**Add your college l0ocation on maps and also provide a location tracking feature in your app.**

import android.os.Bundle;

import android.util.Log;

import android.util.Xml;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.Toast;

import org.json.JSONArray;

import org.json.JSONException;

import org.json.JSONObject;

import org.w3c.dom.Document;

import org.w3c.dom.Element;

import org.w3c.dom.Node;

import org.w3c.dom.NodeList;

import org.xml.sax.SAXException;

import org.xmlpull.v1.XmlPullParser;

import org.xmlpull.v1.XmlPullParserException;

import java.io.IOException;

import java.io.InputStream;

import java.nio.charset.StandardCharsets;

import javax.xml.parsers.DocumentBuilder;

import javax.xml.parsers.DocumentBuilderFactory;

import javax.xml.parsers.ParserConfigurationException;

public class MainActivity extends AppCompatActivity {

Button parseXmlBtn, parseJsonBtn;

TextView displayTextView;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

MOBILE APPLICATION DEVELOPMENT LABORATORY - 18CSMP68

SJCIT, Department of Information Science and Engineering 17

parseJsonBtn = findViewById(R.id.parseJsonBtn);

parseXmlBtn = findViewById(R.id.parseXmlBtn);

displayTextView = findViewById(R.id.displayTextView);

parseXmlBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

try {

InputStream is = getAssets().open("city.xml");

DocumentBuilderFactory documentBuilderFactory = DocumentBuilderFactory.newInstance();

DocumentBuilder documentBuilder = documentBuilderFactory.newDocumentBuilder();

Document document = documentBuilder.parse(is);

StringBuilder stringBuilder = new StringBuilder();

stringBuilder.append("XML Data");

stringBuilder.append("\n----------");

NodeList nodeList = document.getElementsByTagName("place");

for (int i = 0; i < nodeList.getLength(); i++) {

Node node = nodeList.item(i);

if (node.getNodeType() == Node.ELEMENT\_NODE) {

Element element = (Element) node;

stringBuilder.append("\nCollege Name: ").append(getValue("college name", element));

stringBuilder.append("\nName: ").append(getValue("name", element));

stringBuilder.append("\nLatitude: ").append(getValue("lat", element));

stringBuilder.append("\nLongitude: ").append(getValue("long", element));

stringBuilder.append("\nTemperature: ").append(getValue("temperature", element));

stringBuilder.append("\nHumidity: ").append(getValue("humidity", element));

stringBuilder.append("\n----------");

}

}

displayTextView.setText(stringBuilder.toString());

} catch (Exception e) {

e.printStackTrace();

Toast.makeText(MainActivity.this, "Error Parsing XML", Toast.LENGTH\_SHORT).show();

}

}

});

parseJsonBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String json;

StringBuilder stringBuilder = new StringBuilder();

try {

InputStream is = getAssets().open("city.json");

int size = is.available();

byte[] buffer = new byte[size];

is.read(buffer);

MOBILE APPLICATION DEVELOPMENT LABORATORY - 18CSMP68

SJCIT, Department of Information Science and Engineering 18

json = new String(buffer, StandardCharsets.UTF\_8);

JSONArray jsonArray = new JSONArray(json);

stringBuilder.append("JSON Data");

stringBuilder.append("\n----------");

for (int i = 0; i < jsonArray.length(); i++) {

JSONObject jsonObject = jsonArray.getJSONObject(i);

stringBuilder.append("\nCollege Name: ").append(jsonObject.getString("college name"));

stringBuilder.append("\nName: ").append(jsonObject.getString("name"));

stringBuilder.append("\nLatitude: ").append(jsonObject.getString("lat"));

stringBuilder.append("\nLongitude: ").append(jsonObject.getString("long"));

stringBuilder.append("\nTemperature:").append(jsonObject.getString("temperature"));

stringBuilder.append("\nHumidity: ").append(jsonObject.getString("humidity"));

stringBuilder.append("\n----------");

}

displayTextView.setText(stringBuilder.toString());

is.close();

} catch (IOException | JSONException e) {

e.printStackTrace();

Toast.makeText(MainActivity.this, "Error in parsing JSON data from!",Toast.LENGTH\_SHORT)

.show();

}

}

});

}

private String getValue(String tag, Element element) {

return element.getElementsByTagName(tag).item(0).getChildNodes().item(0).getNodeValue();

}

}