1. **Interface AIM:**

Enabling faster user performance without taking a hit on time to learn and retention of skills.

The user interface is primarily designed keeping novice and intermediate users with some computer science background in mind. The UI mainly uses user’s visual understanding/mapping of the subject matter as primary mode to communication, which enables faster performance.

2. **User Profile:**

In general site was designed with an assumption that a visitor has some “Computer Science Background” (i.e. familiarity with computer science terms like programming, databases, web design and so on). Hence forth in this document, when we refer to “user/visitor” it means “a user with some computer science background”.

The interface built mostly caters to novice and intermediate users. Definitions of novice and intermediate users are as given below:

Novice users:

Very little computer skills and has fair understanding of computer science terms like programming, operating systems, databases etc. Technically someone who knows and understand what subject is about but not to extent where he can make a decision about a book solely on bases like code coverage, no of pages etc.

Novices are most of the times are looking for assessment than assertions (that is they are looking for decisions not opinions).

Intermediate Users:

Has familiarity to what books/commodities related websites functions like, (may be familiarity with sites like amazon.com). Fair knowledge of what one is looking for and how the books are evaluated.

Intermediate/Advanced user would look for assertions than assessments, they like to read reviews and opinions about the book along with its technical details.

**3. Interface Goals:**

Shniderman's Criteria and how they are taken care in the interface.

Time to learn – 1:

Is taken takes as primary concern for all design decisions reasons being.

* Given that a user would not visit this site on a daily basis, visitor should not be wasting time on learning very time he visits. Could be a frustrating experience.
* A novice can easily get lost if takes too long to get started with

Design decisions minimizing time to learn.

* Maintains the user syntax. Like on hovering change of pointer, starts to communicate rating of a book, hyper link’s default behavior. Example1 below demonstrates the use of user syntax
* Clear distinct side bar menu, with contextual changes to it.
* Consistency in design across the site.

Speed of performance -2:

Enabling user to find rating of a book and reviews with minimal of click or keystrokes is important as

* We know what a user has come in for, its either to rate a book or find out about a book. It would be no pleasant experience when user have to just spend minutes just searching for books its not physical library after all.
* Users give up search for a book within first few minutes, they just move on.

Design decisions to improve speed of a user

* Color combinations are maintained (like orange fade) is used to display prominent information on site. Especially the ones would miss user attention and is important
* Side menu items most of the time would need just a glance, instead of reading full item, as we have prominent icons to communicate the meaning of the menu items.
* We have graphical representations to convey if a books is Available in Paper back, Kindle and if its DRM free and so on. A screenshot attached below.



(Example1 Demonstrating Combination of Visual and textual elements to enable better performance speeds)

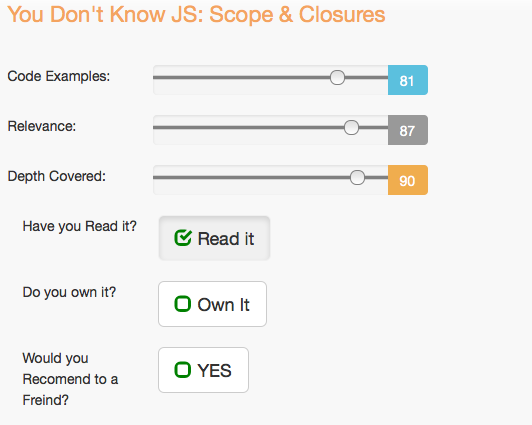
Rate of user errors – 4:

Individual user errors take a lower importance as,

* Displayed user rating on the ratings page is aggregate of the ratings, so would now have a huge impact on the overall rating
* And ratings without a comment are usually subjected to moderation.

Design decision to avoid User Errors:

* Type is totally absent in the process of rating a book. Hence eliminating a major probability of error occurring.
* As the ratings are ranges based, minor deviations from intended user rating does not change the meaning of the overall rating. Refer example Example2

(Example2: Avoiding user error by eliminating necessity to type in values)

Retention of skills -3:

Retention of skills takes a lower importance next to speed of performance

* Given the time to learn, interface does not force a user to retain much of “How to use”.

Design Decisions regarding Retention of skills

* Consistency in design across the screens.
* Adherence to basic user syntax

Subjective satisfaction -5:

As Subjective stratification tends hard to be measured, this is been given the least importance

Design decisions taking care of Subjective Satisfaction:

* Logos representing particular technology adds to some degree of satisfaction
* Color choices to indicate completed tasks.

**4. Rating system:**

Rating system choice (5 star rating was chosen):

5 star rating can be found everywhere. It is a standard rating scale that’s being used by popular marketplace sites like Amazon and most app stores. Because this system is so common,it is intuitive to average users in terms of how they interpret and cast the ratings (clicking on desire number of stars). Visually, star ratings are very appealing and noticeable compare to number or text (number of reviews), therefore it is easy for users to scan and compare a list of ratings at once. Lastly, scale rating is extremely powerful and flexible because you can obtain feedback with great detail by increasing the number of scale level.

While it became almost a design pattern on marketplace sites, some designers argue that star rating is bad and ambiguous because users have different interpretation of each scale level and most of the time users either like something or they hate it. People also like to mentioned that YouTube switched from 5 star rating to a binary system, however it only demonstrated that their users were rating their videos in a binary way therefore it’s logical for them to convert to a binary system and not necessary saying that binary rating is better than scale rating. Despite the flaws mentioned, star scale rating is extremely effective and should be used unless your user can benefit from a binary setup.

Considering that we cannot have absolute rating about code coverage, relevance and depth of subject matter in the textbook. The rating system in this project uses the aggregation technique to help novice user while presenting whole reviews to intermediate/advanced users.

Rating and there meanings:

To help novice users understand, a books summary provides the following

* Review’ s say. Conveys what users think about the book.
* A book is marked with there different levels
  + Beginner
  + Intermediate
  + Expert
* Relevance of the subject matter to the given date.

A book is marked as Must have only when a book 10 reviews and 8 out of them think it is a must have, and a emotions is used to convey the same.

A book gets marked with different user levels based on the depth of the subject matter.

Aggregate for various levels based on Depth rating

Exceeds 80% (all reviews combined) gets a Expert level

60% - 80% gets Intermediate level

10-60% gets Beginner level

Relevance of subject matter usually signifies the relevance of subject matter to the present industry conditions.

**5. Interface Screen Design:**

Most of the design decisions where made with the following questions in mind

-What is the targeted audience?

One with some computer science background and browser familiarity

- Why would a user visit this site?

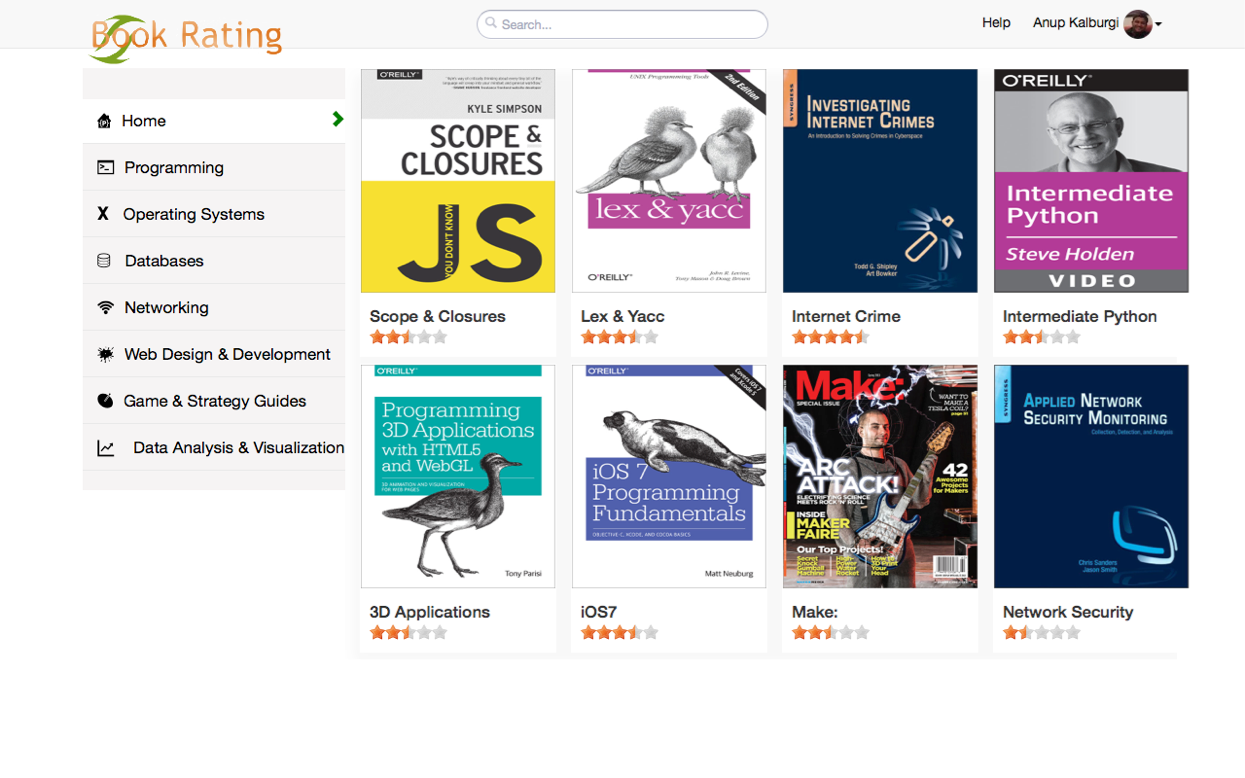
To find about a book, write a review and rate a book one has read

-How frequently a user would visit this site?

May be once in 15 days

Screen designs present in the system:

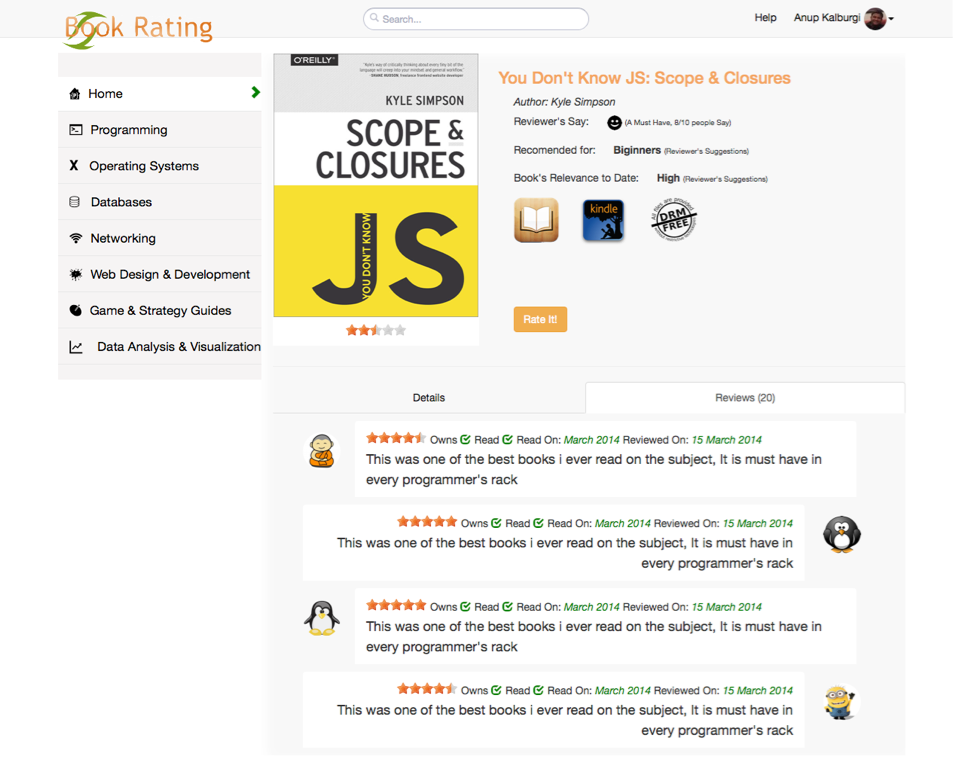
1. Home / Category specific page:



(Screen 1)

Design Considerations for screen (1)

1. Combination and visual and text based content to communicate various elements present on the screen.
2. Limited no of elements on the screen to 7+/-2. (7+or -2 rule )
3. The menu elements are arranged as per the popularity of the subject.
4. The menu elements change as per the context. A programming page would list all the available programming page.
5. Search immediately available with authors enabling faster usage for intermediate users
6. Avoided scrolling by limiting no of books displayed.
7. No horizontal scroll
8. Easy access to help and profile pages
9. This design is consistent across the category pages as well.
10. Individual Details Page:

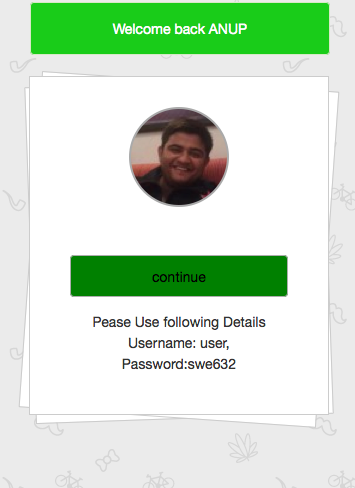
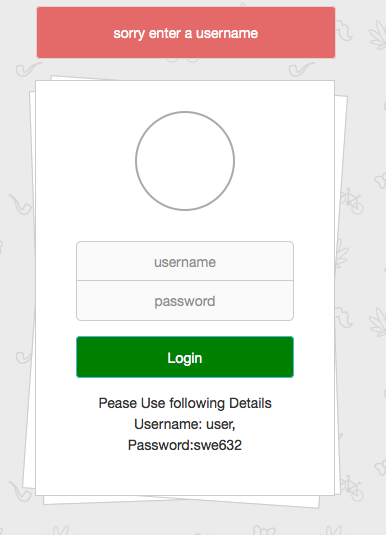
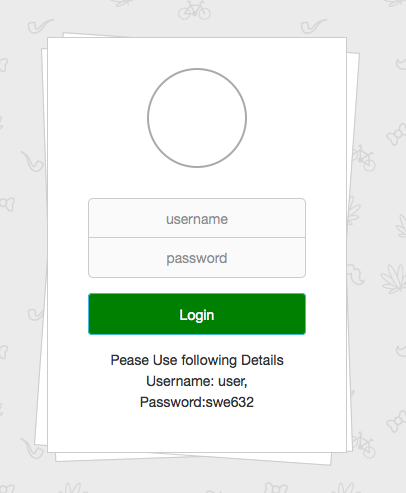


SCREEN 2

Design Considerations for screen (1)

1. Design consistency with rest of the pages.
2. Visual medium to communicate paper back, Kindle support and DRM.
3. Prominent button to rate a book. So that user does not keep searching for it.
4. Reviews with all the relevant details. Visible distinctly
5. User reviews along with the profile images and link to users public profile.

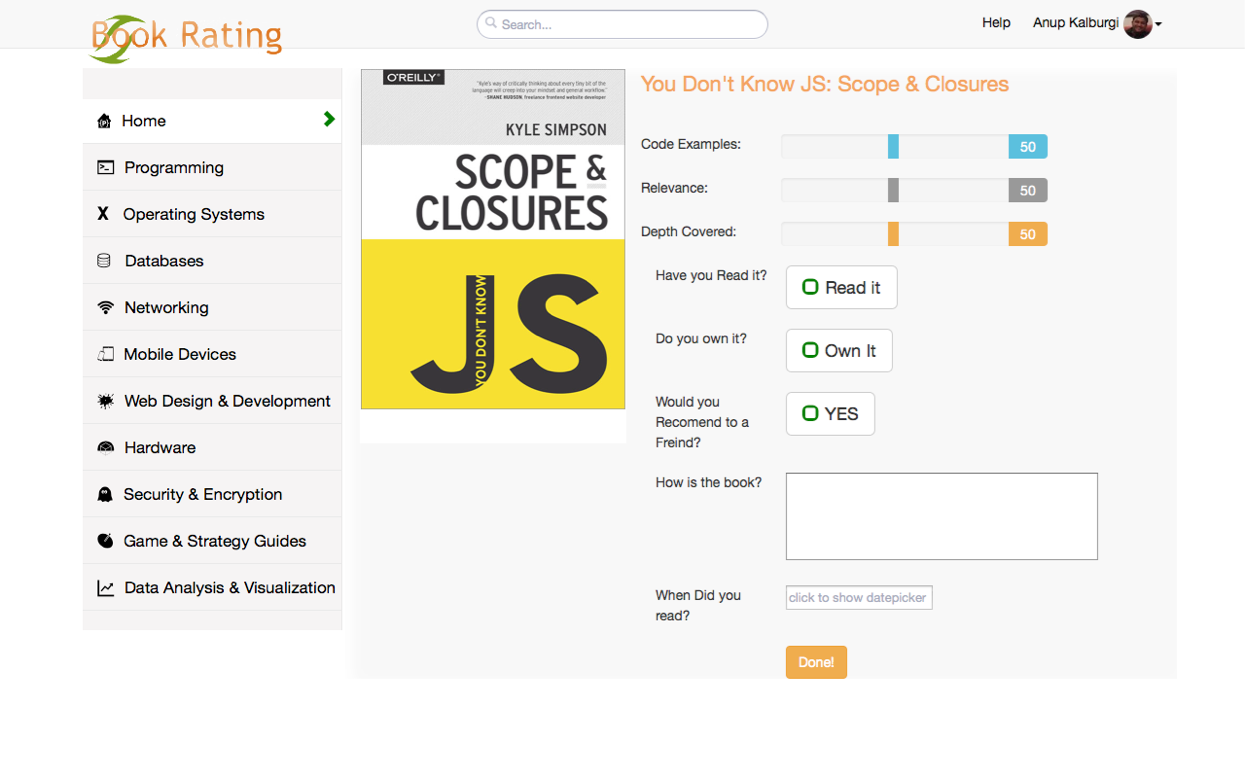
3. Login page:



Design Considerations:

1. Immediate and constructive feedback
2. Time to validate the self-account via image. Add subjective satisfaction.

4. Rating Page



SCREEN 3

Design Considerations for Screen 3:

1. Avoiding user errors is the main point of consideration here. Other than comment section there is no way a user can commit a mistake while rating a book here.
2. Sliders are used to rate different accepts of a books
3. The default check buttons have been modified to appear big and appealing to the user.

**6. Features:**

Once that were planned and implemented

* Search with immediate results along with a distinct details about the book which can help user make decision about the book
* Minimal color usage so as to help time to learn factor of the site.
* Graphical mode of communication for user familiar terms like Kindle, Paperback etc.
* Consistency among main/category/search pages
* Avoiding keyboard based entry and scrolling in either directions

Planned and dropped after review

* More parameter to decide rating of a book like, older books get a -1 by default. But after careful consideration this was left out as we most of the time have revisions of the same book
* More color usage to help some subjective satisfaction factor , but resulting more colors interface contributes to increase in time to learn.

Planned and was not implemented.

* Set of five stars and the variations in rating as the user rates the book by sliding the respective sliders. This would have added on to the immediate feedback factor of the website.
* A way to add non-existing books to the site.
* A voting mechanism to moderate the reviews posted by the users.