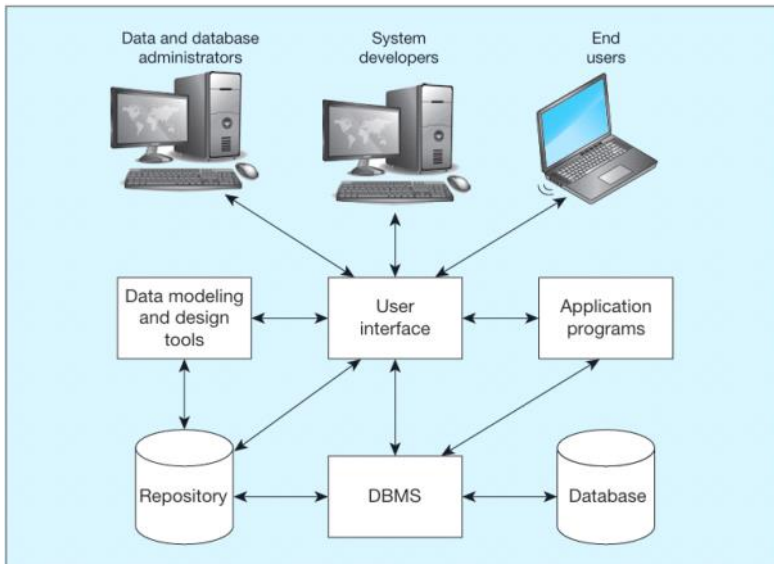


COMPONENTS OF THE DATABASE ENVIRONMENT



- *Data modeling and design tools*: are automated tools used to design databases and application programs.
 - o They help with the creation of data models and can sometimes generate the code needed to create the database
- *Repository*: centralized knowledge base for all data definitions, data relationships, screen and report formats, and other system components.
 - o A repository contains an extended set of metadata important for managing databases as well as other components of an information system.
- *DBMS*: is a software system that is used to create, maintain, and provide controlled access to user databases.
- *Database*: is a collection of logically related data usually designed to meet the needs of multiple parties within an organization.
- *Application programs*: computer based application programming are used to create and maintain the database and provide info to the user
- *User interface*: The user interface includes languages, menus, and other facilities by which users interact with various system components, such as data modeling and design tools, application programs, the DBMS, and the repository.
- *Data and database administrators*: Data administrators are persons who are responsible for the overall management of data resources in an organization.
 - o Database administrators are responsible for physical database design and for managing technical issues in the database environment.
- *System developers*: System developers are persons, such as systems analysts and programmers, who design new application programs.
- *End users*: End users are persons throughout the organization who add, delete, and modify data in the database and who request or receive information from it.
 - o All user interactions with the database must be routed through the DBMS.