

Online databases



An online database is a collection of organized data that can be accessed from various networks, like the internet. Usually, databases are used for things like booking a seat or a room in planes or hotels, or even online shopping. In this report, I have chosen to discuss two databases that are quite different, and investigate the benefits and detriments of the storage of data in online information systems. The two databases I have chosen to discuss are YouTube and Amazon. These databases are some of the largest and most successful online databases.

YouTube is an online database of videos where users can upload, view and share videos. As mentioned, YouTube is one of the largest databases, with over 1 billion unique users visiting every month and one hour of video uploaded every second. YouTube has revolutionized the world - you only need to be connected to the internet to watch and share videos. Before YouTube was invented you had to share via a USB, or upload to a file sharing website. YouTube also collates and sorts the data in a very efficient manner, making it the superior video sharing database.

Amazon is another efficient database; it is the largest online retailer. It sells books, DVD's, video games, electronics, toys and jewelry. In 2007, Amazon announced Amazon S3 which is a cloud storage database system. Amazon has also revolutionized shopping, before online retail databases were in existence, people had to drive to the shopping centre, spend time looking for what you want to buy and then drive home. With the invention of Amazon, users can enter a query, showing all the items that have the word you searched for in them. This only takes a couple of minutes, rather than a couple of hours.

However, once you order the product, it may take several days to arrive. The benefits of having online databases far outweigh the detriments. Some of the biggest benefit is that it can reach many more people and that it is accessible 24 hours a day, assuming that you have an internet connection. With just the push of a couple of buttons, users can access nearly anything they want, making businesses more productive, and turn over more profit. Another benefit is that people can work from almost anywhere, provided they have a laptop or a smart phone with Internet connection.

Many users are concerned about their security, and some may argue that an ordinary database is more secure than an online one. In most databases, the user can't see or edit the management system of a database. A login and password is required to change the database or see the database. Lots of databases also have additional measures of making sure that it is secure, they have an encryption key added to the login interface, making it harder for people to get in. There are, however, many other threats to online databases.

There are many threats to an online database, such as SQL Injection, DOS (Denial of Service) and having weak authentication. SQL Injection is when a user gains access to edit secured data by "injecting" various SQL queries into a vulnerable SQL data channel. A Denial of Service is when a perpetrator attacks the database, by sending packets of information to the server, making it slower. The server responds, but doesn't detect the user, so waits for a response. When this times out, the attacker will send another packet full of requests, until eventually.