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-- 1Create the LibraryManagementSystem Database
CREATE DATABASE LibraryManagementSystem;
-- 2Switch to the new database
USE LibraryManagementSystem;
-- 3 Create Tables
-- auth_user Table: user info table
CREATE TABLE auth user (
  id INT NOT NULL AUTO INCREMENT,
  password VARCHAR(128) NOT NULL,
  is superuser TINYINT(1) NOT NULL,
  username VARCHAR(150) NOT NULL,
  first name VARCHAR(30) NOT NULL,
  last name VARCHAR(30) NOT NULL,
  email VARCHAR(254) NOT NULL,
  content type id INT NULL,
  PRIMARY KEY (id),
  UNIQUE (username),
  FOREIGN KEY (content type id) REFERENCES django content type (id)
);
-- library_book Table: This table stores information about the books available in the library.
CREATE TABLE library book (
  id INT NOT NULL AUTO INCREMENT,
  title VARCHAR(100) NOT NULL,
  author VARCHAR(100) NOT NULL,
  isbn VARCHAR(13) NOT NULL,
  PRIMARY KEY (id),
  CHECK (isbn \geq 0)
);
-- library studentextra Table: This table stores additional information about the students(user
info).
CREATE TABLE library_studentextra (
  id INT NOT NULL AUTO INCREMENT,
  user id INT NOT NULL,
  enrollment VARCHAR(30) NOT NULL UNIQUE,
  PRIMARY KEY (id),
  FOREIGN KEY (user id) REFERENCES auth user(id)
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);
-- Table to store book issued
CREATE TABLE library issuedbook (
 id INTEGER NOT NULL PRIMARY KEY AUTO_INCREMENT,
 issuedate DATE NOT NULL,
 expirydate DATE NOT NULL,
 enrollment INT NOT NULL,
 isbn INT NOT NULL,
 FOREIGN KEY (enrollment) REFERENCES library studentextra (id) ON DELETE CASCADE ON
UPDATE CASCADE.
 FOREIGN KEY (isbn) REFERENCES library_book (id) ON DELETE CASCADE ON UPDATE CASCADE
);
-- 4 INSERTING INFO to tables
-- Sample data for auth user table
INSERT INTO auth user (password, is superuser, username, first name, last name, email)
VALUES ('password1', 1, 'admin', 'John', 'Doe', 'admin@example.com');
-- Sample data for library studentextra table
INSERT INTO library_studentextra (user_id)
VALUES (1);
-- Sample data for library book table
INSERT INTO library book (title, author, isbn)
VALUES ('The Catcher in the Rye', 'J.D. Salinger', '0316769177'),
  ('To Kill a Mockingbird', 'Harper Lee', '9780061120084'),
  ('1984', 'George Orwell', '9780451524935'),
  ('The Great Gatsby', 'F. Scott Fitzgerald', '9780743273565'),
  ('Pride and Prejudice', 'Jane Austen', '9780486284736');
-- Sample data for library_issuedbook table
INSERT INTO library issuedbook (issuedate, expirydate, enrollment, isbn)
VALUES ('2023-03-01', '2023-03-31', '20230001', '0316769177');
-- 5 BELOW TABLES GENERATED & HANDLED BY DJANGO (RUN first)
-- django model will automatically handle generating the SQL code needed for logins and other
related authentications.
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- -- We wrote it here to show what the model will contain
- -- django_content_type Table: This table stores information about the content types used by the Django models.

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CREATE TABLE django content type (
  id INT NOT NULL AUTO INCREMENT,
  app label VARCHAR(100) NOT NULL,
  model VARCHAR(100) NOT NULL,
  PRIMARY KEY (id),
  UNIQUE (app label, model)
);
-- django_admin_log Table
CREATE TABLE django admin log (
  id INT NOT NULL AUTO INCREMENT,
  action time DATETIME NOT NULL,
  user id INT NOT NULL,
  content type id INT NULL,
  object id LONGTEXT NULL,
  object repr VARCHAR(200) NOT NULL,
  action flag SMALLINT UNSIGNED NOT NULL,
  change_message LONGTEXT NOT NULL,
  PRIMARY KEY (id),
  FOREIGN KEY (user id) REFERENCES auth user (id),
  FOREIGN KEY (content_type_id) REFERENCES django_content_type (id)
);
-- auth_permission Table
-- This table links users with the permissions they have.
CREATE TABLE auth permission (
  id INT NOT NULL AUTO INCREMENT,
  name VARCHAR(255) NOT NULL,
  content type id INT NOT NULL,
  PRIMARY KEY (id),
  UNIQUE (name, content type id),
  FOREIGN KEY (content_type_id) REFERENCES django_content_type (id));
-- auth_user_user_permissions Table:
CREATE TABLE auth user user permissions (
  id INT NOT NULL AUTO INCREMENT,
  user id INT NOT NULL,
  permission id INT NOT NULL,
  PRIMARY KEY (id),
  UNIQUE (user_id, permission_id),
  FOREIGN KEY (user_id) REFERENCES auth user (id),
  FOREIGN KEY (permission id) REFERENCES auth permission (id)
);
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-- 6 Create Constraints

-- auth_group_permission Table
ALTER TABLE auth_group_permission
ADD CONSTRAINT fk_auth_group_permission_group
FOREIGN KEY (group_id)
REFERENCES auth_group(id);