The purpose of a database is to store information that serves a purpose to the user. The database helps the user to keep the information organized, managed, updated, and easily accessible so it can be used/modify at any moment. Is hard to imagine how we could manage the amount of information circulating in the world if we did not have databases. Today’s companies must organize millions of items and users. Inventories must be updated as items are bought or are restoked. Imagine managing all that information by hand.

There are many components to databases, but I think some of the most important components are software, hardware, users, and data. One component we saw in the book was the DBMS which is a system that helps with defining, manipulating, constructing, and sharing databases(Fundamentals 1.1). I was surprised at how important a DBMS can be for a database. Databases need an enormous amount of hardware such as computers and storage devices to keep them working. Users are an important component of databases. Users are who interact with the database and give a purpose to the database. I feel that data is the most essential component to the databases, because the purpose of databases is to store and manage data.

The study of database technology is important because databases are everywhere. After reading the chapter I realized how much databases influence our life. I started to look around and realized how many things I interact with use databases, my phone, laptop, consoles, websites, etc. In addition, I feel that since I am a software engineering major is important that I learn about databases. I did work with databases once in a project before, but it was something simple, so I did not need to know much. This semester I will start working in a much more complex project where I will make heavy use of databases. I hope this class will help me to be better as a software developer.

References

Elmasri, Ramez, and Shamkant B. Navathe. *Fundamentals of Database Systems*. 7th ed., Pearson, 2017.