

# Lecture 13: Mapping Relationship Tables

## Theory

Database relationships define how entities are connected to each other. In Hibernate, these relationships are mapped using annotations to maintain referential integrity and enable efficient data retrieval.

## Types of Relationships

### 1. One-to-One Relationship

**Definition:** Each record in one table corresponds to exactly one record in another table.

**Example:** Alien ↔ Laptop relationship

- One alien owns exactly one laptop
- One laptop belongs to exactly one alien

#### Table Structure:

alien table:

- aid (Primary Key): 101
- aname: Navin
- tech: Java
- laptop\_lid (Foreign Key): 1

laptop table:

- lid (Primary Key): 1
- brand: Asus
- model: rog
- ram: 16

#### Key Points:

- Uses Foreign Key to establish relationship
- Foreign key can be placed in either table
- Maintains referential integrity