Library Management Application

Author

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Video

https://drive.google.com/file/d/1ihIMQgZEJOAEUEwdQf85yIRldis8BDKY/view?usp=sharing

Description

The Library Management System is a modern solution for efficiently managing e-books and sections in a library environment. Developed using Flask for API and VueJS for the user interface, it offers essential functionalities for both librarians and users. Librarians can add, edit, and remove sections and e-books, while users can search for and request books. The system employs role-based access control for secure user authentication and features backend jobs for exporting, reporting, and sending emails daily and APIs for interaction with library resources.

Technologies used

* Python and following modules
* amqp==5.2.0
* aniso8601==9.0.1
* async-timeout==4.0.3
* bcrypt==3.2.2
* billiard==4.2.0
* blinker==1.5
* cachelib==0.9.0
* celery==5.3.5
* cffi==1.16.0
* chardet==5.2.0
* click==8.1.3
* click-didyoumean==0.3.0
* click-plugins==1.1.1
* click-repl==0.3.0
* colorama==0.4.6
* dnspython==2.3.0
* email-validator==1.3.1
* Flask==2.2.3
* Flask-Caching==2.1.0
* Flask-Excel==0.0.7
* Flask-Login==0.6.2
* Flask-Principal==0.4.0
* Flask-RESTful==0.3.10
* Flask-Security-Too==5.1.2
* Flask-SQLAlchemy==3.0.3
* Flask-WTF==1.1.1
* greenlet==2.0.2
* idna==3.4
* importlib-metadata==6.0.0
* itsdangerous==2.1.2
* Jinja2==3.1.2
* kombu==5.3.3
* lml==0.1.0
* MarkupSafe==2.1.2
* passlib==1.7.4
* prompt-toolkit==3.0.40
* pycparser==2.21
* pyexcel==0.7.0
* pyexcel-io==0.6.6
* pyexcel-webio==0.1.4
* python-dateutil==2.8.2
* pytz==2023.3.post1
* redis==5.0.1
* six==1.16.0
* SQLAlchemy==2.0.6
* texttable==1.7.0
* typing\_extensions==4.5.0
* tzdata==2023.3
* vine==5.1.0
* wcwidth==0.2.9
* Werkzeug==2.2.3
* WTForms==3.0.1
* zipp==3.15.0
* Sqlite for database
* Flask for API
* Vue.js for UI
* Bootstrap for css
* Redis for caching
* Redis and Celery for batch jobs

DB Schema Design

