

DATA MODELS

# HIERARCHIAL DATA MODEL

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# DATABASE

A database is an organized collection of structured information, or data, typically stored electronically in a computer system. is information that is set up for easy access, management and updating.A database is usually controlled by a database management system (DBMS).



# DATA MODEL

A data model is an abstract model that organizes elements of data and standardizes how they relate to one another and to the properties of real-world entities.

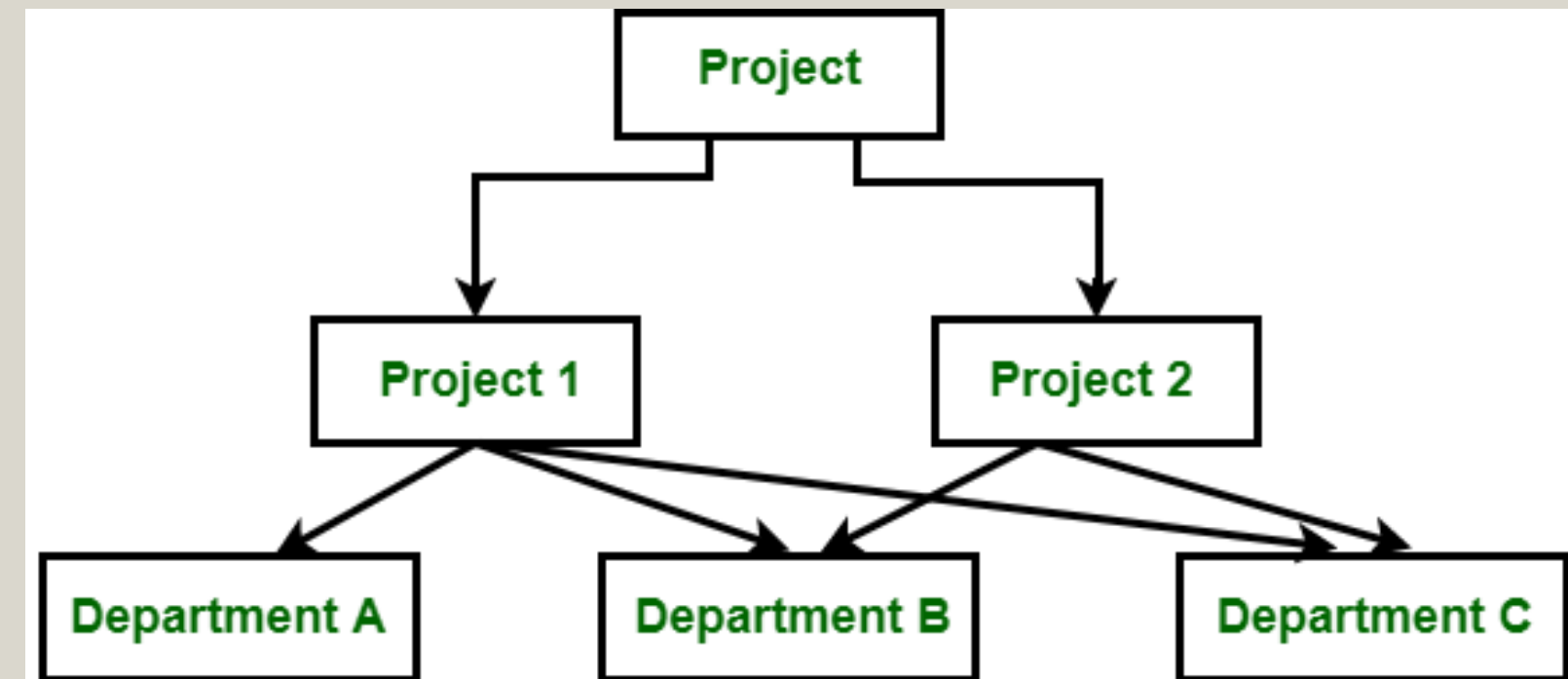
Data models define how the logical structure of a database is modeled.

The term data model refers to an abstract formalization of the objects and relationships found in a particular application domain.

It determines the structure of data.

# HIERARCHIAL DATA MODEL

A hierarchical database model is a data model in which the data are organized into a tree-like structure in which there is a single parent for each record. The data are stored as records which are connected to one another through links. This model structure allows the one-to-one and a one-to-many relationship between two/ various types of data. The hierarchical structure is used as the physical order of records in storage. One can access the records by navigating down through the data structure using pointers which are combined with sequential accessing. Even though it is the oldest type of data model (i.e developed 1968 by IBM), it is still being used widely.



# CONCLUSION

It is a data model in which the data are organized into a tree-like structure so a user can retrieve data very quickly due to the presence of explicit links between the table structures. due to this reason it is used in places that require very high performance and availability such as banking, health care, and telecommunications. but it still has some drawbacks like:

type of database cannot support complex relationships, and there is also a problem of redundancy, which can result in producing inaccurate information due to the inconsistent recording of data at various sites.