

BiblioSwap

Feasibility Presentation

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Overview

BiblioSwap is a web application that will allow users to upload their existing library of books they are interested in trading for new books.

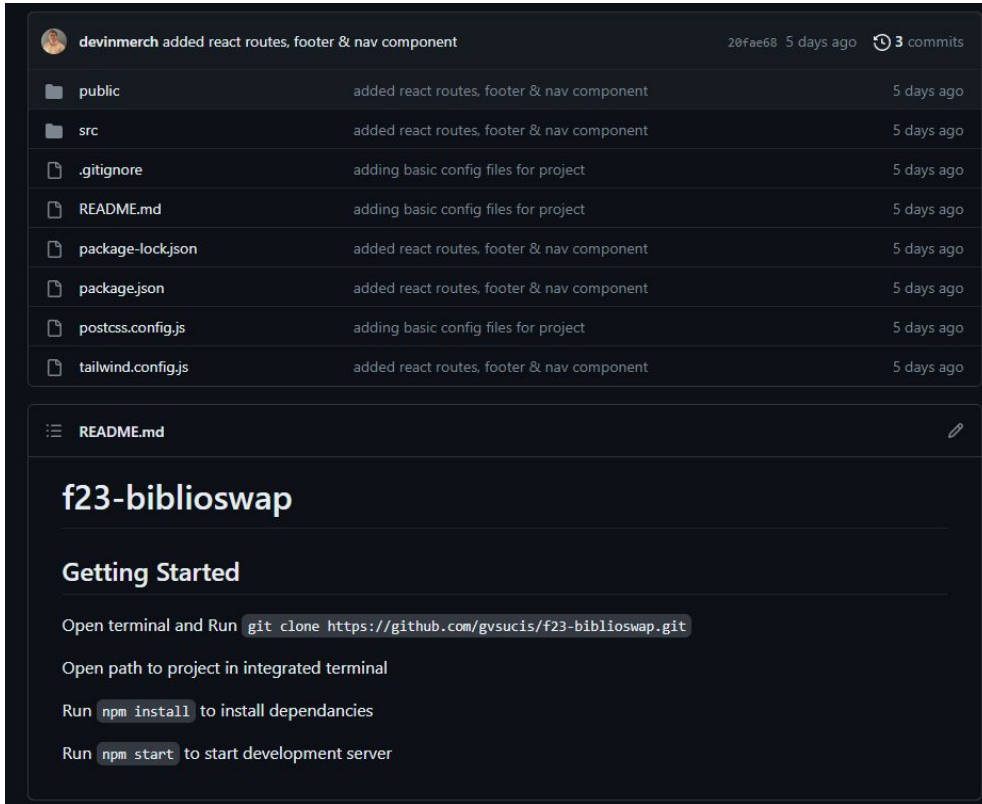
Users will be able to browse other's libraries and initiate a swap, in which they will pay shipping in order to select a book from someone else's library.

This allows the avid reader to rotate their library at a lower cost than buying new books.

Toolset

- Languages
 - React
 - HTML, CSS, JavaScript
 - Git
 - Tailwind
- Libraries
 - React Router
 - ESLint
- APIs
 - Axios - HTTP Requests
- Database
 - Firebase

Repository Structure - GitHub



The screenshot shows a GitHub commit page for user 'devinmerch' with the commit message 'added react routes, footer & nav component'. The commit is dated '5 days ago' and has '3 commits'. Below the commit information is a table of files added in this commit:

File	Commit Message	Time
public	added react routes, footer & nav component	5 days ago
src	added react routes, footer & nav component	5 days ago
.gitignore	adding basic config files for project	5 days ago
README.md	adding basic config files for project	5 days ago
package-lock.json	added react routes, footer & nav component	5 days ago
package.json	added react routes, footer & nav component	5 days ago
postcss.config.js	adding basic config files for project	5 days ago
tailwind.config.js	added react routes, footer & nav component	5 days ago

Below the file list is the README.md content for the repository 'f23-biblioswap'.

f23-biblioswap

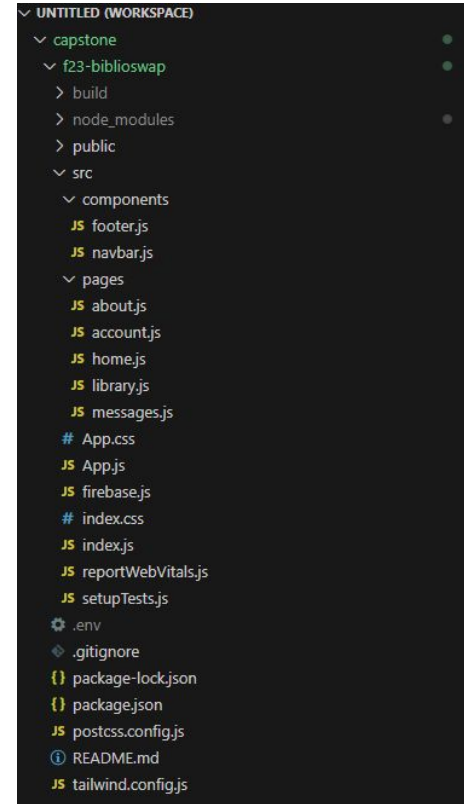
Getting Started

Open terminal and Run `git clone https://github.com/gvsucis/f23-biblioswap.git`

Open path to project in integrated terminal

Run `npm install` to install dependancies

Run `npm start` to start development server



The screenshot shows a file explorer view of the project structure. The root is 'UNTITLED (WORKSPACE)'. The structure is as follows:

- capstone
 - f23-biblioswap
 - build
 - node_modules
 - public
 - src
 - components
 - footer.js
 - navbar.js
 - pages
 - about.js
 - account.js
 - home.js
 - library.js
 - messages.js
 - App.css
 - App.js
 - firebase.js
 - index.css
 - index.js
 - reportWebVitals.js
 - setupTests.js
 - .env
 - .gitignore
 - package-lock.json
 - package.json
 - postcss.config.js
 - README.md
 - tailwind.config.js

System Organization & Development

Architecture

Frontend: Developed using React and Tailwind CSS.

Backend: Managed by Firebase, which includes database (Firestore), authentication, and other backend services.

Flow of Data

User Authentication: Handled by Firebase Authentication. Email/Password-based methods could be used.

Database Interaction: CRUD operations (Create, Read, Update, Delete) for books, users, swaps, etc., will be managed by Firebase's Firestore database.

Static Files: Book cover images, and user profile pictures can be stored in Firebase Storage.

Chat Features: Firebase Realtime Database or Firestore can handle chat systems.

Non-Trivial Requirements

- Adding multiple User Authentication(s) w/ Google or GitHub
- Book Recommendation Engine w/ AI Incorporation

Work Policies

- Weekly stand-up meetings
- Time-tracking using Clockify
- Code reviews are mandatory
- Testing
- Deliverables and Milestones
- Sprint Plan

Testing

- Responsive
- Test account(s) for user auth & swaps
- If time, use Jest library for React components

Deliverance and Milestones

- Sprint 1
 - Create login
 - Basic outline of all pages/routing
 - Allow user to add a book to their library
- Sprint 2
 - Implement Search Functionality
 - Add Book Details Page
 - Implement “Library” page of favorite books
- Spring 3
 - Implement Swapping
Functionality/communication
 - Set up Payment Estimator for shipping
- Sprint 4
 - Credit System
- Sprint 5
 - Enhance UI/UX
 - Optimize Performance
- Sprint 6
 - Final Testing
 - Deployment