

# GW2-SRS LOAD

powered by L<sup>A</sup>T<sub>E</sub>X

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## 3.0 LOAD

### 3.1 Introduction

The last part concerning the ETL process is loading the results into a database. In this case I decided going for MongoDB and SQLite. The reason behind this decision was storing big JSON files in a suitable database like MongoDB, while maintaining an space for structured tables on SQLite that I built with queries.

Now the key part here, is that at first I was saving entire JSONs on MongoDB, and while this is the purpose of a No-SQL database, I preferred just uploading the dictionaries I created manually within the ETL code. As for SQLite, there are two main queries, one for dps data and one for users.

### 3.2 SQLite Queries

In order to have every boss classified, I created a table for each boss, so the data loading was a matter of inserting the data within the ETL, therefore I needed a connection with the database.

I used Python and `sqlite3`<sup>1</sup> to set up the connection and execute the queries. The main connection can be set up using the following:

```
1 conn = sqlite3.connect("Your_database_path")
2 cur = conn.cursor()
3
```

Listing 1: SQLite Connection

From this line, we can easily execute any query inside the database by calling the cursor:

```
1 cur.execute(
2     f"INSERT INTO vg_dps(phase1_dps,phase2_dps ,
3     phase3_dps,FK_player_id) \
4     VALUES({dps1},{dps2},{dps3},'{acc}')"
5 )
```

Listing 2: Query example

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<sup>1</sup>sqlite3 is a Python library used to work with SQLite database

### 3.3 MongoDB Connection

As for MongoDB, the connection is quite simple as well. I chose to use PyMongo library and a MongoDB Atlas Cluster to help me out. I used the local cluster, but this process could also be made on the cloud cluster as well. The connection would look like the following:

```
1 client = pymongo.MongoClient('mongodb://localhost
2 :27017/')
```

Listing 3: MongoDB Connection

```
1 db = client['GW2_SRS']
2 collection = db['players_info']
3
4 collection.insert_one(json_data)
5 print('MongoDB load done!')
6
```

Listing 4: MongoDB data load

