

Session 2 - SQLite Local Database

September 4, 2018

1 Python Training: Day 2 Session 2

References:

- <https://www.pythoncentral.io/introduction-to-sqlite-in-python/>
- <https://docs.python.org/3/library/sqlite3.html>

1.1 2.2.1 Create database, connect, and create table

```
In [ ]: import sqlite3

In [ ]: db = sqlite3.connect('database/exampledb')

In [ ]: cursor = db.cursor()
        cursor.execute('''
            CREATE TABLE IF NOT EXISTS todo(id TEXT PRIMARY KEY, activity TEXT,
            deadline TEXT, done INTEGER)
        ''')
        db.commit()

In [ ]: db.close()
```

1.2 2.2.2 Introduction to UUID

Sources:

- <https://docs.python.org/3/library/uuid.html>
- https://en.wikipedia.org/wiki/Universally_unique_identifier

```
In [ ]: from uuid import uuid1

In [ ]: id1 = uuid1()
        id2 = uuid1()
        id3, id4 = uuid1(), uuid1()

        print(id1)
        print(id2)
        print(id3)
        print(id4)
```

1.3 2.2.3 Insert data

```
In [ ]: from datetime import date
        from datetime import timedelta

        deadline = date.today() + timedelta(days=3)

In [ ]: str(deadline)

In [ ]: db = sqlite3.connect('database/exampledb')
        cursor = db.cursor()
        cursor.execute("INSERT INTO todo(id, activity, deadline, done) VALUES(?, ?, ?, ?)", (str(id1), "belanja ke pasar", str(deadline), '0'))
        cursor.execute('''INSERT INTO todo(id, activity, deadline, done)
                           VALUES(?,?,?,?)''', (str(id2), "belanja ke pasar", str(deadline), '0'))
        cursor.execute('''INSERT INTO todo(id, activity, deadline, done)
                           VALUES(?,?,?,?)''', (str(id3), "cuci kendaraan", str(deadline), '0'))

        db.commit()
        db.close()
```

1.4 2.2.4 Query

```
In [ ]: db = sqlite3.connect('database/exampledb')
        cursor = db.cursor()
        cursor.execute(''' SELECT id, activity, deadline, done FROM todo ''')
        q = cursor.fetchall()
        for row in q:
            # row[0] -> first column, row[1] -> second column, etc
            print(row[0], row[1], row[2], row[3])
        db.commit()
        db.close()
```

1.5 2.2.5 Update and Delete

1.5.1 Assignment 2.2.1

1. Set the activity 'menulis proposal' to status 'finished'
Hint: Let's assume that not finished = 0, finished = 1
2. Delete activity 'cuci kendaraan'