## sql script for creating the DB

```
book
CREATE TABLE book (
  book_id SERIAL PRIMARY KEY,
  title VARCHAR(255) NOT NULL,
  author VARCHAR(255),
  isbn VARCHAR(13) UNIQUE,
  number_of_books INT DEFAULT 0,
  price_per_day NUMERIC(10, 2),
  year_of_publishing INT
);
location
CREAT TABLE Location(
location_id SERIAL PRIMARY KEY,
number_of_books INT NOT NULL,
);
borrower
CREATE TABLE borrower (
  n_id SERIAL PRIMARY KEY,
  first_name VARCHAR(100) NOT NULL,
  last_name VARCHAR(100) NOT NULL,
  email VARCHAR(255) UNIQUE,
  registered_date DATE DEFAULT CURRENT_DATE
);
book_location
CREATE TABLE book_location (
 book_id INT NOT NULL,
 location_id INT NOT NULL,
 PRIMARY KEY (book_id,location_id),
 FOREIGN KEY(book_id) REFERENCES book(book_id) ON DELETE CASCADE,
 FOREIGN KEY (location_id) REFERENCES Location(location_id) ON DELETE
CASCADE
);
book_topic
CREATE TABLE book_topic (
  book_id INT NOT NULL,
  topic VARCHAR(255) NOT NULL,
  PRIMARY KEY (book_id, topic),
```

```
FOREIGN KEY (book_id) REFERENCES book(book_id) ON DELETE CASCADE );
```

## borrowing\_transaction

```
CREATE TABLE borrowing_transaction (
    transaction_id SERIAL PRIMARY KEY,
    book_id INT NOT NULL,
    national_id INT NOT NULL,
    start_date DATE NOT NULL,
    end_date DATE NOT NULL,
    total_price NUMERIC(10, 2) NOT NULL,
    returned BOOLEAN DEFAULT FALSE, -- Added column
    FOREIGN KEY (book_id) REFERENCES book(book_id) ON DELETE CASCADE,
    FOREIGN KEY (national_id) REFERENCES borrower(national_id) ON DELETE
CASCADE
);
```