

# Web Development 2



Departamento de Lenguajes y  
Sistemas Informáticos



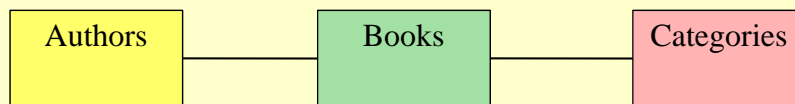
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# Project

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## Data model

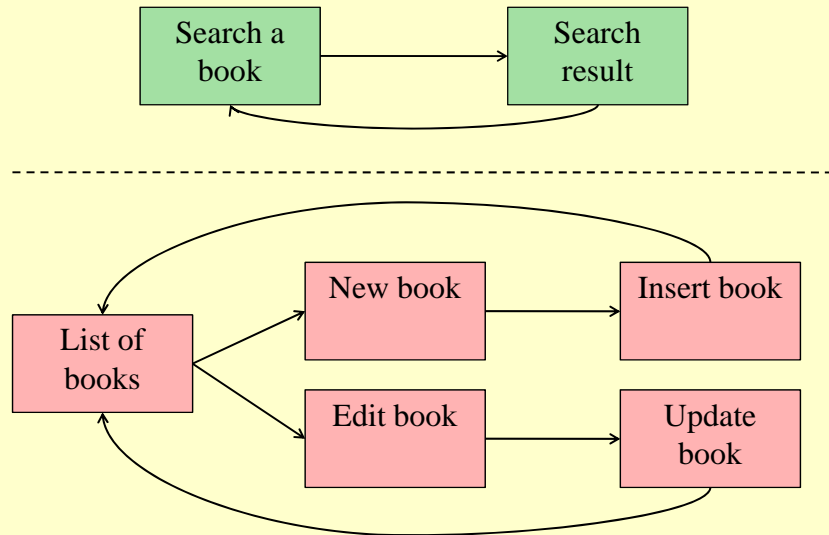
- Public library information system:
  - books (id, title, abstract, author (FK), category (FK), publisher, year)
  - authors (id, name)
  - categories (id, name)



## Data model

- Example:
  - Books: (123, "Hamlet", "Hamlet is the king of Denmark, ...", 21, 3, "Oxford UP", 2007)
  - Authors: (21, "William Shakespere")
  - Categories: (3, "Drama theater")

## Navigation diagram



## Presentation diagram

Search a book

PUBLIC LIBRARY

Search:

Title  Author  Publisher

The presentation diagram shows a search form for a public library. It includes a text input field for the search query, radio buttons to select the search criteria (Title, Author, or Publisher), and a 'Search' button.

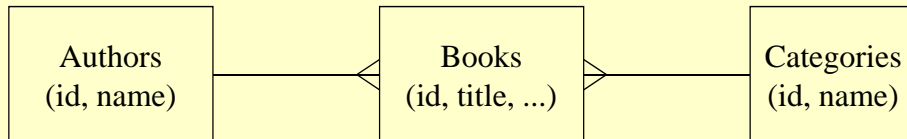
## Presentation diagram

Search result

PUBLIC		LIBRAY
TITLE	AUTHOR	PUBLISHER
xxxxx	aaaa aa	bbbb bb
yyyyy	ccc ccc	dd dddd
zzz zz	eeee eee	ff fff fff

## Creating the Database

## DB Schema



- Table authors, 2 attributes: id, name.
- Table categories, 2 fields: id, name.
- Table book, 7 fields: id, title, abstract, author, category, publisher and year.

## Step by step

- Connect to phpMyAdmin:
  - <http://localhost/phpmyadmin/index.php>
- Create a new DB: Library.
- Create a new table: authors, with 2 fields.
- Field: id, int, not null, auto increment, key
- Field: name, varchar, 250, not null
- Final Script:

```
Create table `library`.`authors` (  
  `id` int not null, auto increment primary key,  
  `name` varchar(250) not null) engine=myisam
```

## Step by step

- Create a new table: categories, with 2 fields.
- Field: id, int, not null, auto increment, key
- Field: name, varchar, 250, not null
- Final Script:  
Create table `library`.`categories` (  
`id` int not null, auto increment primary key,  
`name` varchar(250) not null) engine=myisam

## Step by step

- Create third table: books, 7 fields.
- id, int, not null, auto increment, key
- title, varchar, 250, not null
- Abstract, varchar, 2000, null
- Author, int, not null
- Category, int, not null
- Publisher, varchar, 250, null
- Year, int, null
- Table Script:  

```
CREATE TABLE `library`.`books` ( `id` INT NOT NULL AUTO_INCREMENT PRIMARY
KEY ,
`title` VARCHAR( 250 ) NOT NULL ,
`abstract` VARCHAR( 2000 ) NULL ,
`author` INT NOT NULL ,
`category` INT NOT NULL ,
`publisher` VARCHAR( 250 ) NULL ,
`year` INT NULL
) ENGINE = MYISAM
```

## Finally

- Put some data in tables authors and categories.
  - Remember ids
- Insert data in table books.
  - In fields 'author' and 'category' you must to put the identifier, not the name.