Microsoft Access:

From Microsoft's Official Website. Accessed May 12, 2024.

Aesthetics:	It's quite minimalistic, using a simple white, gray, and dark red color palette for most of the user interface.
Cost:	It is paywalled and requires a subscription to Microsoft Office or Microsoft 365.
Customer:	It is aimed at large teams of data analysts.
Environment:	The software becomes more resource intensive with more data entries analyzed or retrieved.
Size:	It requires 4 GB of available disk space.
Safety:	A database file can be password-encrypted or not encrypted.
Function:	It is for organizations or companies handling large amounts of data.
Material:	N/A, it is software.

Pros:
Microsoft Access expands upon the functionality of Excel by providing pivot tables and better data visualization options.
Multiple people can work on the same database at the same time.
It is highly efficient and flexible.

Cons:
It has a high learning curve.
It's meant for long-term data storage and large projects.
It's not free.

Inspiration:
The simplistic design of the top bar and sidebar might be something I will incorporate into my application.
The simple color palette is quite clean and comfortable to look at. I plan to follow similar design principles.

Java Swing:

Pros:
It is platform-independent.
It is highly customizable with many extra tooltips and features for components.
Swing components are quite light and not memory intensive.
It is desktop-oriented and is catered toward programmers seeking to create desktop applications.

Cons:
Due to the overhead of running the Java Virtual Machine, the finished application may be slow.
It lacks mobile support.
It cannot create complex User Interfaces.

Java:

Pros:
I have previous knowledge in Java as I've learned it in class.
Java is object-oriented.
Java is platform-independent as it runs within a Java Virtual Machine.
Java has multithreading support.

Cons:
It has a slower performance compared to other programming languages.
It requires a large amount of RAM and is generally more inefficient.
The syntax is complex.

JDerby Embedded Database:

Pros:
It's extremely easy to maintain.
It is aimed towards small-scale applications and proof-of-concepts.
It has a small footprint.
It is quite flexible and reliable.

Cons:
It is not suited for larger-scale applications.
There is a risk of data loss due to frequent crashes.
It's catered towards Java only as a Java-based database solution.

Apache Netbeans:

Pros:
Apache Netbeans is extremely good at completing code automatically, speeding up development.
The plugins that it comes with are quite extensive and complete.
It is a free IDE.
The design is quite simple yet effective.

Cons:
Due to being open-source, the software can be buggy at times.
The program often requires large amounts of RAM when working with large GUIs.
Response times can be slow.

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