SQLite Database

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- SQLite is a C-language library that implements a small, fast, self-contained, high-reliability, full-featured, SQL database engine. SQLite is the most used database engine in the world. SQLite is built into all mobile phones and most computers and comes bundled inside countless other applications that people use every day.
- The SQLite file format is stable, cross-platform, and backwards compatible and the developers pledge to keep it that way through at least the year 2050.
- SQLite source code is in the public-domain and is free to everyone to use for any purpose.

Default DBMS with Django

- Already configured database software is SQLite.
- In addition to SQLite, Django officially supports three other popular relational databases that includes PostgreSQL , MySQL and Oracle. And unofficially, with third party packages, Django supports connectivity to other relational databases that include: SAP (Sybase) SQL Anywhere, IBM DB2, Firebird, etc
- To use different database software, you need to configure it in settings.py
- In settings.py

```
DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.sqlite3',
        'NAME': os.path.join(BASE_DIR, 'db.sqlite3'),
    }
}
```

Using other Database Systems

- In settings.py, The Django DATABASES variable defines key-value pairs. Each key represents a database reference name and the value is a Python dictionary with the database connection parameters.
- To use other database software mention following value against the dictionary key:
    - For MySQL
        - ENGINE: `django.db.backends.mysql`

- For ORACLE
    - ENGINE: `django.db.backends.oracle`

Commands to check DB configuration

- Open CMD
- Go to project directory (f:/projects/firstproject)
- Type command: python manage.py shell
- >>>from django.db import connection
- >>>c=connection.cursor()
- If there is no error due to the above commands then everything is working fine.

How to use database concept in Django?

- Model concept is used to handle database
- In Django, you have to write only python code and not sql statements to communicate database.