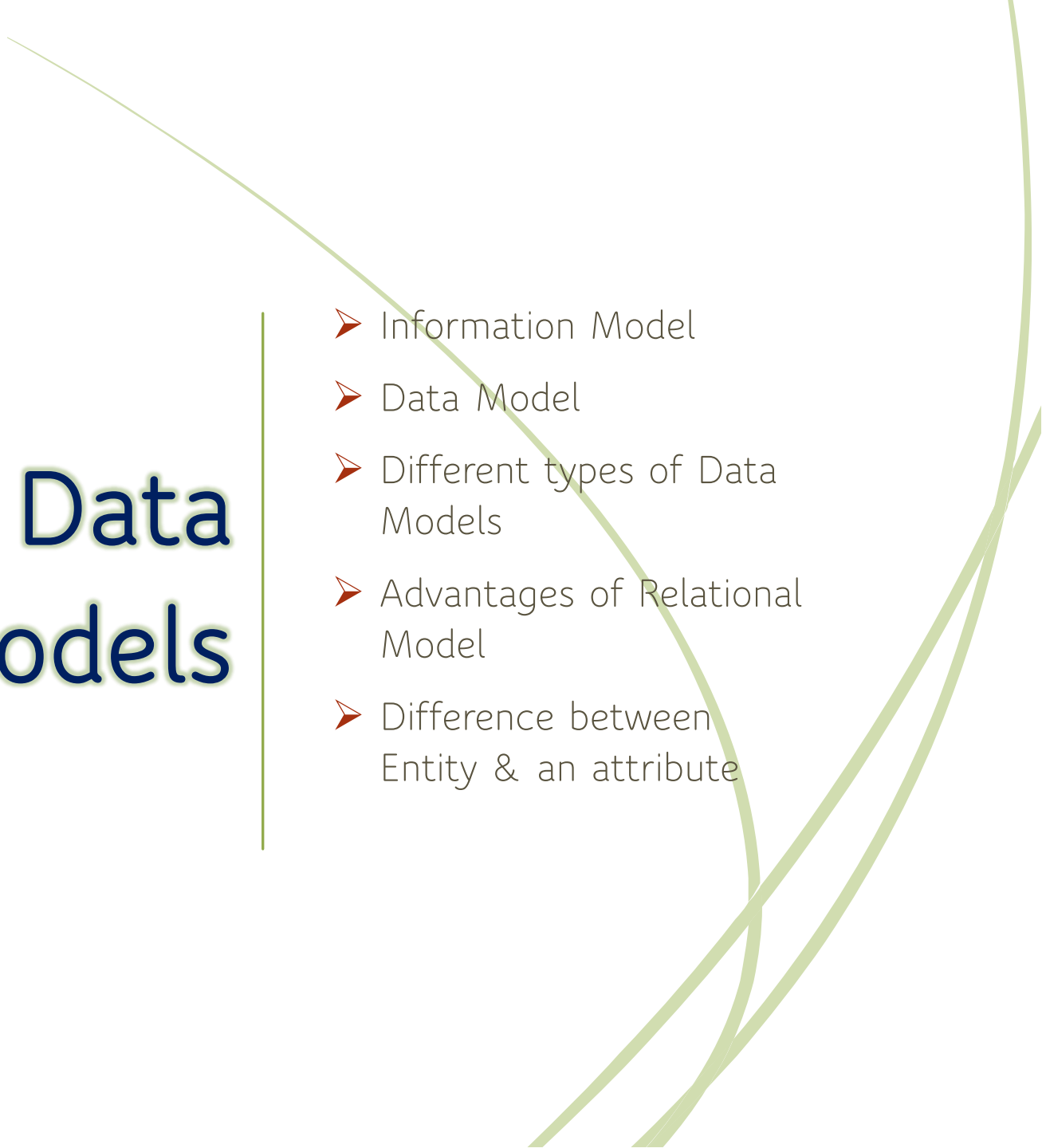


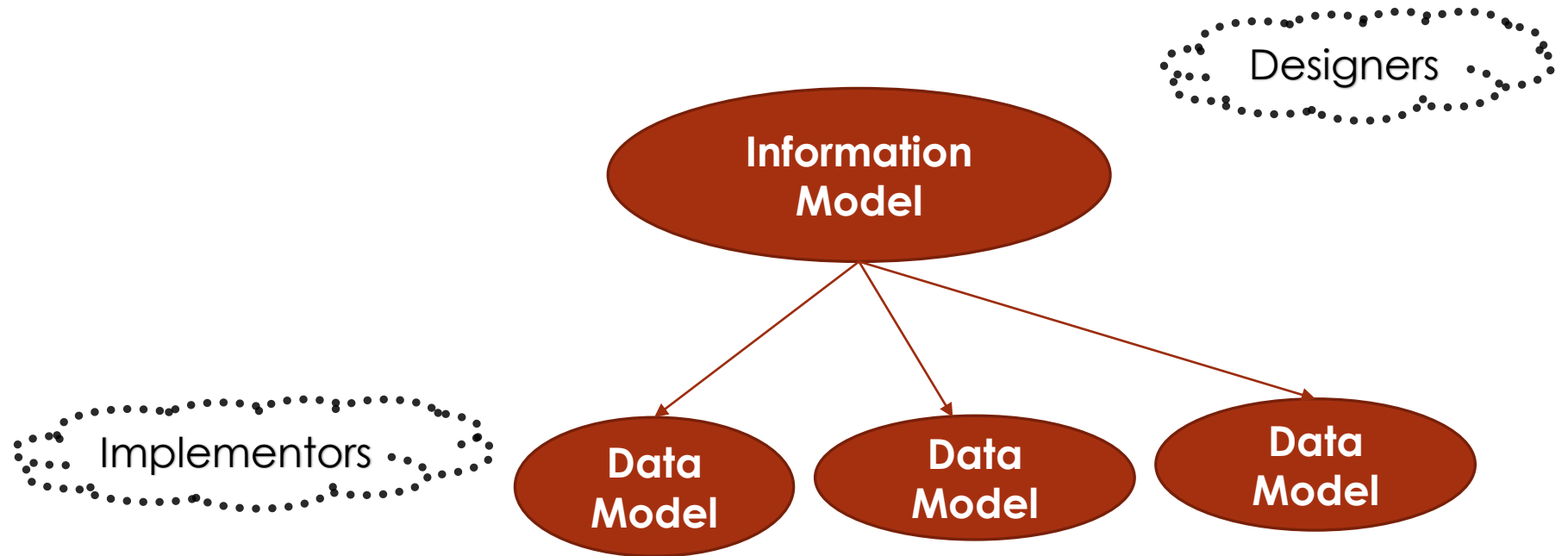


Information & Data Models

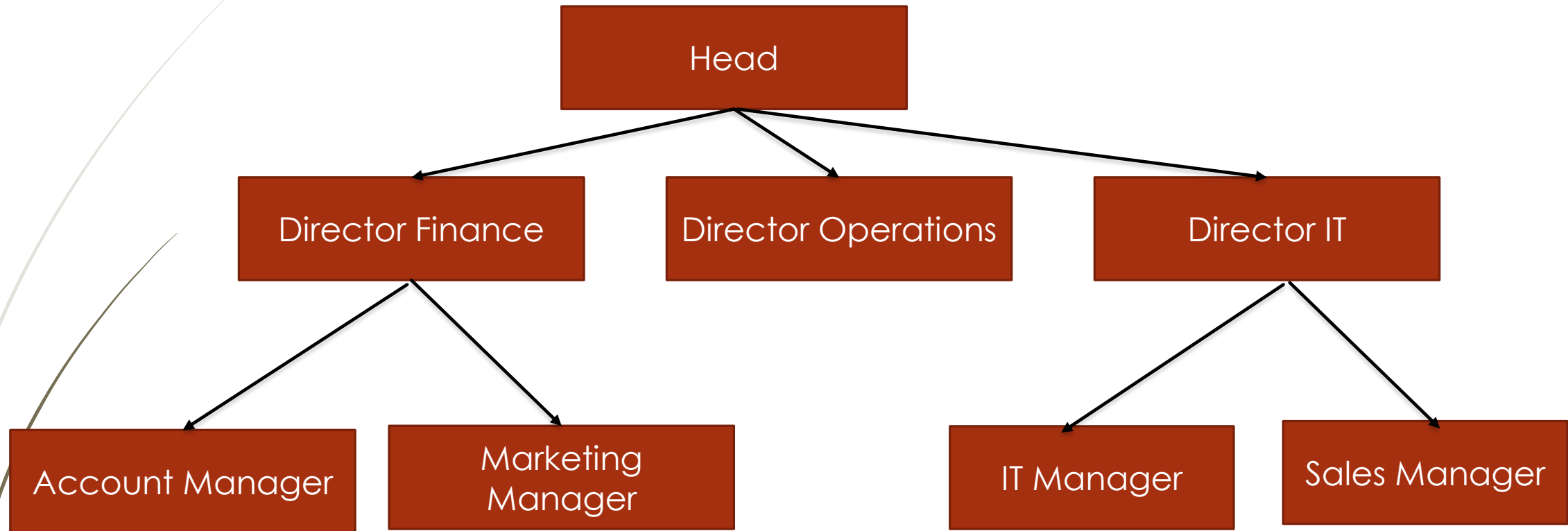
- 
- Information Model
 - Data Model
 - Different types of Data Models
 - Advantages of Relational Model
 - Difference between Entity & an attribute

Information Model vs Data Model

- **Information Model** – Conceptual information about different entities (High Level)
- **Data Model** – Defined at more concrete level and defines relationship between objects.



Types of Information Models: Hierarchical



First Hierarchical Database management system – Information Management System released by IBM in 1968 for Apollo Space program

Relational Model

- Most used Data model
- Allows for data independence
- Data is stored in tables

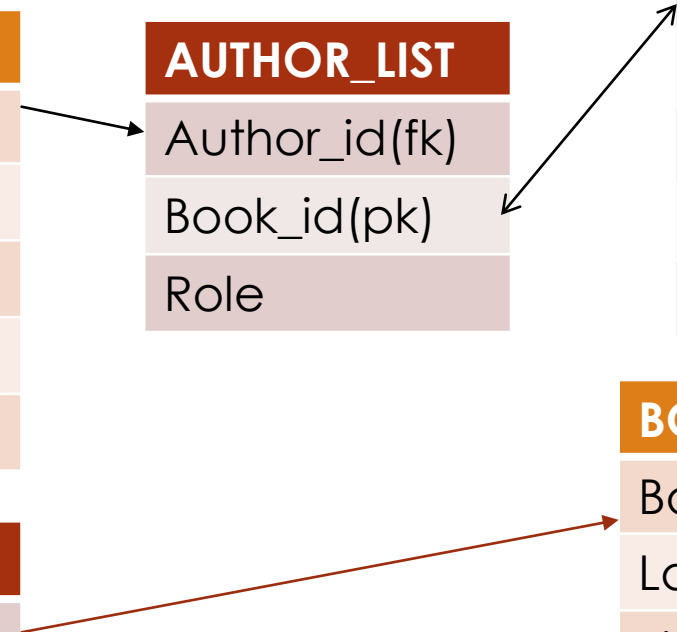
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Role

BOOK
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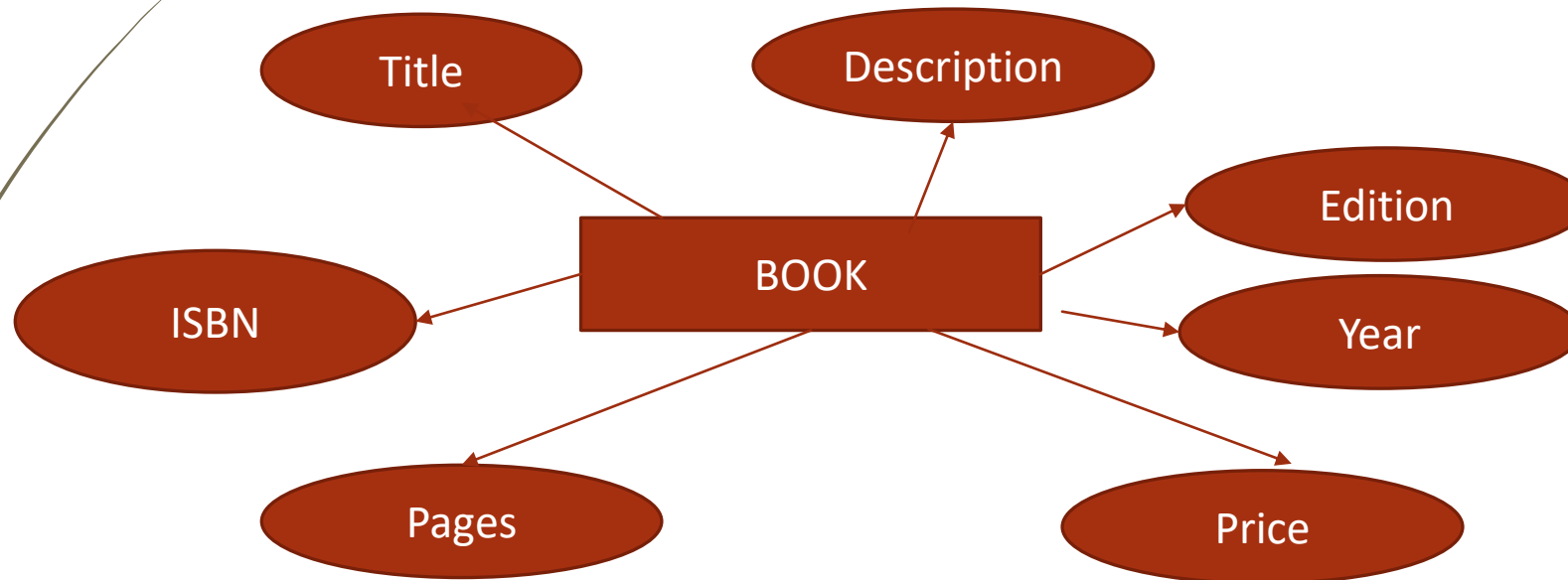
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First_name
Email
address
city

BORROWER
Borrower_id
Last_name
First_name
Email
address



Entity Relationship Model

- Used as a tool to design relational databases
- Building Blocks – Entities and Attributes



Entity Relationship Diagram

- Simplified library example
- Author as an entity

