# **ReSource**Data Design Document

## Submitted to:

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In partial fulfillment of Academic Requirements for the course CS 191 Software Engineering I of the 1st Semester, AY 2019-2020

## Unique Reference:

The documents are stored in the https://github.com/mathena828/ReSource.

ReSource - Data Design.pdf

## Document Purpose:

The purpose of this document is to lay down the groundwork for the database design. It specifies the data elements that will constitute each of the classes. The organization of information on the web application will follow this general structure.

#### Target Audience:

The target audience of this document is the CS 191 and CS 192 Software Engineering classes of the academic year 2019 to 2020, as well as other individuals who may need to evaluate the functional requirements of this project. The members of Group No. 2, namely, Jaira Mathena B. Angeles, Danilo M. Mendoza II, and Beatrice Pauline R. Mercado will be creating and referencing this model. Professor Ma. Rowena C. Solamo will be evaluating the contents of this submission to ensure that it fulfills the criteria for this academic requirement.

#### **Revision Control**

#### History Revision:

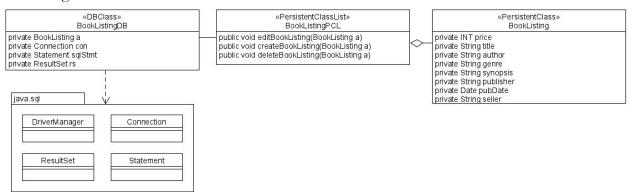
| Revision<br>Date | Person Responsible             | Version<br>Number | Contribution/Modification  |
|------------------|--------------------------------|-------------------|--|
| 10/11/2019       | Jaira Mathena Angeles          | 1.0               | She filled out the preface, List of Data Source, and the Logical Database Design section.      |
| 10/24/2019       | Danilo M. Mendoza II           | 2.0               | Created the Data Design models and filled in the Data<br>Access Object(DAO) or DBClasses table |
| 10/24/2019       | Beatrice Pauline R.<br>Mercado | 3.0               | Filled in the table for Transfer Object or Persistent Classes.                                 |

System: ReSource Book Trading System Version: 3.0

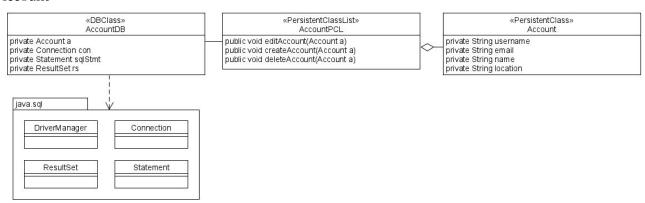
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## Data Design:

## BookListing



#### Account



# Data Access Object (DAO) or DBClasses:

| Class Name    | Description  |
|---------------|--|
| BookListingDB | This database is responsible for storing and retrieving book listing records |
| AccountDB     | This database is responsible for storing and retrieving account records      |

# TransferObject or Persistent Classes:

| Class Name     | Description  |  |  |
|----------------|--|--|--|
| BookListingPCL | his persistent class is responsible for maintaining the record for the book listing prough create, edit, and delete functions. |  |  |
| BookListing    | This persistent class is responsible for holding a single book listing record.   |  |  |
| AccountPCL     | This persistent class is responsible for maintaining the record for the accounts through create, edit, and delete functions.   |  |  |
| Account        | This persistent class is responsible for holding a single account record.  |  |  |

# List of Data Source:

Database Name: Book Inventory Database

**Description:** This is the database that contains the inventory of books being sold by sellers on the ReSource web application. The following is the list of tables:

| Tables  | Descriptions  |  |
|---------|---|--|
|         | It contains the records of all the books posted by sellers on the platform. |  |
| Account | It contains the account records.  |  |

# Logical Database Design:

#### воок

| ID       | Title            | Author            | Price            | Genre                    | Publisher        | Publication_Da<br>te | Synopsis                                      | Seller           |
|----------|------------------|-------------------|------------------|--------------------------|------------------|----------------------|---|------------------|
| SMALLINT | VARCHAR<br>(255) | VARCHAR<br>(255)  | DECIMAL<br>(8,2) | VARCHAR<br>(255)         | VARCHAR<br>(255) | DATE                 | VARCHAR<br>(5000)                             | VARCHAR<br>(255) |
| 9999     | X (255)          | X (255)           | 999999.99        | X (255)                  | X (255)          | MM-DD-YYYY           | X(5000)                                       | X (255)          |
| PK,SA    | NN               | NN                | NN               |                          |                  |                      | NN  | FK, NN           |
| 1        | The Hobbit       | J.R.R.<br>Tolkien | 250.00           | Fantasy                  | Allen & Unwin    | 09-21-1937           | In a hole in the ground there lived a hobbit  | legolas          |
| 2        | The Lorax        | Dr. Seuss         | 150.50           | Children's<br>Literature | Random House     | 06-23-1971           | Long before saving the earth                  | once_ler         |
| 3        | 1984             | George<br>Orwell  | 580.00           | Dystopian<br>Fiction     | Harvill Secker   | 06-08-1949           | Winston<br>Smith works<br>for the<br>Ministry | BigBrother       |

#### ACCOUNT

| Username      | Email                    | Name          | Location                    |  |
|---------------|--------------------------|---------------|-----------------------------|--|
| VARCHAR (255) | VARCHAR (255)            | VARCHAR (255) | VARCHAR (255)               |  |
| X (255)       | X (255)                  | X (255)       | X (255)                     |  |
| PK, UA        | NN                       | NN            | NN                          |  |
| legolas       | one_ring@yahoo.com       | Orlando Bloom | Woodland Realm,<br>Ithilien |  |
| once_ler      | thneedle@gmail.com       | Danny DeVito  | Thneedville                 |  |
| BigBrother    | the2minutehate@gmail.com | Winston Smith | Aistrip One,<br>Oceania     |  |