

Online Library System User Manual

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1 Introduction

The Online Library System is a web-based application designed to manage books efficiently. It allows users to register, log in, search for books, borrow and return books, and add new books to the database. The system provides a user-friendly interface to streamline library operations.

2 Features

- **User Registration and Login:** Users can create accounts and authenticate themselves.
- **Search for Books:** Users can search for books using various filters.
- **Borrow Books:** Users can borrow available books.
- **Return Books:** Users can return borrowed books.
- **Add New Books:** Admin users can add new books to the database.

3 System Requirements

- **Operating System:** Windows, macOS, or Linux
- **Python Version:** Python 3.6 or higher
- **Dependencies:** Listed in `requirements.txt`

4 Installation

4.1 Cloning the Repository

Open your terminal or command prompt and run:

```
git clone https://github.com/cylissama/dbms-project.git
cd dbms-project
```

4.2 Creating a Virtual Environment

- **Windows:**

```
python -m venv venv
venv\Scripts\activate
```

- **macOS/Linux:**

```
python3 -m venv venv
source venv/bin/activate
```

4.3 Installing Dependencies

- **Windows:**

```
pip install --upgrade pip
pip install -r requirements.txt
```

- **macOS/Linux:**

```
pip3 install --upgrade pip
pip3 install -r requirements.txt
```

4.4 Applying Migrations

```
python manage.py migrate
```

4.5 Creating a Superuser

To access the admin interface, create a superuser:

```
python manage.py createsuperuser
```

Follow the prompts to set up the superuser account.

4.6 Running the Development Server

Start the server using:

```
python manage.py runserver
```

Access the application at `http://127.0.0.1:8000/`.

5 Usage

5.1 User Registration

Navigate to the registration page and provide the required details to create an account.

5.2 User Login

Use your credentials to log in to the system.

5.3 Searching for Books

Utilize the search bar to find books by title, author, ISBN, genre, or availability.

5.4 Borrowing Books

Authenticated users can borrow available books by clicking the "Borrow" button next to the desired book.

5.5 Returning Books

To return a borrowed book, navigate to your profile and mark the book as returned.

5.6 Adding New Books

Authenticated users can add new books by accessing the "Add Book" section and providing the necessary information.

6 Admin Interface

Access the admin interface at <http://127.0.0.1:8000/admin/> using superuser credentials. Here, you can manage users, books, and other data.

7 Troubleshooting

- **Server Issues:** Ensure all dependencies are installed and the virtual environment is activated.
- **Database Errors:** Verify that migrations have been applied correctly.
- **Authentication Problems:** Confirm that you are using the correct credentials.

8 Contact Information

For further assistance, contact:

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