

In the video attached, you can see the basic functionality of creating a product, publishing it and making it available to the user. Then the user can click on the product whilst browsing through available items and request a specific amount up to the amount in stock.

This does not affect the amount available until an admin authorizes the loan in the manage panel. You can allow people to join as admins or users by 2 different codes – an 8-digit one for normal users and a 16-digit code for admins.

Whilst waiting for the product to be authorized the user can view the request in the pending requests page and delete their request.

When the admin authorizes the loan, the transaction is moved to the collection ready tab where a QR code is available for the staff at the loaning centre to scan and retrieve product details and automatically check it out. This is done through the use of a simple QR code scanner and an API call which I have made but cannot unfortunately show. I have simulated this in the video with the use of Postman (it gave me an error but still worked).

Every night at midnight (where the server is based) a web worker is run on a separate thread to check all loaned items, their state and whether they are overdue. Items are then moved into overdue lists if so and emails are sent out using another separate worker thread so as not to jam up the main thread or slow the app down as a whole.

I have implemented my version of 2fa based on location history which works by checking 15 different data points and comparing them with previous values. If the overall difference in points is off by 20% (all recorded points), an email with a sign-in link will be dispatched. I wish I had just implemented this using my middleware instead of checking this at every API endpoint pretty much

From this project, I have taken away that I shouldn't be abandoning projects only to restart them. It only leads to burnout and not seeing more of my mistakes: I wouldn't have thought to use middleware for authentication had I not looked back at my code yesterday.

This took me a week and I never realised how close I was to completing it which is rather frustrating. I have to complete the update and delete functionality on the products and if I'd like to challenge myself I might do it with the users of an organisation.

Excuse the UI UX on this one - I found myself without internet so I didn't have access to Figma and didn't want to be unproductive. It was supposed to be a pure HTML project as I tend to focus on the front end too much.

Files are attached below