

SSD Lab 10

SQLAlchemy

What is SQLAlchemy?

- Object Relational Mapper (ORM)
- Translates user defined classes to tables in RDB
- Converts function calls to SQL statements

CRUD Operations

- CREATE: `db.session.add(model obj)`
- DELETE: `db.session.delete(model obj)`
- READ: `model.query.all()`

Note - do not forget to commit after a crud operation, `db.session.commit()`

Querying the DB

Let say the user defined class is User.

`records = User.query.all()` : Equivalent to `select * from User`

This will return a collection of user records.

To get the id of the first record, `records[0].id`

Querying the DB

`User.query.filter_by(id = '123')` : Equivalent to `select * from User where id = '123'`

To get the first record, use the `first()` method.

`User.query.filter_by(id = '123').first()`

If the id is primary key, use the `get()` method

`user = User.query.get('123')`