package com.techelevator.city;

import java.util.ArrayList;

import java.util.List;

import javax.sql.DataSource;

import org.springframework.jdbc.core.JdbcTemplate;

import org.springframework.jdbc.support.rowset.SqlRowSet;

public class JDBCCityDAO implements CityDAO {

private JdbcTemplate jdbcTemplate;

public JDBCCityDAO(DataSource dataSource) {

this.jdbcTemplate = new JdbcTemplate(dataSource);

}

@Override

public void save(City newCity) {

String sqlInsertCity = "INSERT INTO city(id, name, countrycode, district, population) " +

"VALUES(?, ?, ?, ?, ?)";

newCity.setId(getNextCityId());

jdbcTemplate.update(sqlInsertCity, newCity.getId(),

newCity.getName(),

newCity.getCountryCode(),

newCity.getDistrict(),

newCity.getPopulation());

}

@Override

public City findCityById(long id) {

City theCity = null;

String sqlFindCityById = "SELECT id, name, countrycode, district, population "+

"FROM city "+

"WHERE id = ?";

SqlRowSet results = jdbcTemplate.queryForRowSet(sqlFindCityById, id);

if(results.next()) {

theCity = mapRowToCity(results);

}

return theCity;

}

@Override

public List<City> findCityByCountryCode(String countryCode) {

ArrayList<City> cities = new ArrayList<>();

String sqlFindCityByCountryCode = "SELECT id, name, countrycode, district, population "+

"FROM city "+

"WHERE countrycode = ?";

SqlRowSet results = jdbcTemplate.queryForRowSet(sqlFindCityByCountryCode, countryCode);

while(results.next()) {

City theCity = mapRowToCity(results);

cities.add(theCity);

}

return cities;

}

@Override

public List<City> findCityByDistrict(String district) {

// TODO Auto-generated method stub

return null;

}

@Override

public void update(City city) {

// TODO Auto-generated method stub

}

@Override

public void delete(long id) {

// TODO Auto-generated method stub

}

private long getNextCityId() {

SqlRowSet nextIdResult = jdbcTemplate.queryForRowSet("SELECT nextval('seq\_city\_id')");

if(nextIdResult.next()) {

return nextIdResult.getLong(1);

} else {

throw new RuntimeException("Something went wrong while getting an id for the new city");

}

}

private City mapRowToCity(SqlRowSet results) {

City theCity;

theCity = new City();

theCity.setId(results.getLong("id"));

theCity.setName(results.getString("name"));

theCity.setCountryCode(results.getString("countrycode"));

theCity.setDistrict(results.getString("district"));

theCity.setPopulation(results.getInt("population"));

return theCity;

}

}