

Title: Wendy\_Rzechula\_Assignment\_8\_2\_WhatABook\_DatabaseModelingScripts

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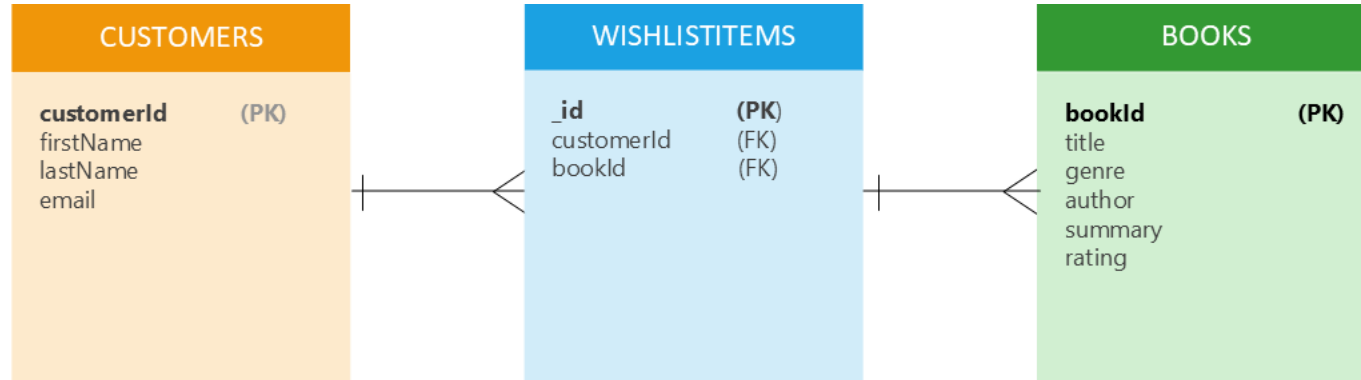
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Description: Assignment 8.2 - WhatABook Database Modeling and Scripts

## ORD

Collections:

- Books
- Customers
- Wishlistitems



- A customer can have many wishlist items.
- Each wishlist item links a customerId and bookId.
- Books are not nested — they remain a separate collection.

## NoSQL Data structure

```
// install-whatabook
```

```
use whatabook;
db.dropDatabase();

// Create collections
db.createCollection("books");
db.createCollection("customers");
db.createCollection("wishlistitems");

// Create books
db.books.insertMany([
  {
    bookId: "B1001",
    title: " The Midnight Library ",
    genre: " Fantasy Fiction ",
    author: { authorId: "A1001", name: "" },
    summary: " A woman discovers a mysterious library between life and death that lets her explore all the lives she could have lived.",
    rating: 4.7
  },
  {
    bookId: "B1002",
    title: " The Silent Patient ",
    genre: " Psychological Thriller ",
    author: { authorId: "A1002", name: "" },
    summary: " A famous painter shoots her husband and never speaks another word. A psychotherapist becomes obsessed with uncovering her motive. ",
    rating: 4.5
  },
],
```

```
{
  bookId: "B1003",
  title: " Where the Crawdads Sing ",
  genre: " Mystery / Coming-of-Age ",
  author: { authorId: "A1003", name: "" },
  summary: " An abandoned girl grows up alone in the marshlands of North Carolina and becomes entangled in a murder
investigation. ",
  rating: 4.3
},
]);
```

```
// Create customers
```

```
db.customers.insertMany([
  {
    customerId: "C1001",
    firstName: "Ryesha",
    lastName: "Reed",
    email: "rreed@books.com",
    wishlist: ["B1001", "B1002"],
    favorites: ["B1002"]
  },
  {
    customerId: "C1002",
    firstName: "Joe",
    lastName: "Green",
    email: "green@books.com",
    wishlist: ["B1001"],
```

```
    favorites: ["B1002"]
  },
  {
    customerId: "C1003",
    firstName: "Jennifer",
    lastName: "Lagerlout",
    email: "jlagerlout@books.com",
    wishlist: ["B1003"],
    favorites: []
  },
];
```

```
// Create wishlists
db.wishlistitems.insertMany([
  { customerId: "C1001", bookId: "B1001" },
  { customerId: "C1002", bookId: "B1002" },
  { customerId: "C1002", bookId: "B1001" },
  { customerId: "C1003", bookId: "B1003" },
]);
```

## Queries

```
// Display all books
db.books.find({}, { _id: 0, title: 1, author: 1, genre: 1 });

// Display a list of books by genre
db.books.find({genre: "Fantasy Fiction" }, { _id: 0, title: 1, author: 1 });
```

```
// Display a list of books by author  
db.books.find({ "author.name": "Delia Owens" }, { _id: 0, title: 1, genre: 1 });
```

```
// Display all books  
db.books.findOne({ bookId: "B1002" });
```