Database Plan

MegaMindz

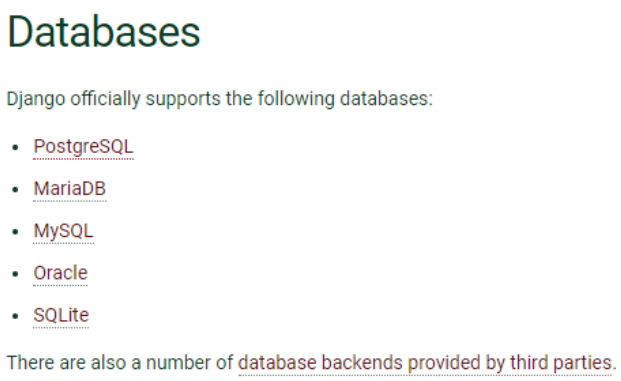
Overview:

For our project we will be using PostgreSQL for our database in our web application.

Reasoning:

It was supported by all the tools that we already wanted to use.

We wanted to use python with Django, and PostgreSQL is one of the officially supported databases with djengo.



Databases

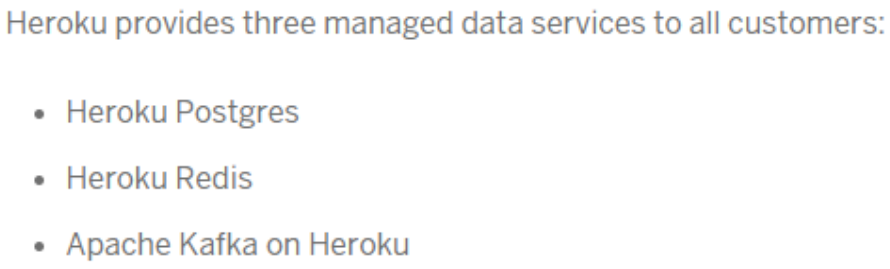
Django officially supports the following databases:

- PostgreSQL
- MariaDB
- MySQL
- Oracle
- SQLite

There are also a number of database backends provided by third parties.

This will be using the “psycopg2” library in python. Link to site: https://www.psycopg.org/

We also needed a database that is supported for Heroku since we need to use this tool to host our web server.



Heroku provides three managed data services to all customers:

- Heroku Postgres
- Heroku Redis
- Apache Kafka on Heroku

Things to Keep in Mind:

It will probably be best to coordinate with front end on data sizes. For example, if we have an email field, and we determine that we want to max at 100 characters, we should not allow the user to input more than 99 in the text box (one extra space for a null terminator character).

A function might also have to be made in order to escape single quotes (‘) out of string fields, since we need to pass single quoted strings to our database text fields. Note, this will be taken care of for you if you do string injections with the psycopg2 library (use %s in your sql command, and then passing it the parameter).

Sample SQL File for Making User Info Table:

<see user_info.sql file in same folder as this pdf>