

# [Analyzing the use of databases in the workplace](https://assignbuster.com/analyzing-the-use-of-databases-in-the-workplace/)

Analyzing the use of databases in the workplace A database stores keyed information in an organized and accessible manner. The size and capacity of databases can vary widely, from a small database used by an individual to file phone numbers, to an extremely large enterprise database that stores several gigabytes of Information accessed by thousands of Individuals. Databases are essential for almost every company in today's business world.

Database can help us keep track of, inventory, billing, pay role, phone numbers and such more. Lacking the use of databases, work will take longer to accomplish. Another wonderful feature about having a database in place is that a record of all transitions can be kept for analyzing purposes. In this paper I am going to discuss about the database and software used In my construction company. Oracle database is a multi platform database, meaning it can run efficiently on any operating system and this makes Oracle flexible and more secure when compared to its competitors.

Our Oracle database is running on a Sun server, using the Sun Solaris enterprise operating system. Oracle databases are an enterprise database system, only medium and large companies would need an enterprise database. Oracle Corporation uses READS rational database management systems to maintain all data wealth the organization. Various data Items can be organized according to their relationships with each other, such as the relationship of Employee name and Employee ID, rational databases give Oracle a great deal of flexibility when describing the relationship between data elements.

Oracle follows Dry. Cobs 12 rules on how a true READS should be evaluated. The following are Cob's 12 rules. 1. Information is represented logically in tables. 2. Data must be logically accessible by table, primary key, and column. 3. Null values must be uniformly treated as " missing Information," not as empty strings, blanks, or zeros. Data is. 5. A single language must be able to define data, views, integrity constraints, authorization, transactions, and data manipulation. [Typically this is SQL. ] 6. Views must show the updates of their base tables and vice versa. . A single operation must be able to retrieve, insert, update, or delete data. 8. Batch and end-user operations are logically separate from physical storage and access methods. 9. Batch and end-user operations can change the database schema without having to recreate it or the applications built upon it. 10. Integrity constraints must be available and stored in the relational database metadata, not in an application program 1 1 . The data manipulation language of the relational system should not care where or how the physical data is centralized or distributed 12.

Any row processing done in the system must obey the same integrity rules and constraints that set-processing operations do. Cob's rules are used by all rational databases environments worldwide (http://cuddliest. Com). Databases are powerful tools when used correctly, and provide businesses with an edge over the competition. Oracle databases use various programming languages to retrieve data, such as SQL Structured Query Language and PL/SQL, which stands for Procedural Language SQL.

PL/SQL is Oracle's procedural extension to industry- standard SQL. PL/SQL naturally, efficiently, and safely extends SQL. Its primary strength is in providing a server-side, stored procedural language that is easy-to-use, males with SQL, robust, portable, and secure (whom. Oracle. Com). Oracle Corporation is one of many companies has build a legacy on using SQL structured quarry language as a standard component of rational databases as well as Oracles extension of PL/SQL.

SQL and PL/SQL is a standard language used to manipulate and retrieve data on an Oracle database. PL/SQL allows the programmer or database administrator to do the follow with the data. Modify database structures, change system security settings, add user permissions on databases and tables, quarry a database for information, and update the contents of the database. In order to manipulate data within the database simple queries can be made using the Select statement, which retrieves data from the database and returns the data to the user.