**Readle**

**The Book Cataloging System**

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**Readle – Book Cataloging System**

# **Functionality Guide**

Readle is a user-friendly book cataloging system which is designed to maintain and organize a personal small library of books. It helps registering user, adding books to the book list and perform certain tasks such as deleting or filtering. Its core functionalities include:

## User Authentication

We have created to pages for registration and login named “register.php” and “login.php”. The user will not be able to add books to the book list or access the book list if it’s not logged in.

## Add Books to the Book List

“add\_books.php” helps the logged in user to add books according to their preferences. It prompts the user for book’ title, author as well as genre. After the book is successfully added to the book list. It will display personalised library to the user.

## Book List and Its Features

“book\_list.php” includes a personalised library which will have all the books added by the user. Furthermore, it allows the user to see the details of the book, edit or delete it. It also performs functions like searching and filtering from the book list.

# **Database Description**

## Users

* id: It automatically generates the ID for the users.
* username: It stores the username which is added by the user. It is a mandatory field.
* password: It stores the password for the username. It is a mandatory field.
* email: It stores the email address for the user. It is mandatory field.
* created at: It shows the time when the user was registered or created.

## Books

* id: It automatically generates the data entered.
* user\_id: It gets the id from the book added.
* title: it is the title of the book. It is mandatory field.
* author: It stores the name of the author. It is a mandatory field.
* genre: It stores the genre of the book. It is a mandatory field.
* added at: it stores the time when the book was added.

# **Database Definition Code**

-- database/books.sql - SQL file to create the database and tables

-- This file contains SQL statements to create the 'book\_catalog' database

-- and the 'books' and 'users' tables.

-- Create the database if it doesn't exist

CREATE DATABASE IF NOT EXISTS book\_catalog;

-- Use the book\_catalog database

USE book\_catalog;

-- This SQL script creates the necessary tables for the Book Cataloging System.

-- --------------------------------------------------------

-- Table structure for table `users`

-- Stores user account information

CREATE TABLE `users` (

  `id` int(11) UNSIGNED AUTO\_INCREMENT PRIMARY KEY,

  `username` varchar(50) NOT NULL UNIQUE,

  `password` varchar(255) NOT NULL, -- Store hashed passwords

  `email` varchar(100) NOT NULL UNIQUE,

  `created\_at` TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_unicode\_ci;

-- --------------------------------------------------------

-- Table structure for table `books`

-- Stores book information, including the user who added it

CREATE TABLE `books` (

  `id` int(11) UNSIGNED AUTO\_INCREMENT PRIMARY KEY,

  `user\_id` int(11) UNSIGNED NOT NULL, -- Foreign key to link book to a user

  `title` varchar(255) NOT NULL,

  `author` varchar(255) NOT NULL,

  `genre` varchar(100) DEFAULT NULL,

  `added\_at` TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

  FOREIGN KEY (`user\_id`) REFERENCES `users`(`id`) ON DELETE CASCADE -- If a user is deleted, delete their books

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4\_unicode\_ci;

# **Database Connection Script**

<?php

// server/db\_connect.php - Database connection script

// This file establishes a connection to the MySQL database.

// It's included in other PHP files that need to interact with the database.

$servername = "localhost"; // Change if your MySQL server is on a different host

$username = "root"; // Change to your actual database username

$password = ""; // Change to your actual database password

$dbname = "book\_catalog"; // Change to your actual database name

// Create connection

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($conn->connect\_error) {

die("Connection failed: " . $conn->connect\_error); // Terminate script on connection error

}

?>

# **Contribution in Assignment**

|  |  |
| --- | --- |
| **Tasks** | **Members Name** |
| Front-end | Navleen Kaur |
| Back-end | Prabhsimran Kaur |
| Documentation | Prabhsimran Kaur & Navleen Kaur |