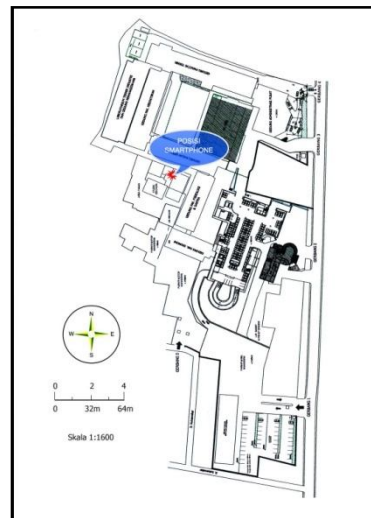
peta21.jpg



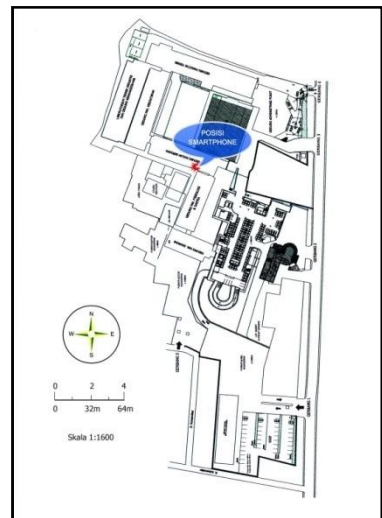
peta22.jpg



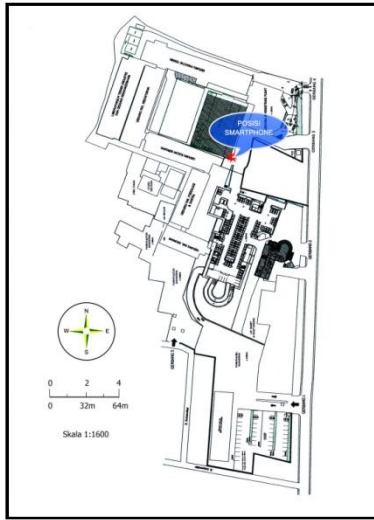
peta23.jpg



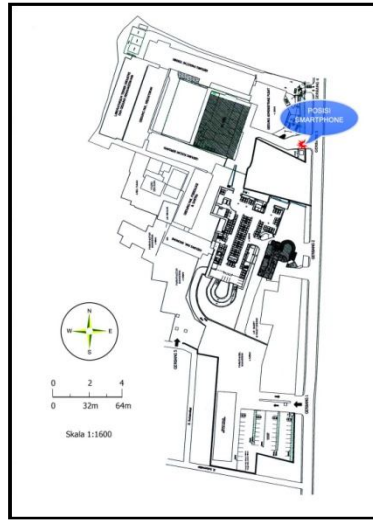
peta24.jpg



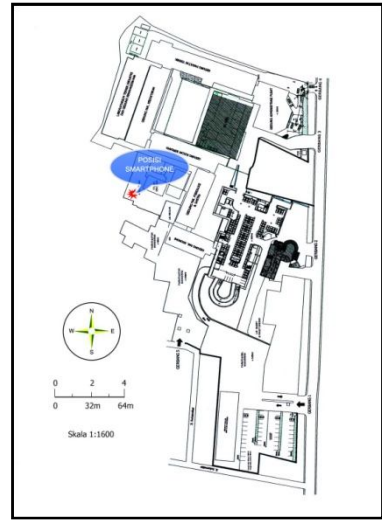
peta25.jpg



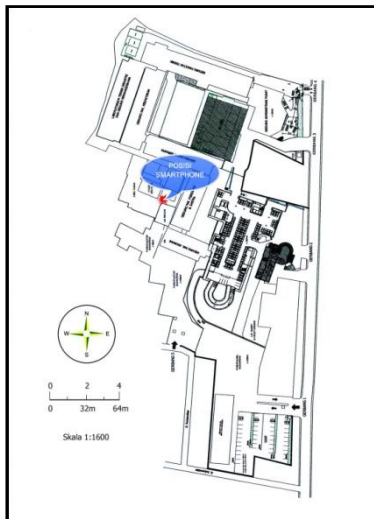
peta26.jpg



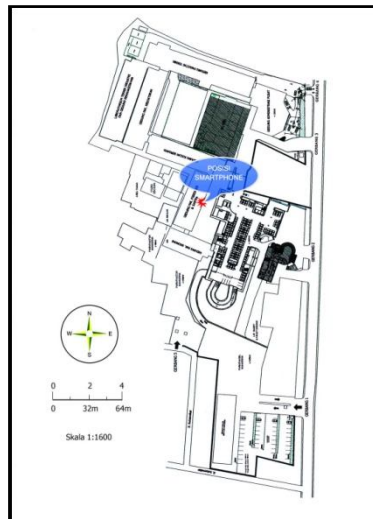
peta27.jpg



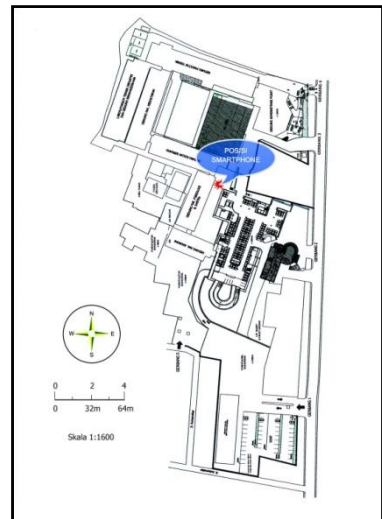
peta28.jpg



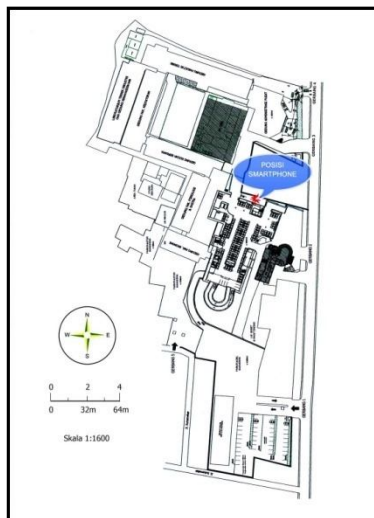
peta29.jpg



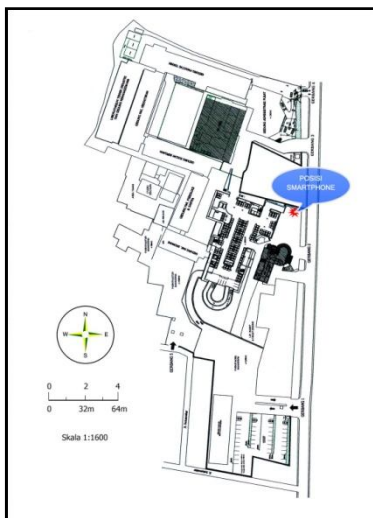
peta30.jpg



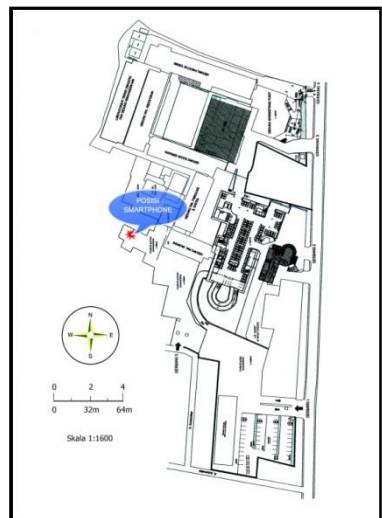
peta31.jpg



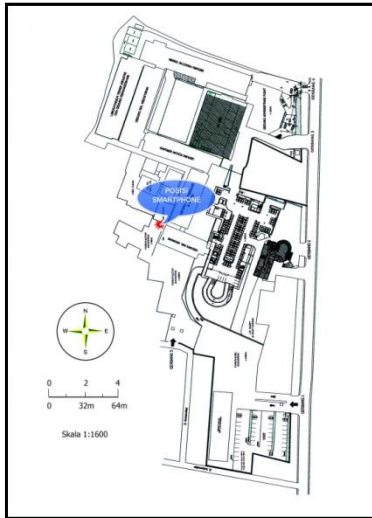
peta32.jpg



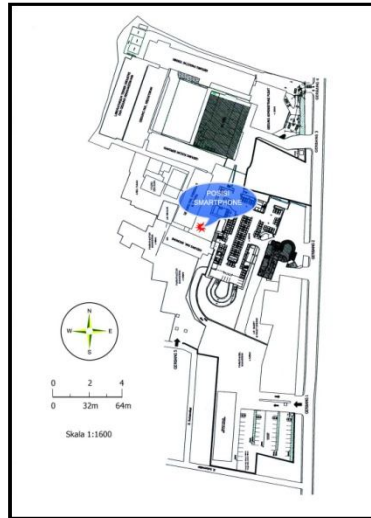
peta33.jpg



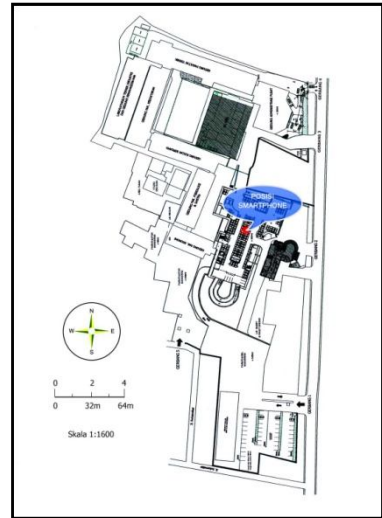
peta34.jpg



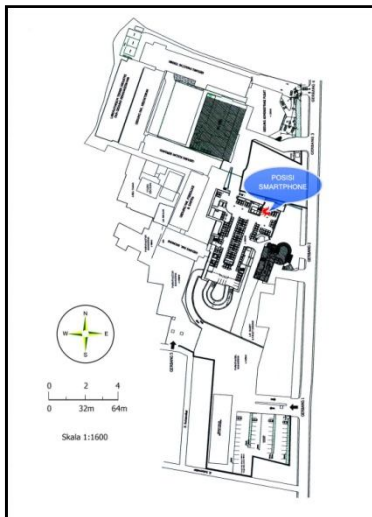
peta35.jpg



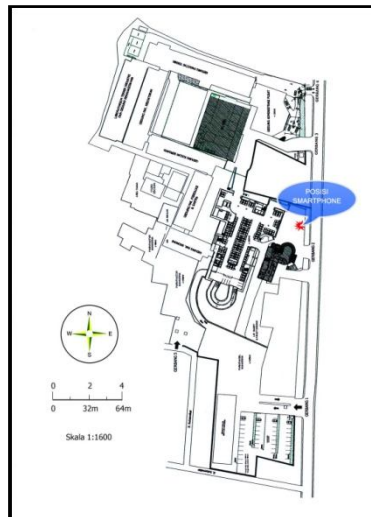
peta36.jpg



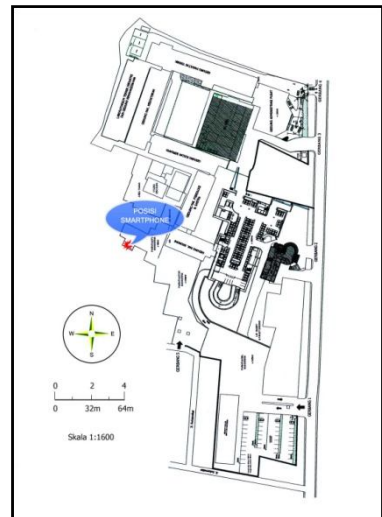
peta37.jpg



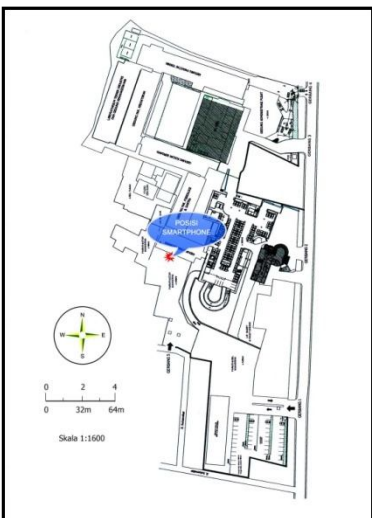
peta38.jpg



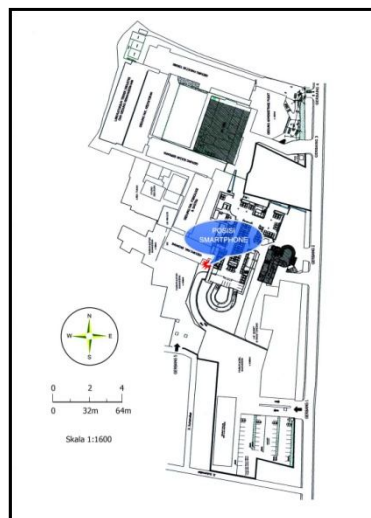
peta39.jpg



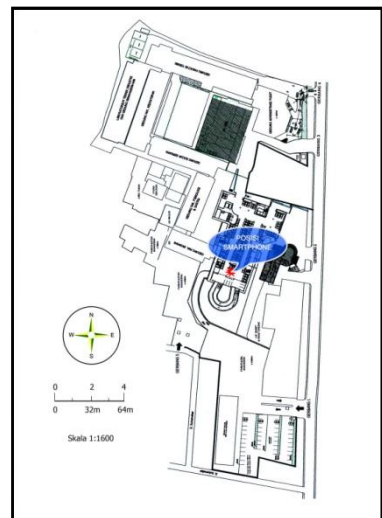
peta40.jpg



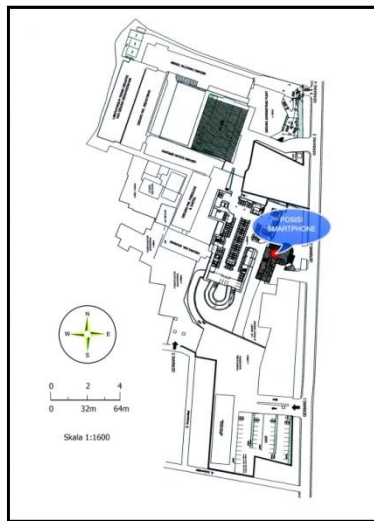
peta41.jpg



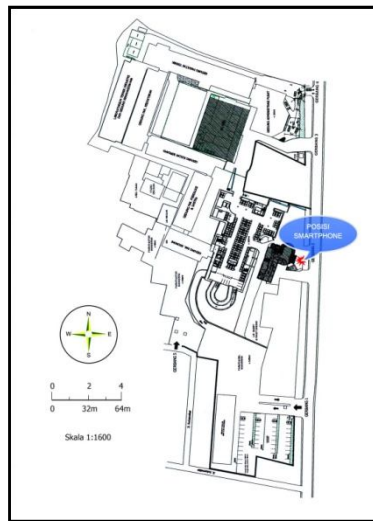
peta42.jpg



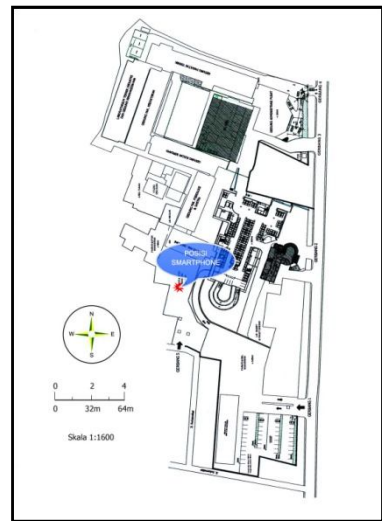
peta43.jpg



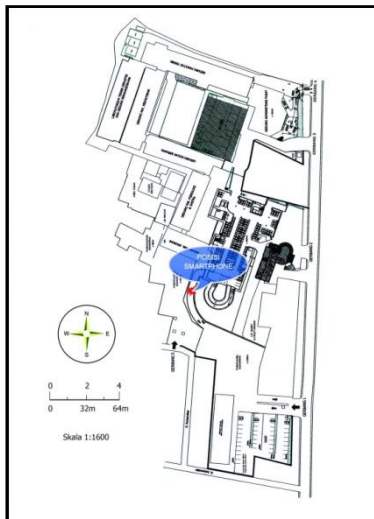
peta44.jpg



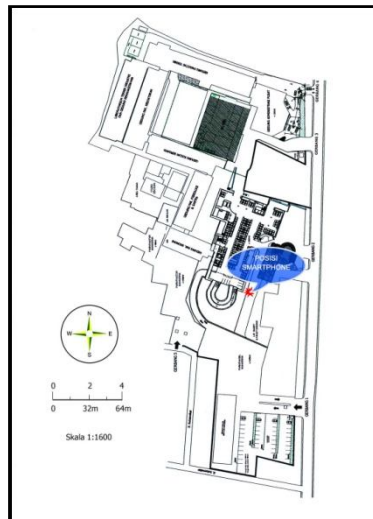
peta45.jpg



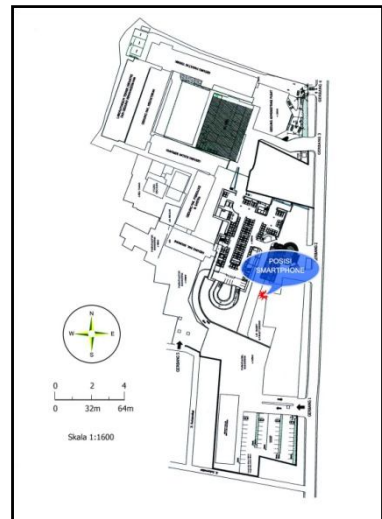
peta46.jpg



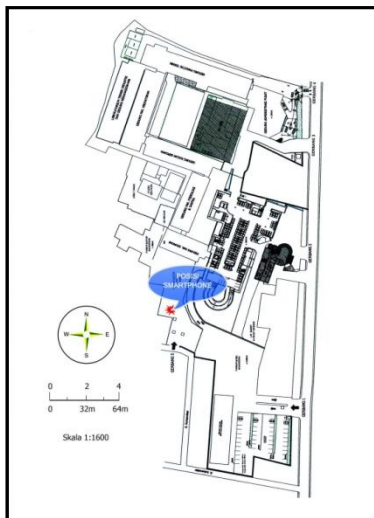
peta47.jpg



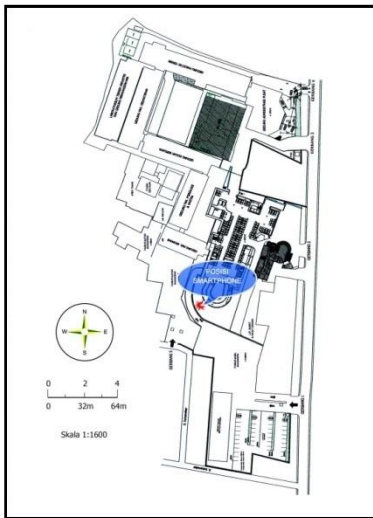
peta48.jpg



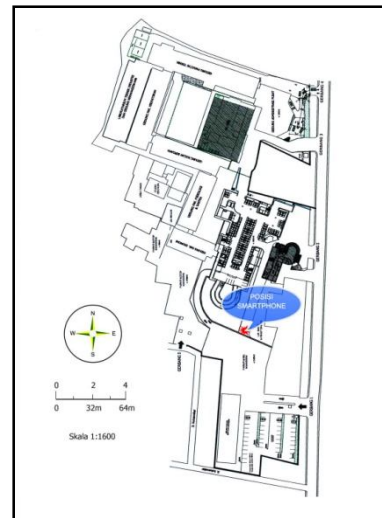
peta49.jpg



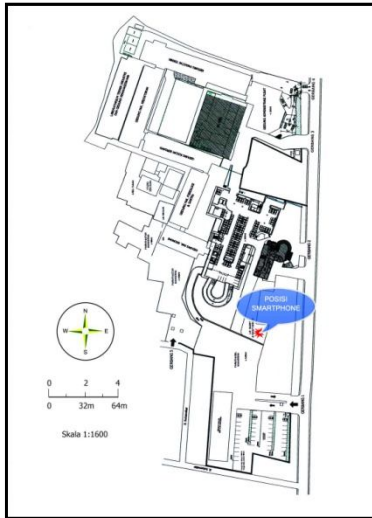
peta50.jpg



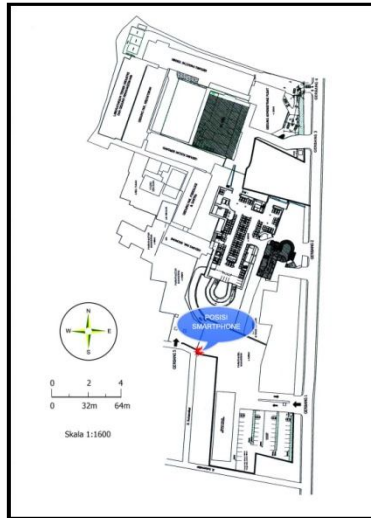
peta51.jpg



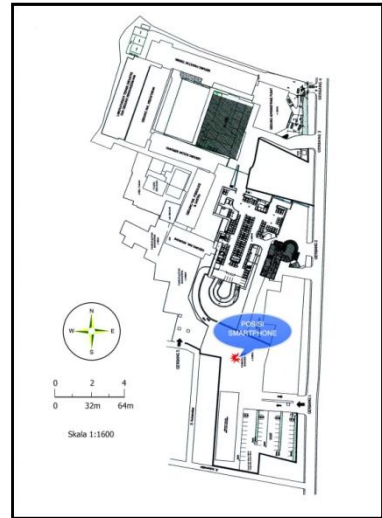
peta52.jpg



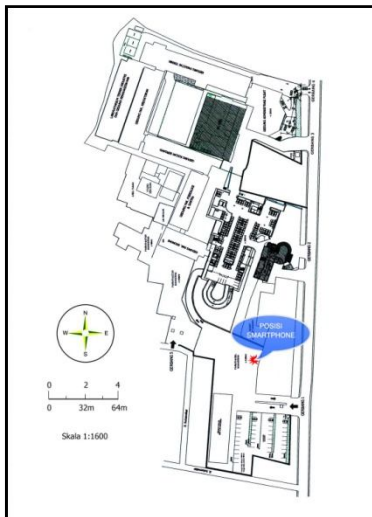
peta53.jpg



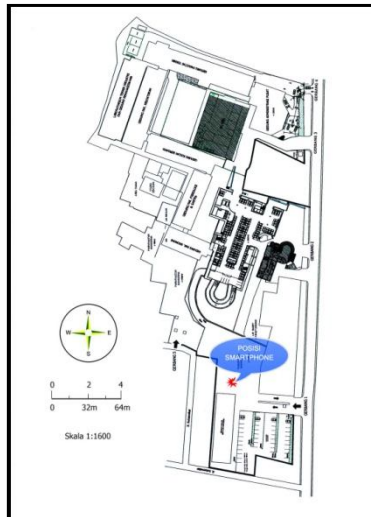
peta54.jpg



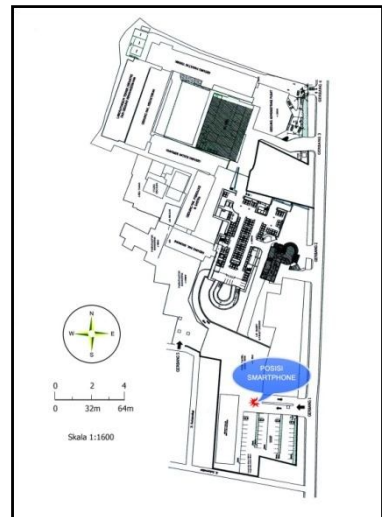
peta55.jpg



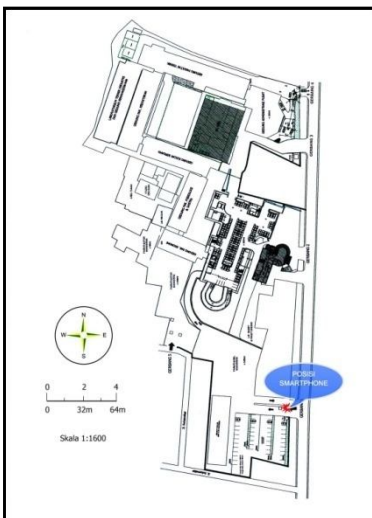
peta56.jpg



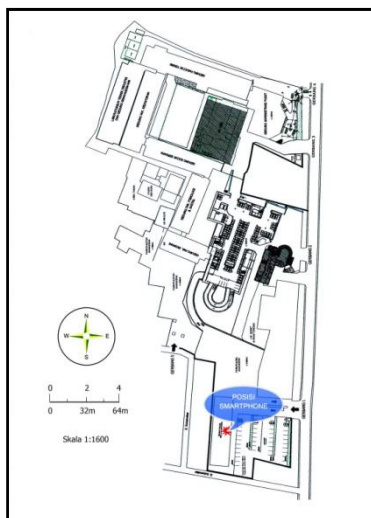
peta57.jpg



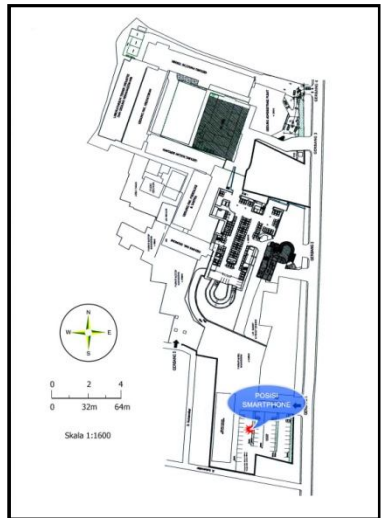
peta58.jpg



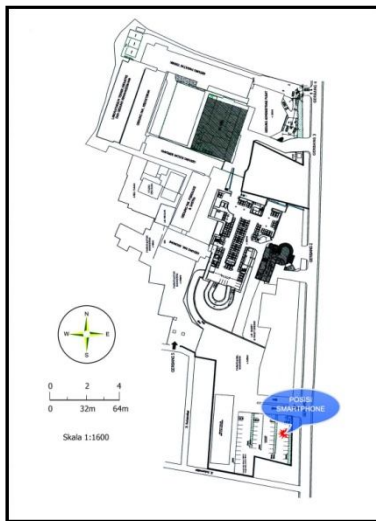
peta59.jpg



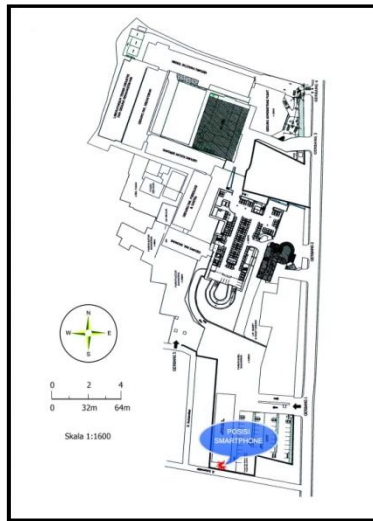
peta60.jpg



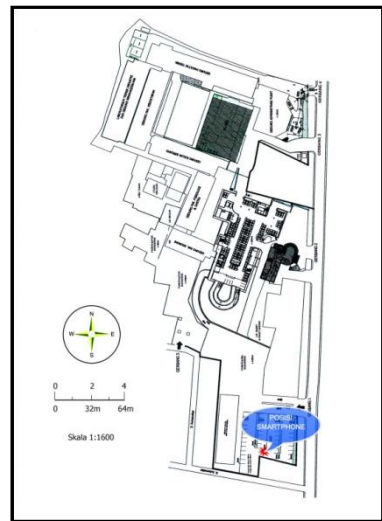
peta61.jpg



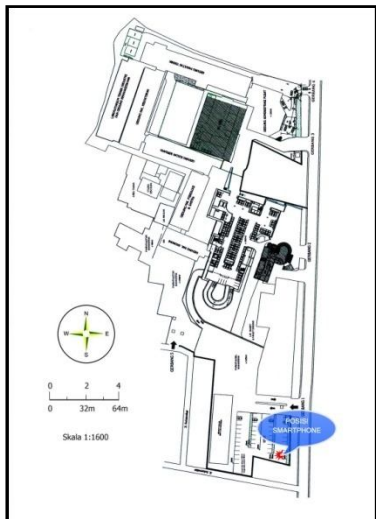
peta62.jpg



peta63.jpg



peta64.jpg



peta65.jpg



foto0.jpg



foto1.jpg



foto2.jpg

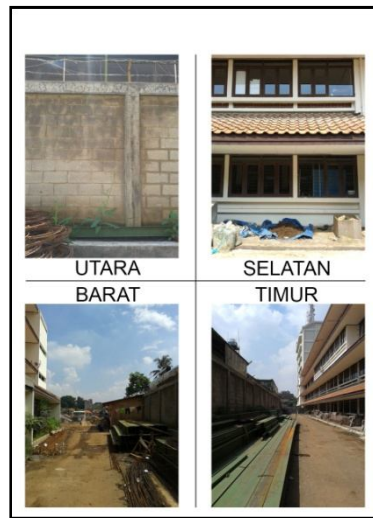


foto3.jpg



foto4.jpg



foto5.jpg



foto6.jpg



foto7.jpg



foto8.jpg



foto9.jpg



foto10.jpg



foto11.jpg



foto12.jpg



foto13.jpg



foto14.jpg



foto15.jpg



foto16.jpg



foto17.jpg



foto18.jpg



foto19.jpg



foto20.jpg



foto21.jpg



foto22.jpg



foto23.jpg



foto24.jpg



foto25.jpg



foto26.jpg

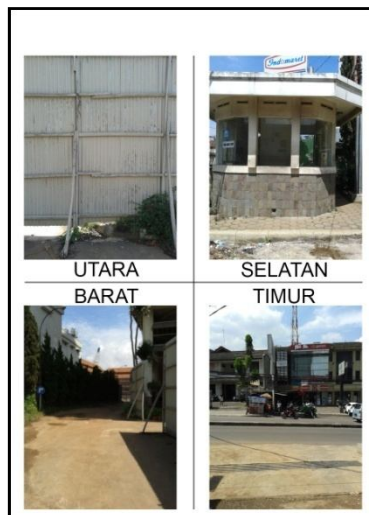


foto27.jpg



foto28.jpg

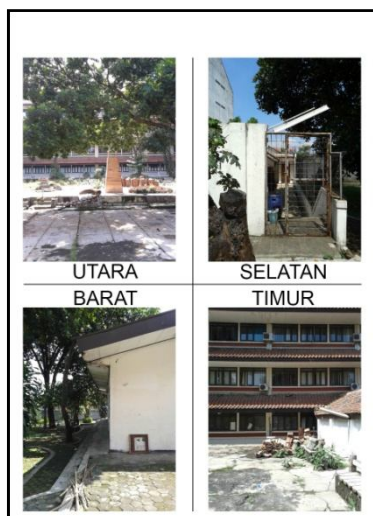


foto29.jpg



foto30.jpg



foto31.jpg



foto32.jpg



foto33.jpg



foto34.jpg



foto35.jpg



foto36.jpg



foto37.jpg



foto38.jpg



foto39.jpg



foto40.jpg



foto41.jpg



foto42.jpg



foto43.jpg



foto44.jpg



foto45.jpg



foto46.jpg



foto47.jpg



foto48.jpg



foto49.jpg



foto50.jpg



foto51.jpg



foto52.jpg



foto53.jpg



foto54.jpg



foto55.jpg



foto56.jpg



foto57.jpg



foto58.jpg



foto59.jpg



foto60.jpg



foto61.jpg



foto62.jpg



foto63.jpg



foto64.jpg



foto65.jpg

* Foto-foto kampus diambil bulan mei 2013

❖ **Folder res → drawable-hdpi :**

➤ **File :**



ic_launcher.png

❖ **Folder res → layout :**

➤ **cover.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:background="@drawable/cover" >
</LinearLayout>
```

➤ **main.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<TabHost xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@android:id/tabhost"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent">

    <RelativeLayout
        android:layout_width="fill_parent"
        android:layout_height="fill_parent" >

        <FrameLayout
            android:id="@android:id/tabcontent"
            android:layout_width="fill_parent"
            android:layout_height="fill_parent"
            android:layout_above="@android:id/tabs"
            android:background="#FFFFFF" >

            <com.Ferdian.TouchImageView
                android:id="@+id/zoom"
                android:layout_width="match_parent"
                android:layout_height="match_parent" />
        </FrameLayout>
```

```

<TabWidget
    android:id="@android:id/tabs"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true" />

<TextView
    android:id="@+id/viewLatitude"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentRight="true"
    android:layout_alignParentTop="true"
    android:text=""
    android:textColor="#000000"
    android:textAppearance="?android:attr/textAppearanceSmall" />

<TextView
    android:id="@+id/viewLongitude"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentRight="true"
    android:layout_below="@+id/viewLatitude"
    android:text=""
    android:textColor="#000000"
    android:textAppearance="?android:attr/textAppearanceSmall" />

<TextView
    android:id="@+id/textLatitude"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_marginRight="28dp"
    android:layout_toLeftOf="@+id/viewLatitude"
    android:text=""
    android:textColor="#000000"
    android:textAppearance="?android:attr/textAppearanceSmall" />

<TextView
    android:id="@+id/textLongitude"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignRight="@+id/textLatitude"
    android:layout_below="@+id/textLatitude"
    android:text=""
    android:textColor="#000000"
    android:textAppearance="?android:attr/textAppearanceSmall" />
</RelativeLayout>
</TabHost>

```

❖ AndroidManifest.xml :

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.Ferdian"
    android:versionCode="1"
    android:versionName="1.0" >

    <uses-sdk android:minSdkVersion="8" />
    <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
    <application
        android:icon="@drawable/ic_launcher"
        android:label="@string/app_name" >
        <activity
            android:label="@string/app_name"
            android:name=".Pemetaan_Posisi" >
            <intent-filter >
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>

        <activity android:name=".Peta"/>
        <activity android:name=".Foto"/>
        <activity android:name=".Kompas"/>
        <activity android:name=".MainActivity"></activity>
    </application>
</manifest>
```