

# LibraryProject (Django) - one-page summary

What it is: Django 6 sample of library relationships with role-aware views.

Who it's for: Django learners or instructors needing clear model examples.

What it does:

- Core models: Author, Book, Library, Librarian, UserProfile (role choices).
- Relationships: Book FK Author; Library ManyToMany Book; Librarian OneToOne Library.
- Lists all books with author names at /relationship\_app/books/.
- Library detail page served via class-based DetailView.
- Registration/login/logout use Django auth forms (AuthenticationForm, UserCreationForm).
- Role dashboards for Admin/Librarian/Member guarded by decorators.
- post\_save signal auto-creates a UserProfile when a User is added.
- bookshelf app holds a separate Book model plus CRUD how-to snippets.

How it works (architecture):

- Project: LibraryProject settings/urls include apps relationship\_app and bookshelf.
- Persistence: SQLite (db.sqlite3) configured in settings.py.
- Routing: project URLs include relationship\_app.urls; templates live under relationship\_app/templates.
- Data flow: requests -> views -> ORM queries -> templates; auth uses built-in forms.
- Login/logout template files referenced but not found in repo.

How to run:

- 1) `python3 -m venv venv && source venv/bin/activate`
- 2) `pip install django==6.0.1`
- 3) `python manage.py migrate`
- 4) `python manage.py runserver`
- 5) Open `http://127.0.0.1:8000/relationship_app/books/`