

# Advanced Web Tech Coursework

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## Website Concept:

The website I'll be creating is a site for books, comics and manga. The basic concept is a place for users to search, rate and review books they've read or are planning to read. It will have an array of features that a user can access by creating an account with the site, this will further the user experience. It'll give the website's users an opportunity to see the general response to books before reading them, will allow users to discuss and show off their collections and should show them possible purchase options for the books. There are two main inspirations for the website, these are a film app/website called "Letterboxd" (see appendix 1) for the main concept and features of the website and most general UK bookshops for the layout and general style/aesthetic of the website.

## Background Research:

As mentioned there are two main inspirations for the website. Through many years of patronage and using these websites I have a lot of background knowledge and research of their main goals and features. I have highlighted the main aspects of each of these inspirations for what features and styles I want to have and what they will bring to the final website.

### Letterboxd:

"Letterboxd" is an app/website that is made for movie lovers to discuss, rate and discover a whole range of different movies. The website contains many features to allow the users to achieve this through an account they can create and personalise. Through their account they can add ratings and reviews to films which will be public to other users around the world. Within the app the users can use a search bar to discover films and discover the information surrounding them. Furthermore, each movie has its own pages which includes a lot of different information, from cast and crew to genre to its overall rating. The accounts also have some further features. They can create movie lists such as "top four movies" or create watchlists for upcoming movies. Additionally, the user is able to follow and chat with other users about their passions.

"Letterboxd" includes a huge amount of other features but the ones mentioned and the main ones I wish to implement. These are the primary ones I believe would work well with the change of media and the concept I've come up with.

## Book stores

Finally, the other inspirations for this site would be general book shops in the UK like “Waterstones”(see appendix 2) or “Blackwells”(see appendix 3). These are the main book retailers around the UK that sell all kinds of genres of books. This inspiration is to more fit to their aesthetic of the site. Like these books shops I want this website to feel like a relaxing experience to the user. This means it should include warm colours, easy to use and generally a good time to be on. In addition to this, the website should be well organised. The pages should be well aligned and ordered as most libraries and bookshops are giving the user an overall easier time. Hopefully, this should give the user a more homely feeling allowing for a more enjoyable experience.



(Book Store - (See appendix 4))

## Features:

Three(possibly four) of the main features of the website will require a database to be linked to them. This is so the website can store and reuse the information inputted. These will be the ability for the user to make an account, add additions of books/comics to the website and then to add the ratings and reviews to these books/comics. It's important the databases are stored alongside the website so they can be used by anyone who runs the website from anywhere. Additional features should be the search bar and within account page tasks, like lists, upcoming reads and following/followers.

The feature to create an account should be one of the first things a user does when entering the website. Many of the other features will require an account to be accessed. The account creation will be a simple form page that the user will be redirected to if they try most activities without an existing account or being logged in. This page will give the user the option to log in but if an existing account doesn't exist there will be a hyperlink to a sign up page. The login page will simply ask for the users' username and password, while the sign up page will ask for other info like username, password, name, date of birth and email address. There should also be a check implemented on this form to make sure the username entered doesn't already exist. All the information from the user sign up will be stored in a respected database that'll be stored alongside the website.

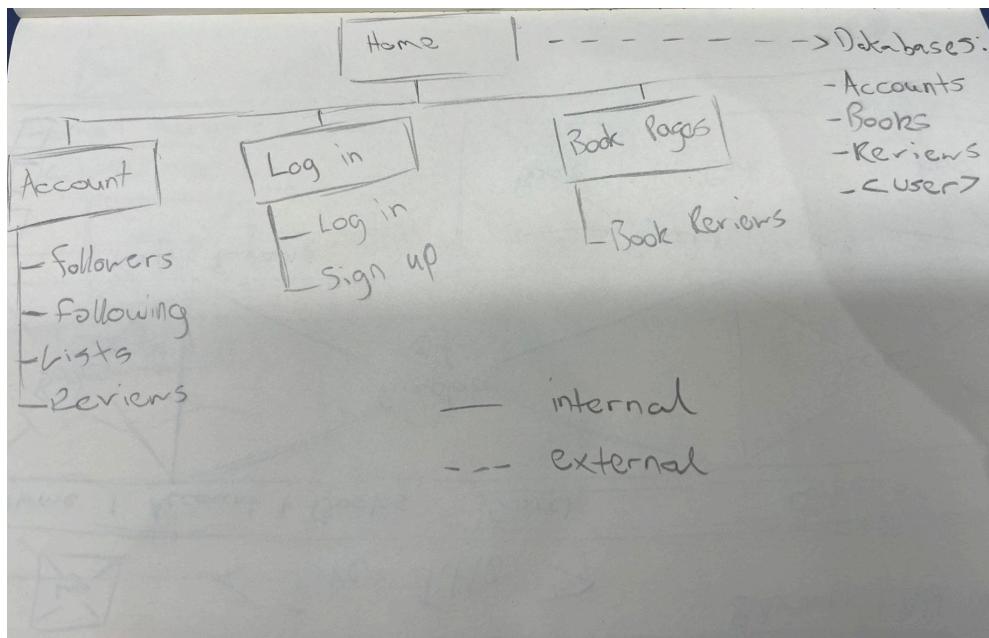
In addition to this, there will be the ability to add books to the websites' database. This gives all users a better experience as if they can't find the book they're looking for they can simply add it to the site. This will just be another form page the user can access through their account. It will ask for information about the book like title, author, artist(if applicable), genre, release, publisher, a brief description of what the book is about and possibly an image of the front cover of the book. This information will be stored in a different accompanying database as the user info. Furthermore, the database should also include the username of the account that submitted the book to the website. This will allow any inappropriate submission to be found and deleted with ease. The completion of this form will create an additional page to the website for that book which will store all of its information with the picture submitted of the book cover.

Finally, there is the ability for users to rate and review the books within the website. This doesn't mean they can only review the books they've added but any book within the database. This will allow users to express their feelings and thoughts on the books, further allowing users that wish to read the books an idea on them. This again will be a simple form page that receives information from the user. This will ask the user for the book and author they wish to review, their star rating(out of 5) and a brief description on

their thoughts on the book. There should be a check when reviewing the book that it exists within the books database. This will also be stored in its own separate database which again will store the user that made the review. I'm hoping that I can implement the options for users to see reviews of the books on the books respected page and on the home screen for most recent reviews. The reviews should hopefully also be seen on the users account page to show others their recent reads and reviews.

Other features within the website should be a simple search bar allowing users to find other accounts and/or books within the websites' database. This feature won't be hidden by the need for an account from the user, anyone should be able to use this. Additionally, within the users' account page they will be able to create lists that are shown on their page. These lists can range from "top 5 favourite books" to "best comics of the hulk". Any user with or without an account should be able to view these. Finally, the users should be able to add the upcoming reads they have. This will be shown through their pages.

The final feature should be for the users to follow and be followed by other accounts on the website. This will most likely require another database to be created when a users' account is created. This will store an ID for the user that will link to the websites' overall user database, it should also store the username of the accounts the respected user is following and being followed by. This information should hopefully be accessible through the users page in the following and followers buttons.



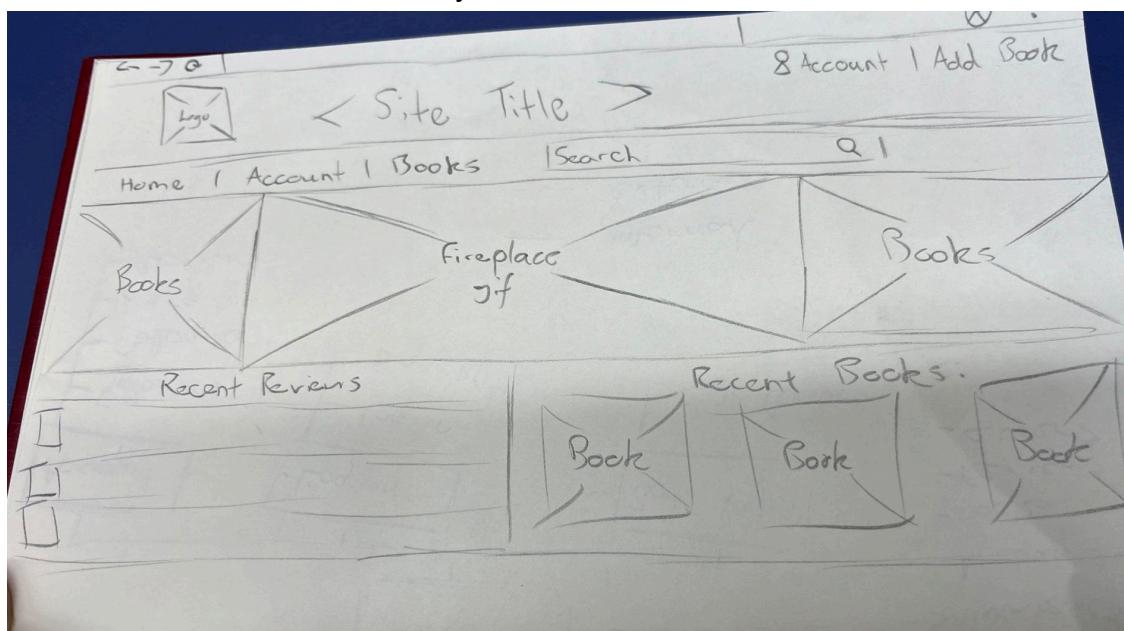
(Initial Design of Website's Hierarchical Structure)

## Implementation:

For the implementation stage of the project I plan to start by just making the barebones of the website. This means I want to start by just making it a functional website and adding the features I have previously mentioned. This is by far the most important part of the website. When I've got that completed I can then move onto focusing on making the website look good and fit the ideal vibe of the book shop that I was going for. I will, however, make the home screen the intended design first, including the preliminary drawings, this will allow me to have a good idea of what the rest of the website will look like finished with colour and images.

### Home Page:

As mentioned I will start the implementation of the website with the home screen as it is the base of the website and the first thing users see when entering. The home screen like all pages will include the name of the site and the logo at the top with a navigation bar at the top that will create easy access to other main pages of the site below. I would like it to include a .gif or video of a fireplace in the centre of the page, giving the desired warm feeling to the users mentioned earlier. Furthermore, the search bar should also be included next to the navigation bar. Below the fireplace should be two sections adjacent to each other. The section of the left should be site news, including any important or new information for the users. While the right side (I hope) will include recent reviews from all users. Even further below I would like to add a section for recent books added to the site, this should allow easy access for users to see new books.



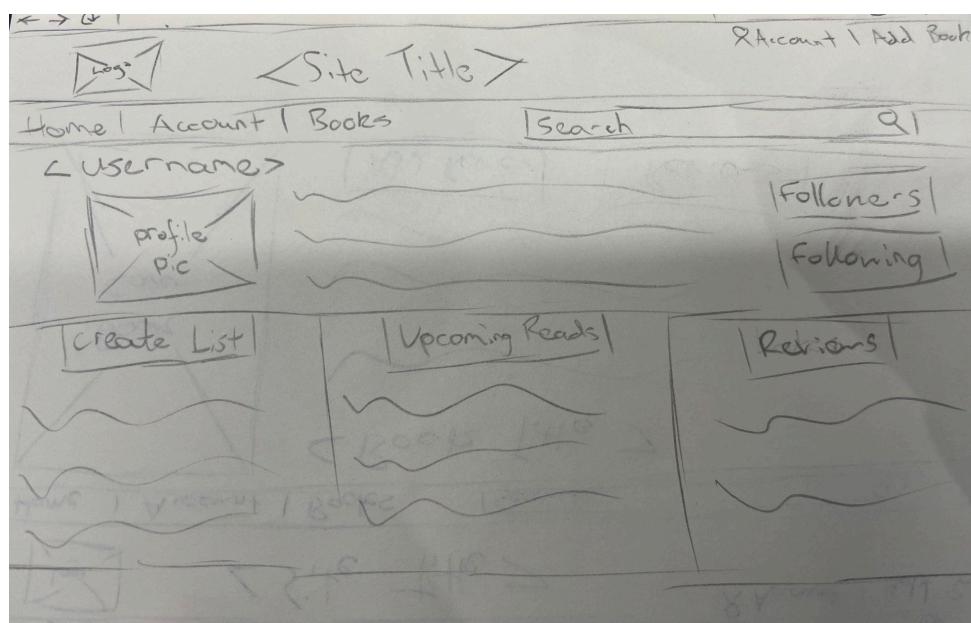
(Preliminary Sketch of Home Screen)

### Login/Sign up Form:

Next, I will go onto implementing the login and sign up features. This should be accessible from a button at the top right of the homescreen called "Account". When clicked it will redirect the user to the login page which will include the usual webpage parts(header, nav bar) and two form inputs for "username" and "password". Additionally, there will be a submit button below this. If the user doesn't have an existing account there will be a bit of info at the bottom saying "Don't have an account? Sign up!". The "Sign up!" will be a hyperlink to redirect them to the sign up page. This page will be a longer form including inputs for all the aforementioned information with a submit button below it. Finally, once logged in or signed up the user will redirect the user back to the home screen but now should include text saying "Welcome <user>!".

### Account Page:

Once an account is created, the account button will redirect the user to their own page. This page will include the users' username and other account information. There should include buttons for "following" and "followers" which will be implemented later. Below this in a separate section will be buttons. One for "create list" and one for "upcoming reads". When the "create list" button is pressed it should redirect the user to a new form page. Three inputs will be on this page, List title, List description and List entries. Below will be the usual submit button. Once pressed it should redirect to the account page with the new List title created in a new section titled "Lists". For the "upcoming reads" button it should simply ask for the book's title and author which'll be shown in a list below the button. Finally, below all this should show the most recent review created by the account, if no reviews have been made yet it should simply say "No reviews have been made".



(Preliminary Sketch of Account Page)

### Book Adder and Search Bar:

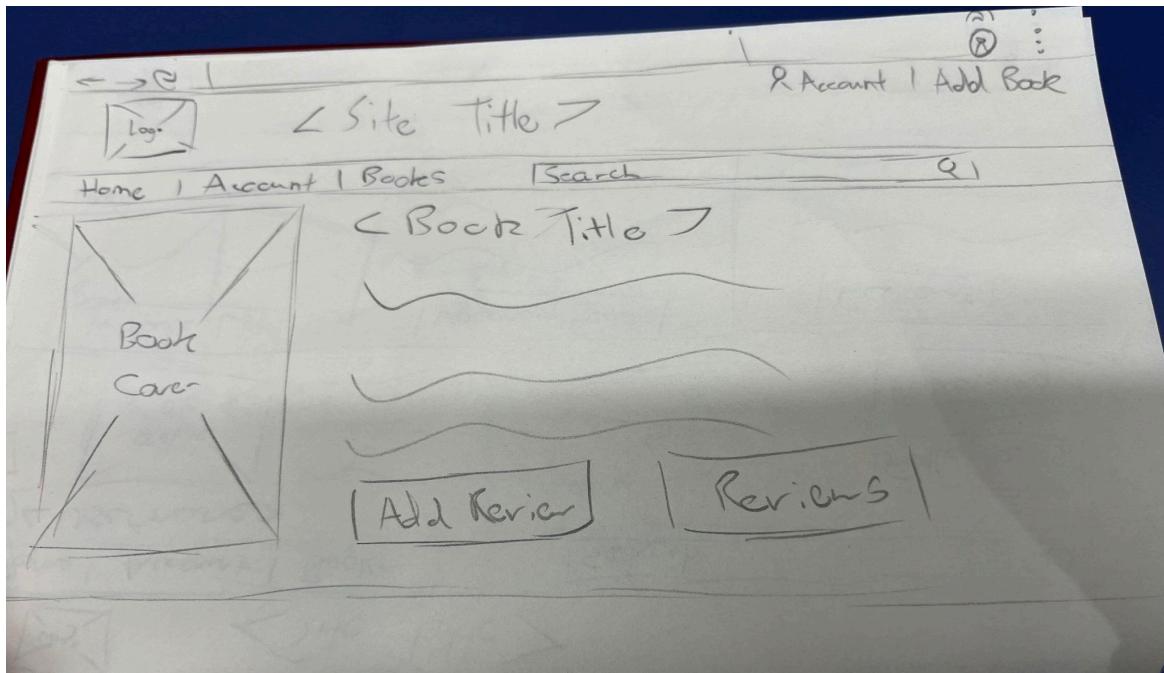
Next to the account button in the header should be the “add book” button. Once pressed it’ll redirect to yet another form page for adding books. It has the aforementioned inputs for the book information including an option to insert an image for the book cover. Once submitted the book and its respected information should be added to the books database. With the book in the database the user should be able to search the book within the search bar with keywords like title or author. The search bar should also be able to search for usernames. If the keyword entered can’t be found, an output message should be shown along the lines of “That keyword cannot be found!”. If a search is found it should send the user to a new page with a list of searches that apply to the keyword entered, these searches should also be hyperlinks for their respected pages.

### Book Reviews:

For the user to make reviews on books they’ll need to go to that books page through the search bar. On this page should include a button for “review book”. As usual it redirects a user to a form page to enter all the information for their book review. Like most form inputs from this website, it’ll be stored in a database. The top 3 most recent reviews made from anyone on the website should be shown on the front page for all to see, while the last review a user made should be shown on their account page. This should include a hyperlink button next to it which will redirect the user to a page of all the reviews that the account has made.

### Followers Feature:

To implement this feature like mentioned before there will be two buttons on all accounts for followers and following. When a user hits either button for the first time it will make them a follower of that account. Now that the user is following the account, pressing either button again will redirect to a page with a list of users either following or being followed by the account currently viewing. This information will come from that user’s database using the “following” and “followers” columns. Clicking on any accounts in these lists should redirect to that account’s respected page.



(Preliminary Sketch of a Book Page)

## Linked Database:

As mentioned several times before the site will have databases linked to it. This is purely so the site can receive and then use data entered by users to further the experience. There will be three main databases linked to the site and then a new database created following the creation of an account. The first database will be a list of all the accounts created within the site. This will store an ID for the account which will act as this database's primary key, the username and password, the user's name, date of birth and email address. Through this database, accounts and their information can be edited at the command of users or the defyment of any sort of terms of services. The next main database is the one that'll store all the books added to the website by users. This will store all information on the book like a book ID, title, author, genre, illustrator(if applicable), description, release date and an image ID. Alongside this database a file should be included that includes any image of book covers that are submitted by the site's users. This database's primary key will be the book ID and should also include the account ID which will be the foreign key so it can be known what account submitted the book. Finally, the last of the main databases is the book review data. This database should only include a review ID, the book ID of the book being reviewed, the star rating (out of 5), the written review and once again the user ID. This database will link to the previous two with the book and user ID's acting as the foreign keys and the review ID being the primary key for the database. Additionally, when any account is created by a

user another database will be created. This will act as a way to store the user's followers and following accounts. It will have three columns, the account ID(foreign key), the followers and the accounts the respected ID is following. This database will be used so other users can see the followings and followers of all accounts.

## Appendix

- 1) Letterboxd - <https://letterboxd.com/>
- 2) Waterstones - <https://www.waterstones.com/>
- 3) Blackwells -  
[https://blackwells.co.uk/bookshop/home?gad\\_source=1&qclid=Cj0KCQjw99e4BhDiARIsAISE7P8OMTVCTnn7UsxU\\_hKSOflOuAvqvV-4dCGIsXdSvIpZLmHg1gr7cWlaAvndEALw\\_wcB](https://blackwells.co.uk/bookshop/home?gad_source=1&qclid=Cj0KCQjw99e4BhDiARIsAISE7P8OMTVCTnn7UsxU_hKSOflOuAvqvV-4dCGIsXdSvIpZLmHg1gr7cWlaAvndEALw_wcB)
- 4) Book Store Image -  
<https://edinburgh.org/blog/eleven-of-edinburghs-best-bookshops/>

