# Library Management Application*

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* Name TBD

# System Description

Application with administrator users and end users

- For administrator, provide tasks to easily manage a library (e.g. adding, deliting, and editing books)
- For end user, provide tasks to easily utilize library resources (e.g. check-out books, search books)

# Planned Implementation*

- Database
  - Supported by SQLAlchemy
- Backend
  - Python Flask
- Front-end
  - HTML and CSS



* Subject to change

# Key Use Cases

**For librarian and end user:**

- To search books by different traits (author name, title, genre)

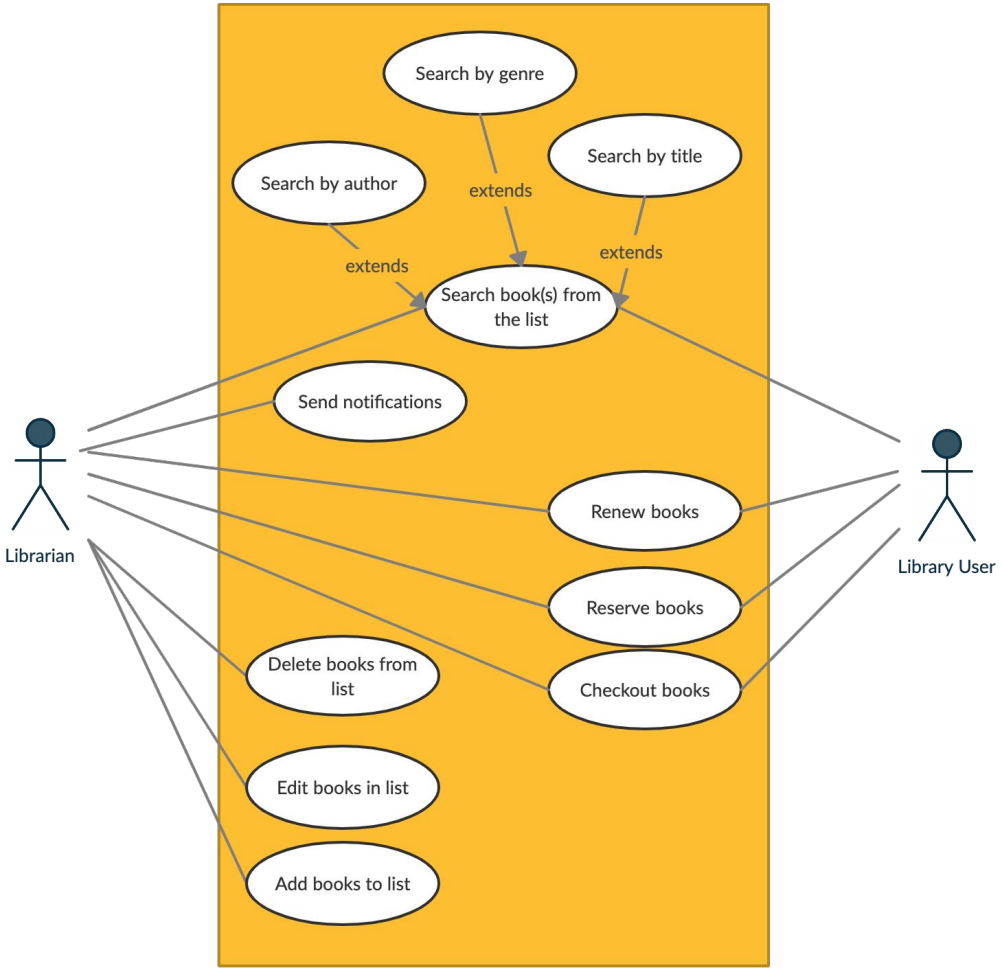
**For end user:**

- Check-out books
- Reserve books if not available

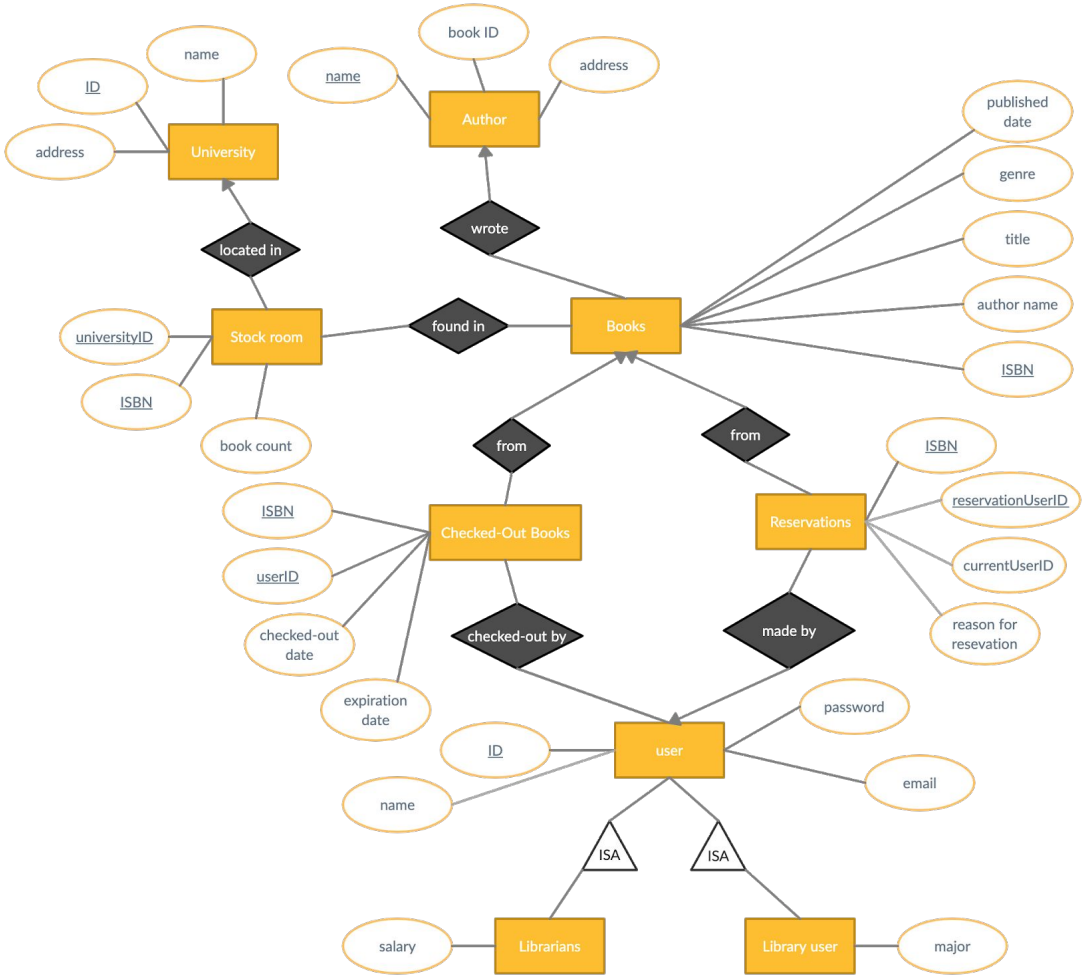
**For librarian:**

- Add, delete and edit books

# User-Case Diagram



# E/R Diagram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salary
Librarians
Library user
major

# Relational Schema

**Books:**
- **b_isbn**, b_authorname, b_title, b_genre, b_publisheddate

**Checked-out Books:**
- **cb_isbn**, **cb_userid**, cb_checkeddate, cb_experiationdate

**Reservations:**
- **r_isbn**, **r_fromuserid**, r_currentuserid, r_reason

**Users:**
- **u_userid,** u_name, u_email, u_password

**Librarians**
- **l_userid**, l_salary

**Library users:**
- **lu_userid**, lu_major

**Authors:**
- **a_name**, a_isbn, a_address

**Stock room:**
- **s_universidtyid**, **s_isbn**, s_bookcount

**University:**
- **uni_id,** uni_name, uni_address

**Checked-by:**
- **cby_isbn**, **cby_userid**

**Found-in:**
- **f_uniid**, **f_isbn**

# Thanks!

Any questions?