

coms4111 sec003 hw5

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Coding

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package hw5;

import redis.clients.jedis.Jedis;

import java.util.*;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import java.sql.Statement;
import java.sql.ResultSet;
import java.io.StringWriter;

import org.json.simple.JSONObject;
import org.json.simple.parser.JSONParser;
import org.json.simple.parser.ParseException;

import redis.clients.jedis.BinaryJedis;
import org.json.*;
import javax.json.*;

public class hw5func1 {

    private static java.sql.Connection getConnection() {
        java.sql.Connection conn = null;
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    try {
        // You must set the schema, user ID and password for your local database
        conn = DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/football"
            "user=root&password=z123456");
    } catch (SQLException ex) {
        // handle any errors
        System.out.println("SQLException: " + ex.getMessage());
        System.out.println("SQLState: " + ex.getSQLState());
        System.out.println("VendorError: " + ex.getErrorCode());

        conn = null;
    }

    return conn;
}

private static Map<String,String> find_mysql_by_id(String id) {
    Connection conn = null;
    Statement stmt = null;
    ResultSet rs = null;
    Map<String,String> map = new HashMap<String,String>();
    try {
        conn = getConnection();
        stmt = conn.createStatement();
        rs = stmt.executeQuery("SELECT * FROM Master WHERE playerID=" + id);
        rs.first();

        String playerID, nameLast, nameFirst, birthYear, birthCountry;

        playerID = rs.getString("playerID");
        nameLast = rs.getString("nameLast");
        nameFirst = rs.getString("nameFirst");
        birthYear = rs.getString("birthYear");
        birthCountry = rs.getString("birthCountry");
        //System.out.println("playerID = " + playerID + ", last name = " + nameLast + ", first name = " + nameFirst + ", birth year = " + birthYear);
        map.put("playerID",playerID);
        map.put("nameLast",nameLast);
        map.put("nameFirst",nameFirst);
        map.put("birthYear",birthYear);
    }
}

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        map.put("birthCountry", birthCountry);

    } catch (SQLException ex) {
        // handle any errors
        System.out.println("SQLException: " + ex.getMessage());
        System.out.println("SQLState: " + ex.getSQLState());
        System.out.println("VendorError: " + ex.getErrorCode());
    } finally {
        // it is a good idea to release
        // resources in a finally{} block
        // in reverse-order of their creation
        // if they are no-longer needed

        if (rs != null) {
            try {
                rs.close();
            } catch (SQLException sqlEx) {} // ignore

            rs = null;
        }

        if (stmt != null) {
            try {
                stmt.close();
            } catch (SQLException sqlEx) {} // ignore

            stmt = null;
        }
    }
    return map;
}

private static Map<String, String> find_redis_by_id(String id) {
    Map<String, String> result;

    //Connecting to Redis server on localhost
    Jedis jedis = new Jedis("localhost");
    System.out.println("Connection to server successfully");
    result = jedis.hgetAll("players:" + id);
    jedis.close();
    return result;
}

```

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    }

    private static void add_to_redis(String id, Map<String,String> data) {
        Jedis jedis = new Jedis("localhost");
        String result = jedis.hmset("players:"+id,data);
        if (result.substring(0,2).equals("OK"))
            System.out.println(" Successfully _add_to_redis!");
    }

    private static Map<String,String> find_by_id(String id) {
        Map<String, String> result;

        result = find_redis_by_id(id);

        if(result.isEmpty()) {
            System.out.println(" Will_load_data_from_MySQL_to_Redis..");
            result = find_mysql_by_id(id);
            add_to_redis(id,find_mysql_by_id(id));
        } else {
            System.out.println(" Found_data_in_Redis");
        }

        return result;
    }

    public static void main(String[] args) {
        System.out.println(find_by_id("napolmi01"));
    }
}

```