Public Library Website

Description

The Public Library website provides an interface for users to manage their book rentals, and check out new books. A user can log in or sign up with a new account. Detailed book information is fetched from the OpenBook Book API and displayed. Users can view a list of the library's book inventory, a list of their current rentals, and their profiles. When the user clicks on a book, they can see more information about the book. The user can also choose to check in and check out a book. A user can also view and update their profile information.

Login Info for Testing:

Email: test@gmail.com
Password: secret

An account can also be created on the sign up page.

Home

The "Home" page displays library hours and a graphic. The navigation bar and footer persist across all pages, with the active page link darker. If a user tries to access the "Profile", "My Rentals", or "Inventory" pages without being authenticated, they will be redirected to the "Login" page.

Log In

The user must enter their email address and password of at least 6 characters. The password input will be checked against the password in the database, which was hashed with bcrypt. Once a user has logged in successfully, they will be redirected to their user profile. They will now be able to access the other pages and see their name displayed in the navigation bar. Clicking the new sign out link will log the user out by destroying the session.

Sign Up

The "Sign Up" page will allow a user to create a new account by entering their first name, last name, address, email address, and password. The user must confirm their password before registering their new account. Once a user has signed up successfully, they will be redirected to the login page.

Profile

The "Profile" page displays the user's personal information, retrieved from the users table of our database. If the user wants to edit their information, they can click on the edit profile button and update their first name, last name, address, and email address. Clicking the update profile info button will update these fields in the database. To change their password, a user can enter their old password and their desired new password. The old password will be checked against the existing password in the database after the update password button is clicked. After successfully updating their password or email address, the user will be able to log into their account using these new credentials.

My Rentals

The "My Rentals" page displays two lists of books: the user's currently checked out books and the user's rental history. For all books, the user can click on the "book info" button to open a modal. The script will fetch data on the book from the OpenBook API, and then display it in the modal. If a book is part of the rental history list, it will display the date the book was returned. If the book is currently checked out, a "return" button will allow the user to return the book to the library. This will update the checked_in field in our database, and the book will now be part of the user's rental history. The quantity of the book in the book table will increase by one since it has been returned.

Inventory

The "Inventory" page will run the inventory.js script and fetch a list of the books in the library inventory from the /api/books endpoint. The books will be displayed, with available books having a "rent" button. When a book is rented, its quantity in the inventory (and book table in the database) will decrease and a rental entry will be added. The user can filter the books by publisher using a select input, which has been populated with options from the /api/publishers endpoint. The user can also toggle a switch to display only available books. When this switch is on, books having a quantity of 0 in the books table will not be displayed.

API Usage

OpenLibrary API (External)

- /isbn endpoint:
 - Fetch book information and works/authors keys. (js/inventory.js line 109)
- /works endpoint:
 - Fetch book description. (js/inventory.js line 81)
- /authors endpoint:
 - Fetch author information. (js/inventory.js line 57)
- /isbn endpoint:
 - Fetch book information and works/authors keys. (js/myrentals.js line 57)
- /works endpoint:

- Fetch book description. (js/myrentals.js line 28)
- /authors endpoint:
 - Fetch author information. (js/myrentals.js line 5)

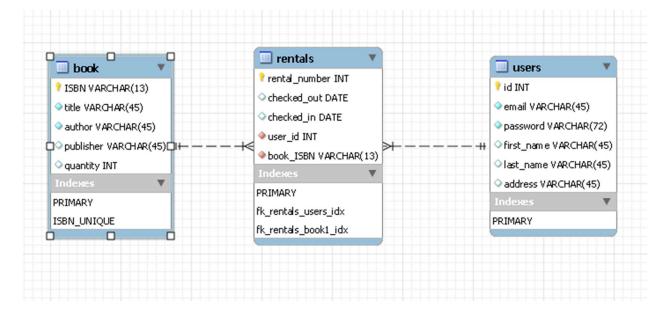
/api/publishers (Internal)

- Populate publisher options in select input. (js/inventory.js line 8) /api/books (Internal)
 - Get a list of books in inventory. (js/inventory.js line 19)

/api/published/:publisher (Internal)

- Get books in inventory by the publisher. (js/inventory.js line 35)

Database Model



Database Schema

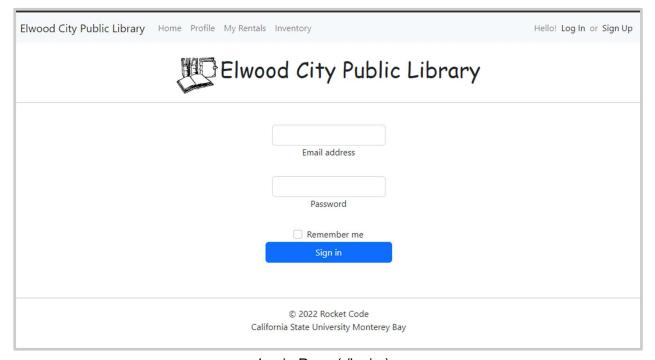
```
-- MySQL Workbench Forward Engineering
SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;
SET @OLD SQL MODE=@@SQL MODE,
SQL MODE='ONLY FULL GROUP BY, STRICT TRANS TABLES, NO ZERO IN DATE, NO ZERO DA
TE, ERROR_FOR_DIVISION_BY_ZERO, NO_ENGINE_SUBSTITUTION';
-- Schema mydb
CREATE SCHEMA IF NOT EXISTS `y1mm9iiz2lwypa94` DEFAULT CHARACTER SET utf8;
USE `y1mm9iiz2lwypa94`;
-- Table `mydb`.`book`
CREATE TABLE IF NOT EXISTS `y1mm9iiz2lwypa94`.`book` (
  `ISBN` VARCHAR(13) NOT NULL,
  `title` VARCHAR(45) NOT NULL,
 `author` VARCHAR(45) NOT NULL,
  `publisher` VARCHAR(45) NULL,
 `quantity` int,
  PRIMARY KEY (`ISBN`),
  UNIQUE INDEX `ISBN_UNIQUE` (`ISBN` ASC) VISIBLE)
ENGINE = InnoDB;
-- Table `mydb`.`users`
CREATE TABLE IF NOT EXISTS `y1mm9iiz2lwypa94`.`users` (
  `id` INT auto_increment NOT NULL,
  `email` VARCHAR(45) NOT NULL,
  `password` VARCHAR(72) NOT NULL,
  `first_name` VARCHAR(45) NULL,
  `last_name` VARCHAR(45) NULL,
  `address` VARCHAR(45) NULL,
  PRIMARY KEY (`id`))
ENGINE = InnoDB;
```

```
-- Table `mydb`.`rentals`
CREATE TABLE IF NOT EXISTS `y1mm9iiz2lwypa94`.`rentals` (
  `rental_number` int auto_increment NOT NULL,
  `checked out` DATE NULL,
  `checked in` DATE NULL,
  `user_id` INT NOT NULL,
  `book_ISBN` VARCHAR(13) NOT NULL,
  PRIMARY KEY (`rental_number`),
  INDEX `fk_rentals_users_idx` (`user_id` ASC) VISIBLE,
  INDEX `fk_rentals_book1_idx` (`book_ISBN` ASC) VISIBLE,
  CONSTRAINT `fk rentals users`
    FOREIGN KEY (`user_id`)
    REFERENCES `y1mm9iiz2lwypa94`.`users` (`id`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
  CONSTRAINT `fk rentals book1`
    FOREIGN KEY (`book_ISBN`)
    REFERENCES `y1mm9iiz2lwypa94`.`book` (`ISBN`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;
SET SQL_MODE=@OLD_SQL_MODE;
SET FOREIGN KEY CHECKS=@OLD FOREIGN KEY CHECKS;
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

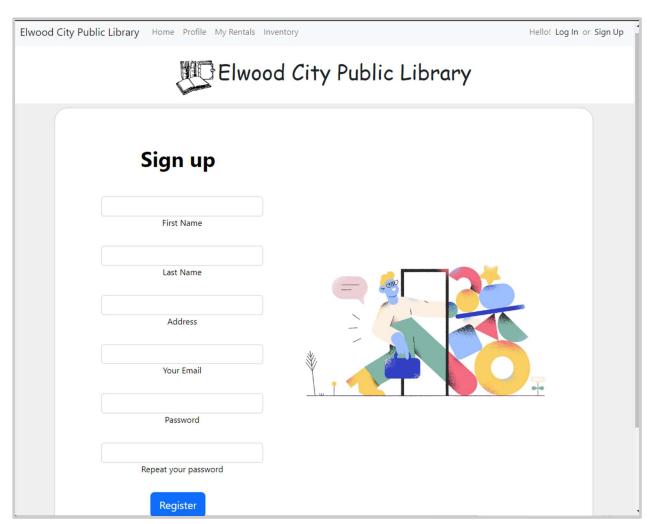
Screenshots



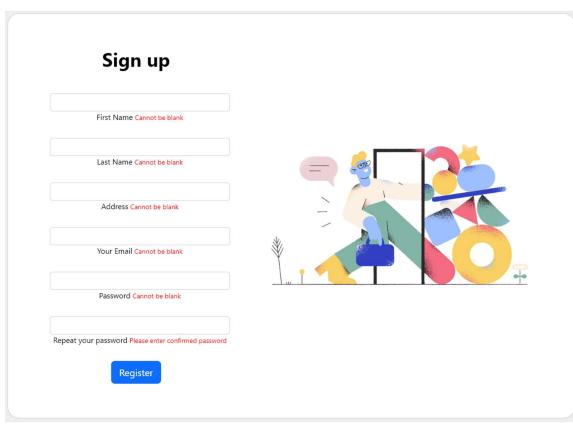
Home Page (/)

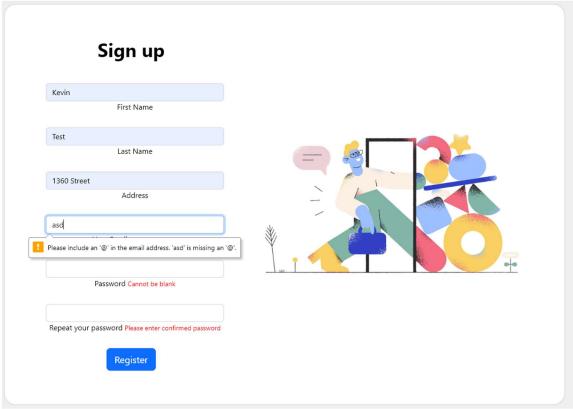


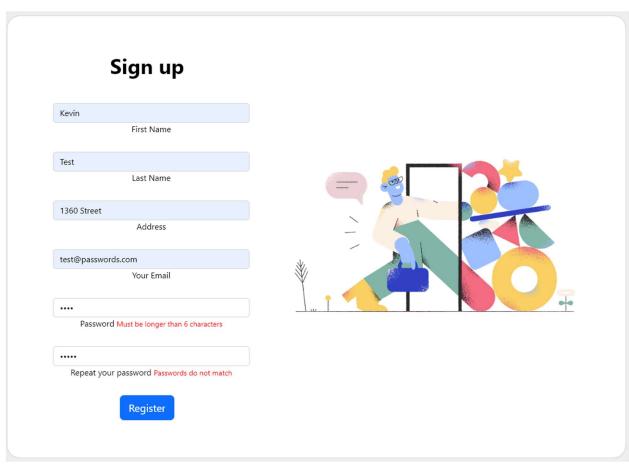
Login Page (/login)



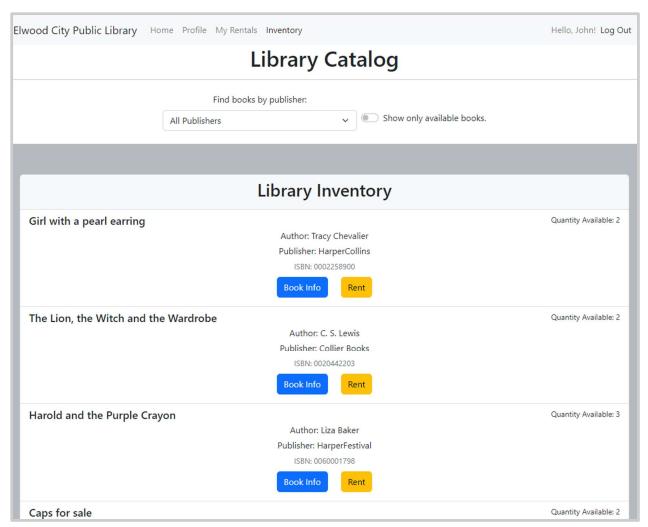
Sign Up Page (/signup)



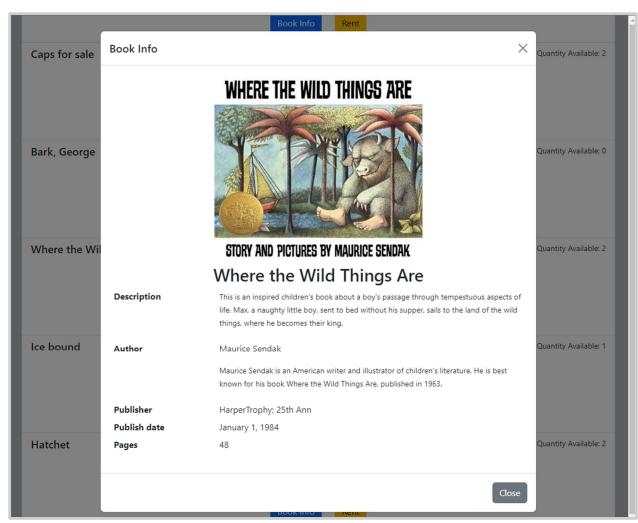




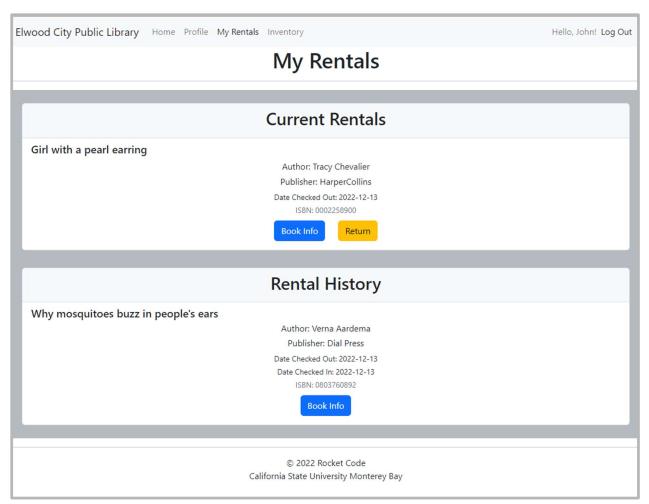
Sign Up Page Validation (/signup)



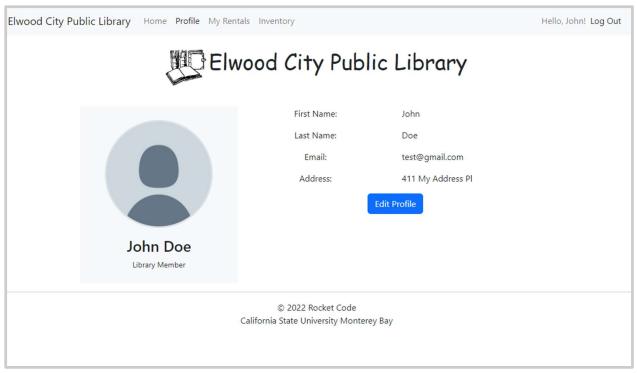
Inventory Page (/inventory)



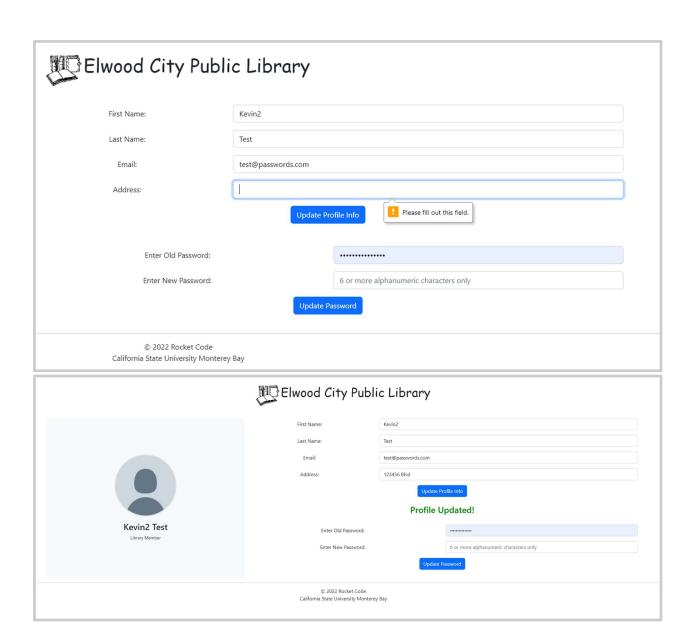
Book Info Modal (/inventory or /myrentals)

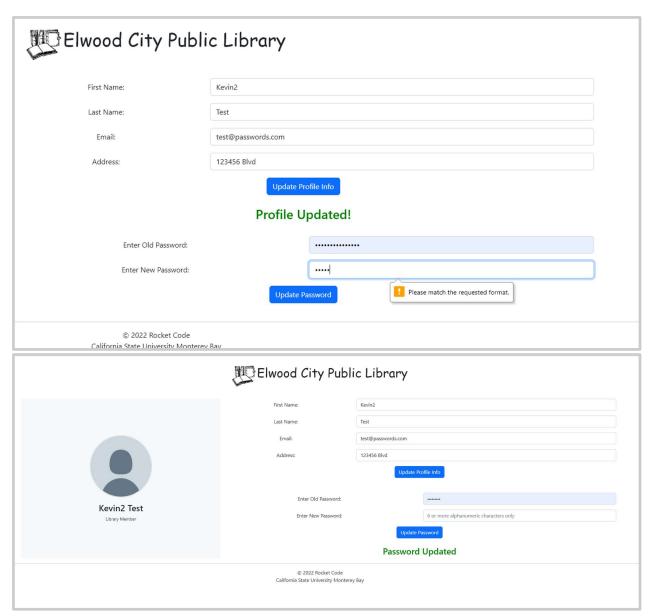


My Rentals Page (/myrentals)



Profile Page (/profile)





Edit Profile Page Validation (/profile/edit)