

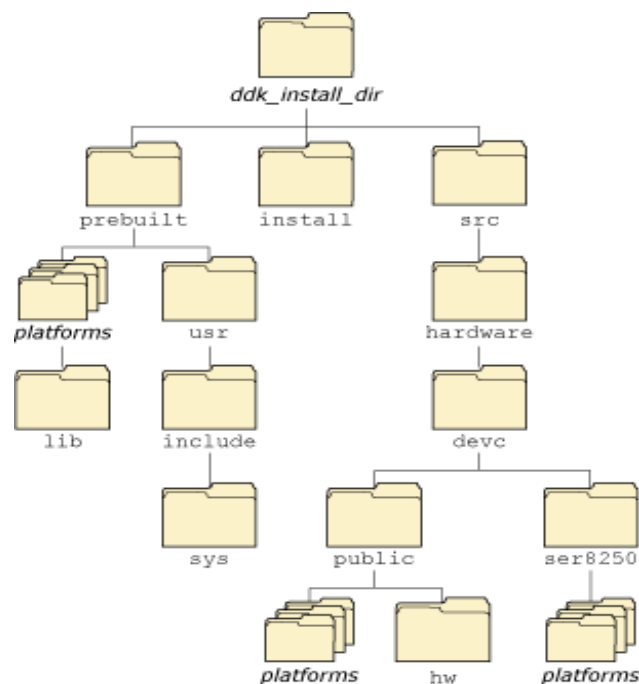
IDENTIFY THE DRAW BACKS OF SYSTEM FILES AND HOW DB ENABLES US TO OVER WITH COME THEM

THE TRADITIONAL FILE SYSTEM HAS SEVERAL DISADVANTAGES. SOME OF THEM ARE:

- **Data redundancy:** This is when the same data is stored in multiple places. This can lead to inconsistencies and errors in the data.
- **Data inconsistency:** This is when the same data is stored in different formats or with different values. This can lead to confusion and errors.
- **Data isolation:** This is when data is stored in separate files or databases that are not linked together. This can lead to difficulty in accessing and using the data.
- **Data integrity problems:** This is when data is corrupted or lost due to hardware or software failures.

- **Security problems**: This is when data is not properly secured and can be accessed by unauthorized users.

FILE SYSTEM:



A file system is a method and data structure that the operating system uses to control how data is stored and retrieved. Without a file system, data placed in a storage medium would be one large body of data with no way to tell where one piece of data stopped and

the next began, or where any piece of data was located when it was time to retrieve it. By separating the data into pieces and giving each piece a name, the data are easily isolated and identified. Taking its name from the way a paper-based data management system is named, each group of data is called a “file”.

SOME OF THE ADVANTAGES OF DATABASE MANAGEMENT SYSTEMS ARE:

- **Improved data integrity**: A DBMS helps to ensure the integrity of data stored in the database by validating and enforcing data constraints.
- **Stronger data security & access control**: A DBMS helps to protect the data from unauthorized access, manipulation and corruption.
- **Backup & recovery**: The DBMS provides backup and recovery procedures to recover from hardware or software failures.

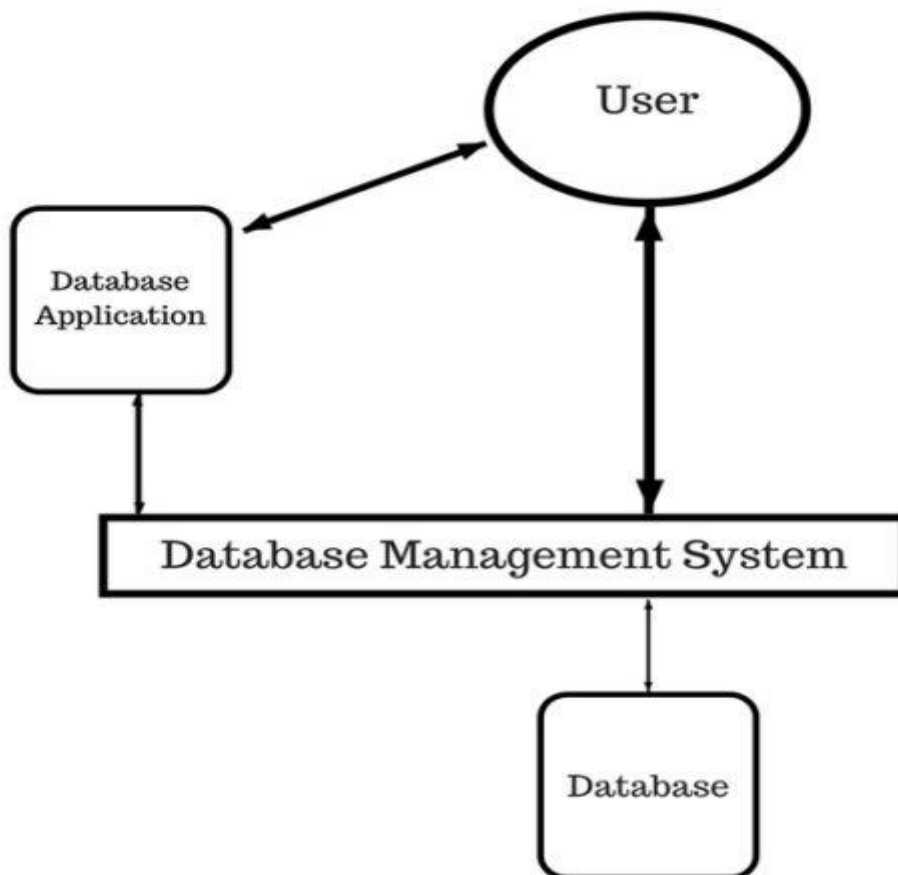
- **Improved data sharing**: A DBMS allows multiple users to access the same data at the same time.
- **Reduced application development time**: A DBMS provides a set of tools and utilities that can be used to develop applications more quickly and efficiently.

SOME OF THE DISADVANTAGES OF DATABASE MANAGEMENT SYSTEMS OVER FILES ARE:

- **Increased cost**: A DBMS requires expensive hardware and software to store and manage data.
- **Complexity**: A DBMS is an extremely complex software that requires a good knowledge of it by the developers, DBA, designers, and also the end-users.
- **Currency maintenance**: This is when data is corrupted or lost due to hardware or software failures.

- **Performance**: A DBMS may not be as fast as a file system for certain operations.
- **Frequent updates/upgrades**: A DBMS requires frequent updates and upgrades to keep up with new technologies.

HOW DB ENABLES US TO OVER COME WITH FILES



A database management system (DBMS) overcomes the limitations of file-based systems by eliminating redundant data, storage space is reduced, resulting in associated cost savings. However, in most database installations, this savings is more than offset by the additional costs of DBMS software. Data integrity is also improved by eliminating data redundancy. A DBMS provides a way for organizations to store, organize and retrieve large amounts of data quickly and efficiently in an organized manner. It allows multiple users to access the same data at the same time and provides a set of tools and utilities that can be used to develop applications more quickly and efficiently.