Comp 306- Group Project: OdinLibrary

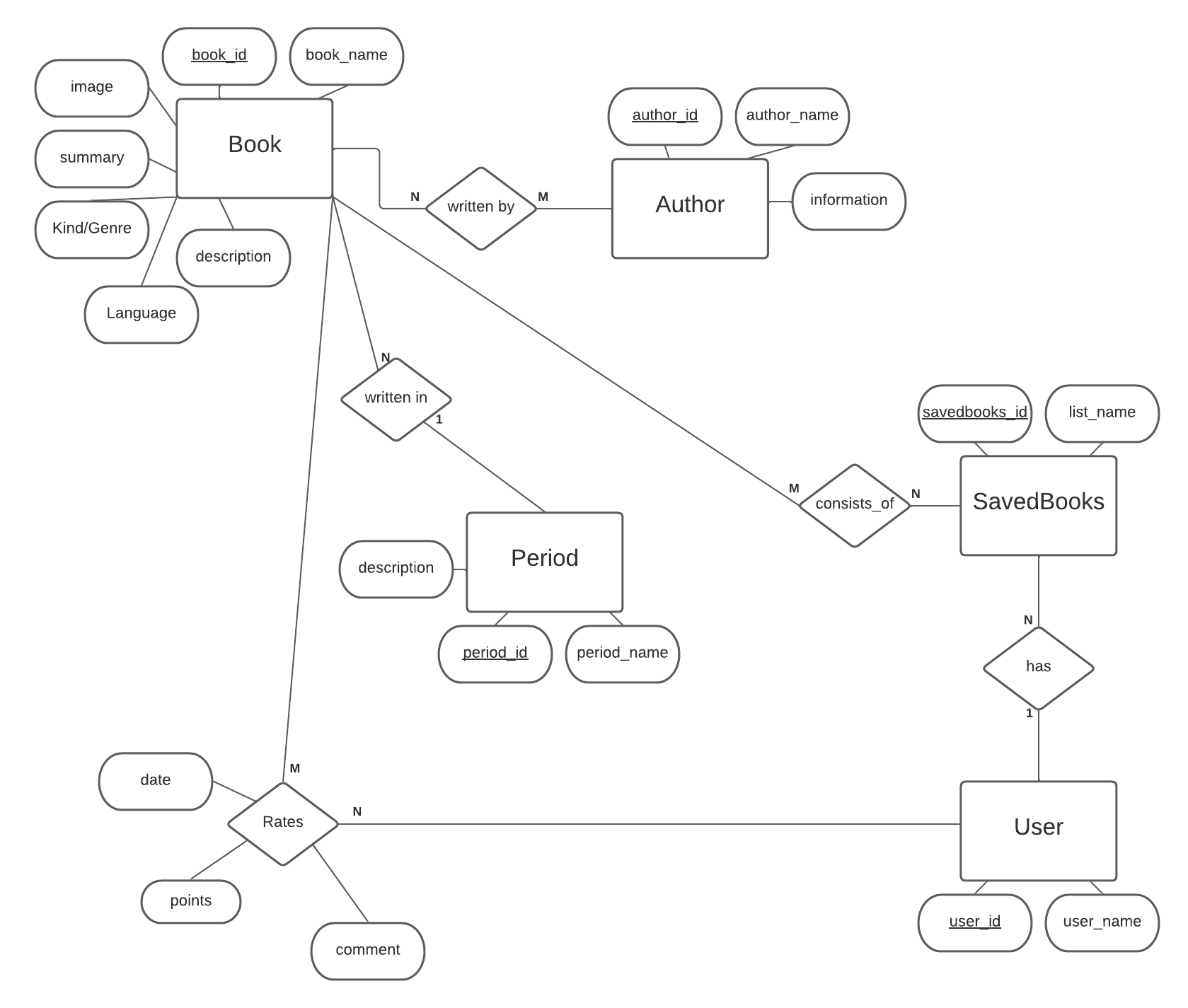
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Project Repository: [OdinLibrary](https://github.com/iremddemir/odinlibrary)

Project Description:

OdinLibraryis a library application that a user can find books, authors, periods and can save their favorite books into lists that created by themselves. Books, authors, and periods have little information that a user can enjoy reading. Moreover, we generated a database that consists of books frequently asked in Turkish University Exam (AYT). One of our aims is to help students to get this exam related information in a structured way rather than mixed up PDFs and blogs that they can find on internet.

Entity-Relationship Diagram:



Relational Database Design:

Following the ER to Relational Model conversion algorithm we have obtained the following relations to create our OdinLibraryDB.

CREATE TABLE book

(

book\_id INT,

book\_name VARCHAR(500),

description VARCHAR(500),

summary VARCHAR(500),

image VARCHAR(500),

kind\_genre VARCHAR(100),

language VARCHAR(100),

period\_id INT,

PRIMARY KEY (book\_id),

FOREIGN KEY (period\_id) REFERENCES period(period\_id)

);

CREATE TABLE author

(

author\_id INT,

author\_name VARCHAR(100),

information VARCHAR(500),

PRIMARY KEY (author\_id)

);

CREATE TABLE period

(

period\_id INT,

period\_name VARCHAR(100),

description VARCHAR(500),

PRIMARY KEY (period\_id)

);

CREATE TABLE savedBooks

(

savedbooks\_id INT,

list\_name VARCHAR(100),

user\_id INT,

PRIMARY KEY (savedbooks\_id),

FOREIGN KEY (user\_id) REFERENCES user(user\_id)

);

CREATE TABLE user

(

user\_id INT,

user\_name VARCHAR(100),

PRIMARY KEY (user\_id)

);

CREATE TABLE author\_book

(

book\_id INT,

author\_id INT,

FOREIGN KEY (book\_id) REFERENCES book(book\_id),

FOREIGN KEY (author\_id) REFERENCES author(author\_id),

PRIMARY KEY (book\_id, author\_id)

);

CREATE TABLE user\_book

(

book\_id INT,

user\_id INT,

date timestamp,

points INT,

comment VARCHAR(100),

FOREIGN KEY (book\_id) REFERENCES book(book\_id),

FOREIGN KEY (user\_id) REFERENCES user(user\_id),

PRIMARY KEY (book\_id, user\_id)

);

CREATE TABLE book\_savedBooks

(

book\_id INT,

savedbooks\_id INT,

FOREIGN KEY (book\_id) REFERENCES book(book\_id),

FOREIGN KEY (savedbooks\_id) REFERENCES savedBooks(savedbooks\_id),

PRIMARY KEY (book\_id, savedbooks\_id)

);

Data Sources:

AYT related information is gathered from online resources and using various tools it is formatted in the MySQL insert into statements. After populating enough real-world data, we also started creating more broad database using Kaggle datasets with the help of pandas package.

Complex SQL Queries:

Ad

Ideas:

en çok favorilere eklenen kitap

XXX kitabından çok YYY kitabından az olarak favorilere eklenen kitap

XXX dönemindeki YYY kitabından az olarak favorilere eklenen ZZZ dönemindeki ilk 3 kitap vs vs vs

Screenshots:

Ad