package com.example.wifiStrength;

import android.content.Context;

import android.media.MediaScannerConnection;

import android.net.wifi.WifiInfo;

import android.net.wifi.WifiManager;

import android.os.Bundle;

import android.support.v7.app.AppCompatActivity;

import android.text.format.Formatter;

import android.util.Log;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.Toast;

import java.io.BufferedWriter;

import java.io.File;

import java.io.FileWriter;

import java.io.IOException;

import java.io.OutputStreamWriter;

import java.util.Calendar;

import java.util.Date;

public class MainActivity extends AppCompatActivity {

TextView txtWifiInfo;

Button btnInfo;

TextView tssid;

TextView trssid;

TextView tmac;

TextView tip;

TextView tlink;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

txtWifiInfo = findViewById(R.id.*idTxt*);

btnInfo = findViewById(R.id.*idBtn*);

tssid = findViewById(R.id.*ssid*);

trssid = findViewById(R.id.*rssid*);

tmac = findViewById(R.id.*mac*);

tip= findViewById(R.id.*ip*);

tlink = findViewById(R.id.*linkspeed*);

}

public void getWifiInfo(View view) {

WifiManager wifiManager = (WifiManager) getApplicationContext().getSystemService(Context.*WIFI\_SERVICE*);

if (wifiManager.isWifiEnabled()) {

WifiInfo wifiInfo = wifiManager.getConnectionInfo();

if (String.*valueOf*(wifiInfo.getSupplicantState()).equals("COMPLETED")) {

//WIFI NAME

String SSId = "Wifi Details of :" + wifiInfo.getSSID();

tssid.setText(SSId);

Toast.*makeText*(this, SSId, Toast.*LENGTH\_SHORT*).show();

//STRENGTH

int rssid = wifiInfo.getRssi();

String str= "Strength: " + Integer.*toString*(rssid);

trssid.setText(str);

//MAC

String bssid ="MAC :"+ wifiInfo.getBSSID();

tmac.setText(bssid);

//IP value

int ip = wifiInfo.getIpAddress();

String value ="IP:"+ Formatter.*formatIpAddress*(ip);

tip.setText(value);

//link speed

int linkspeed = wifiInfo.getLinkSpeed();

String link="link speed: "+ Integer.*toString*(linkspeed);

tlink.setText(link);

String ssid= wifiInfo.getSSID();

Date currentTime = Calendar.*getInstance*().getTime();

String time = currentTime.toString();

String info =time + "\n" +

"Ipaddress: " + value +

"\n" + "BSSID: " + bssid +

"\n" + "RSSID: " + rssid + "\nSSID:" + ssid + "\n" + "Linkspeed" + linkspeed + "\n";

try {

File testFile = new File(this.getExternalFilesDir(null), "timeStamp.txt");

if (!testFile.exists())

testFile.createNewFile();

Toast.*makeText*(this, "File named timeStamp.txt created and stored in the documents section ", Toast.*LENGTH\_LONG* ).show();

BufferedWriter bufferedWriter = new BufferedWriter(new FileWriter(testFile, true));

bufferedWriter.write(info + "\n");

bufferedWriter.close();

MediaScannerConnection.*scanFile*(this,

new String[]{testFile.toString()},

null,

null);

} catch (IOException e) {

Log.*e*("ReadWriteFile", "Unable to write to the TestFile.txt file.");

}

}

}

else {

wifiManager.setWifiEnabled(true);

}

}

}