

Software Discovery

Why SQLite3

Our cohort decided to use SQLite3 for our implementation of our database because two of our members have prior experience using this system. Jonathan has used SQLite3 for some personal projects, while Josh has used SQLite3 for coursework in his Unix class. It also has the perks of being free and cross-platform allowing for the entire cohort to learn and contribute. The SQLite3 system has very generic commands names for ease of use, creation, and manipulation of databases. The SQLite3 system is a text-based system that is ran in the command line. The SQLite3 system has a slight learning curve, but once you learn how to navigate through the system, it becomes easier. SQLite3 is the best system to use with our cohort because Jonathan and Josh were able to help speed up the learning curve for Rohan and Poria.

Negatives of SQLite3 include not being able to change multiple tables easily while in the command line. Although we have had some experience with SQLite, we found the use of ALTER TABLE to change existing columns on a table to be more trouble than simply dropping the table and creating it again with our changes. In this case, it would have been nice to have an ide with some sort of preview to show changes in real-time. It is also not as user-friendly as an ide would be. It's easy to make simple mistakes and have to rewrite an entire complex statement.

Although we encountered these downsides, SQLite3 had the advantage of being similar to examples from Dr. Becker's notes and from the book. In that way, it was easy to get tables created once we understood the syntax and how to

convert from our diagrams to SQL. Sqlite3 also has the advantage of producing portable files and changes are written immediately upon transaction.

```
SQLite version 3.24.0 2018-06-04 14:10:15
Enter ".help" for usage hints.
Connected to a transient in-memory database.
Use ".open FILENAME" to reopen on a persistent database.
sqlite> █
```

Our Cohort will be using sqlite3 for our implementation.

“The SQLite project was started on [2000-05-09](#). The future is always hard to predict, but the intent of the developers is to support SQLite through the year 2050. Design decisions are made with that objective in mind.”

“About SQLite.” *About SQLite*, www.sqlite.org/about.html.