

Realm	Objects	Examples
Real World Mini-World	Enterprise	Corporation University Bank
Conceptual Model	Entity Attribute Relationship	Research Department LastName HasAccount
Logical Model	Record Type Data Item Type Data Aggregate	Dept Record Type Stuld Address
Data Occurrences	Records Files Database	Dept 12 Record Student File University DB

Figure 02.F01: Four Levels of Discussing Data

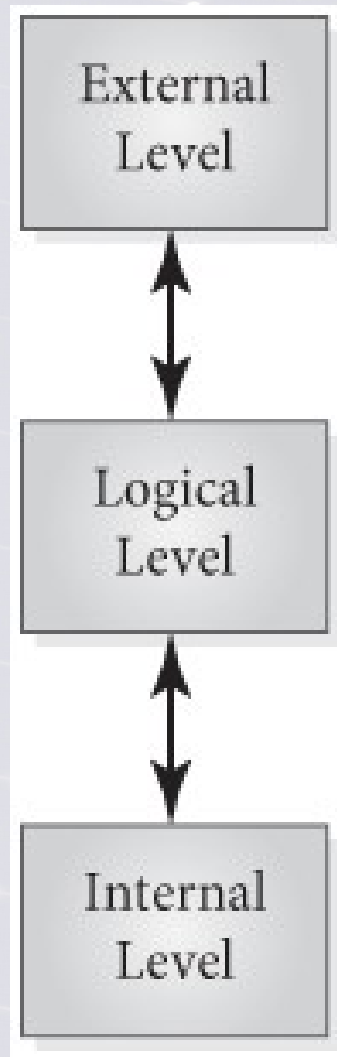


Figure 02.F03: Simplified Three-Level Architecture for Database Systems

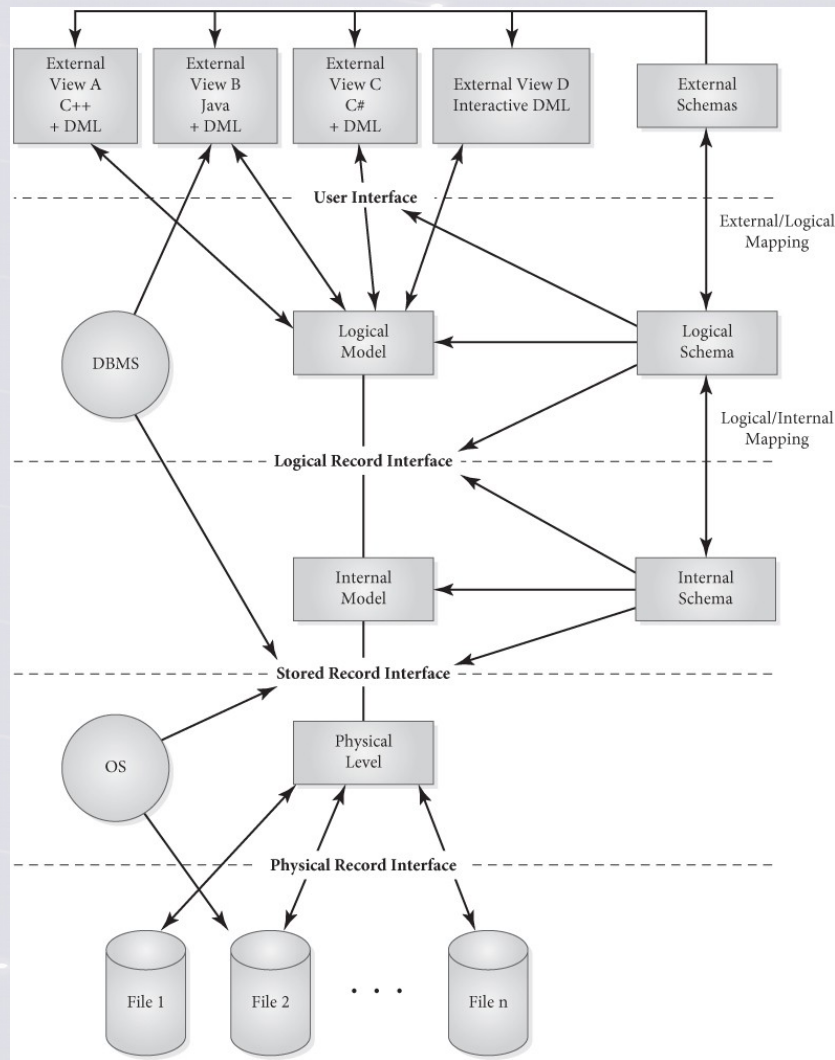


Figure 02.F04: Three-Level Database Architecture

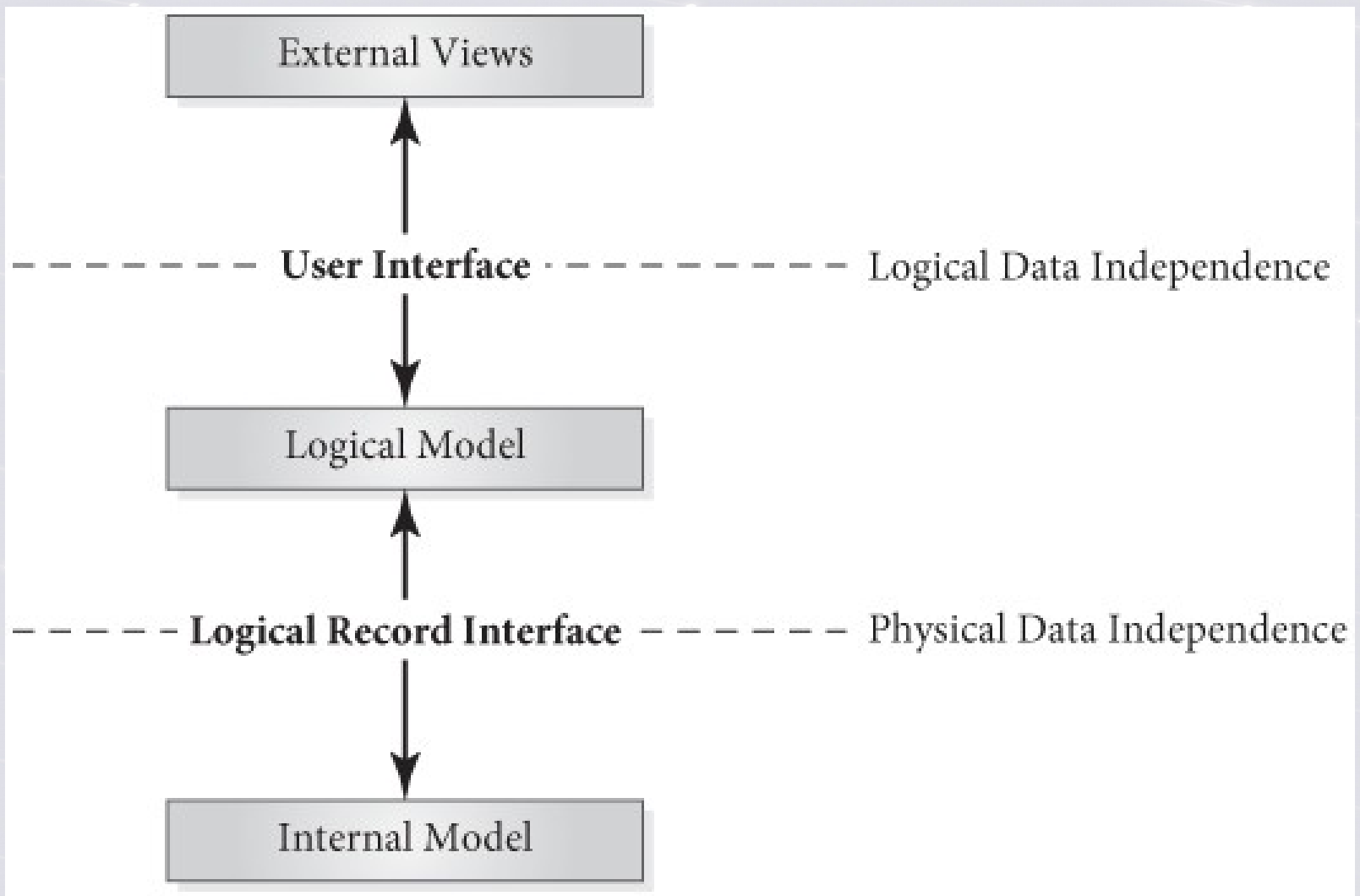


Figure 02.F07: Logical and Physical Data Independence