



MOBILE DEVELOPMENT A6

CSC2002S



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Overview of the App

Overview of the app, describing your problem statement, your target audience and any assumptions you have made. You will want to show how the features you choose fit together in the overall app.

The goal of the design of the application is make the digital book reading process more user friendly for its users (i.e. the reader) and audience (i.e. children being read to), interactive and enjoyable. However, users have often found the process of using digital reading cumbersome, preferring physical books instead, so we need to find a way to improve their experience. As the world is still involving with the constant rapid growth of technology in our lives the use of mobile devices has become the new norm, according to reports the number of mobile connections in South Africa has increased by 3.1 million between January 2019 and January 2020. Replacing the use of physical books which need careful caring as they are fragile, a place of storage as they take up space and funds to purchase them since they are often pricey varying with size. This seems like a good way to get access to a variety of books in a very cheap way simply by the click of a button. Reading books to children is a way to bond with children, improve their vocabulary as they try to sound the words and activate their creative minds.

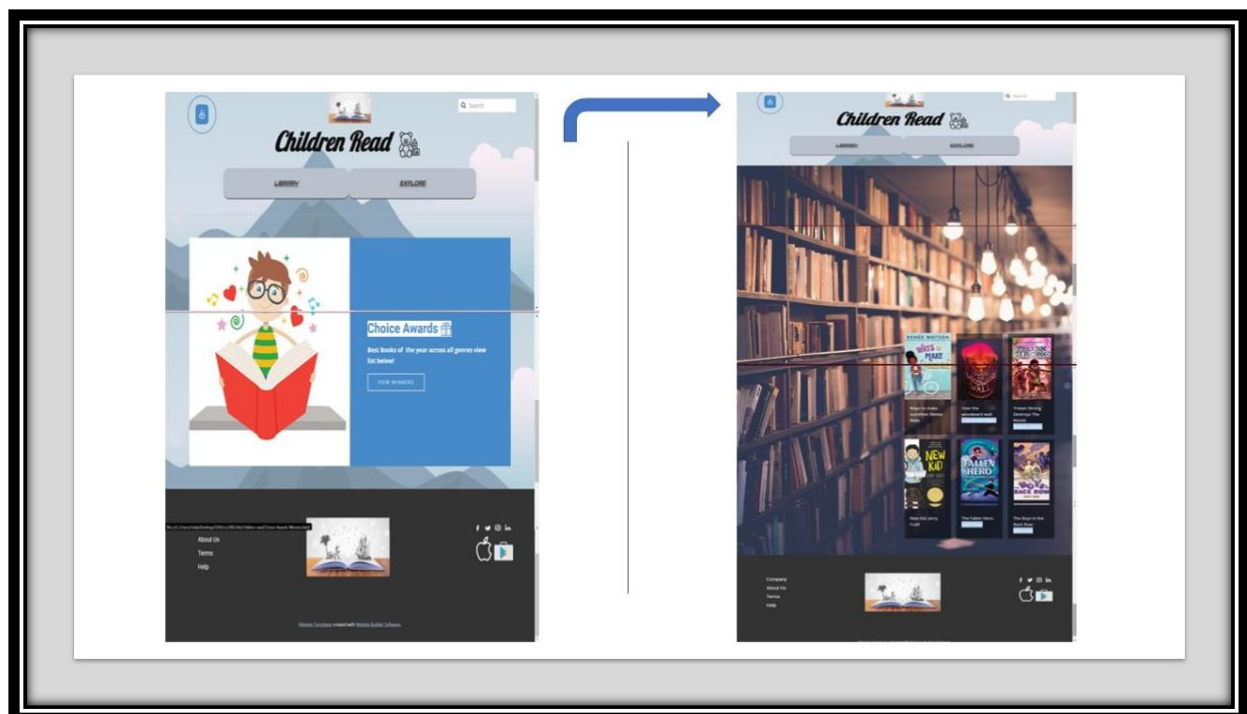
We decided to make a Responsive Mobile Web Application that creates an optional viewing experience across a wide range of devices since we cannot predict what device our user has. This makes our web applications flexible and user friendly by not limiting its audience. The target audience are all caregivers whether they are family, educators or childcare givers all of them can be accommodated on our application. We assumed that the caregivers should have a strong internet or mobile network service to access resources on our application initially.

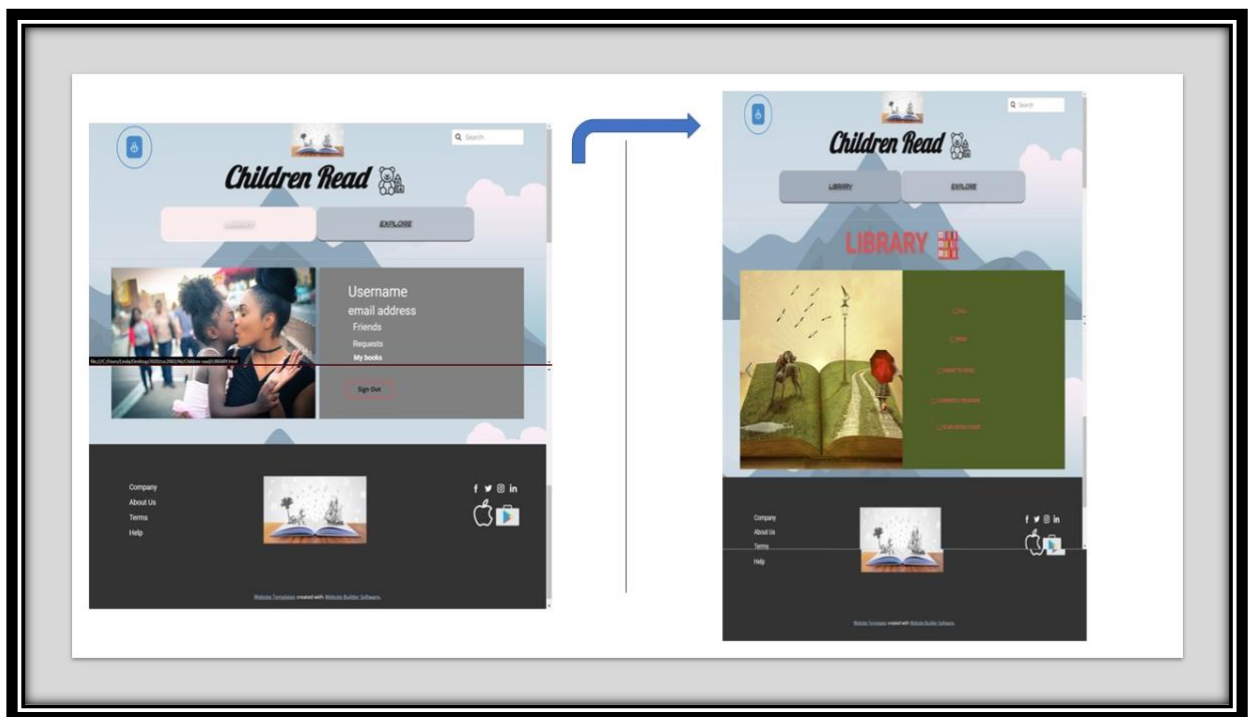
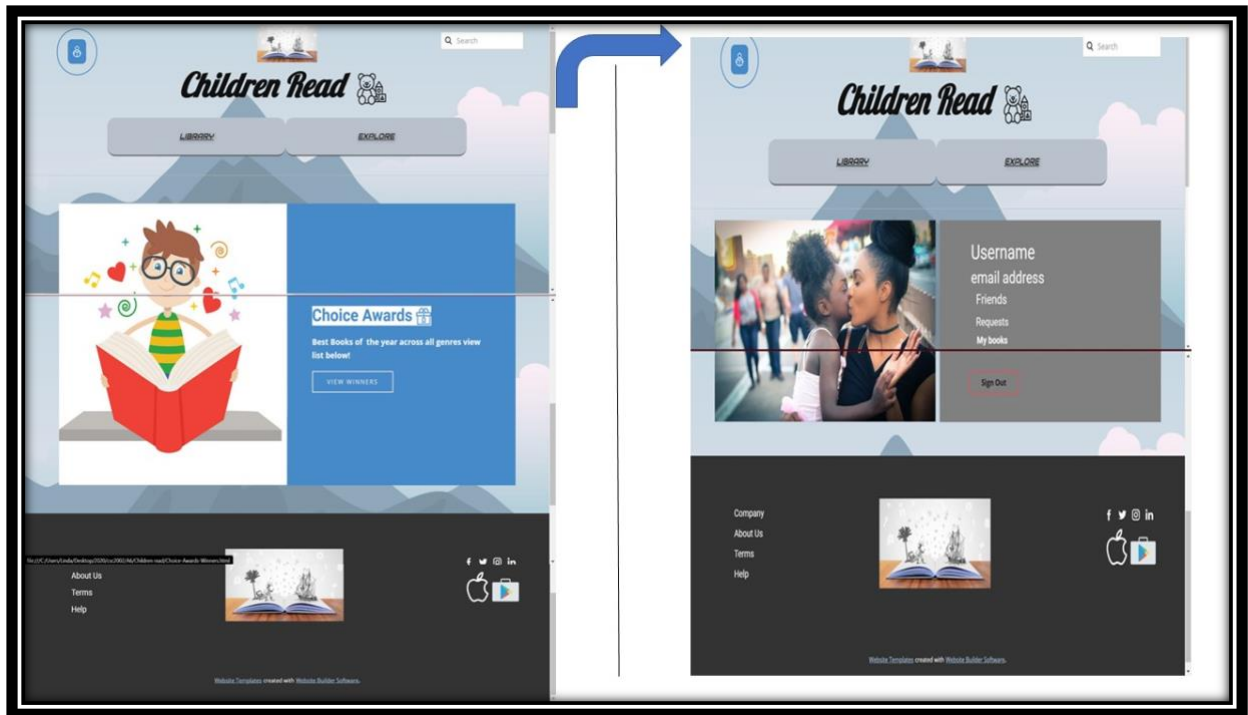
Overall Design and Layout

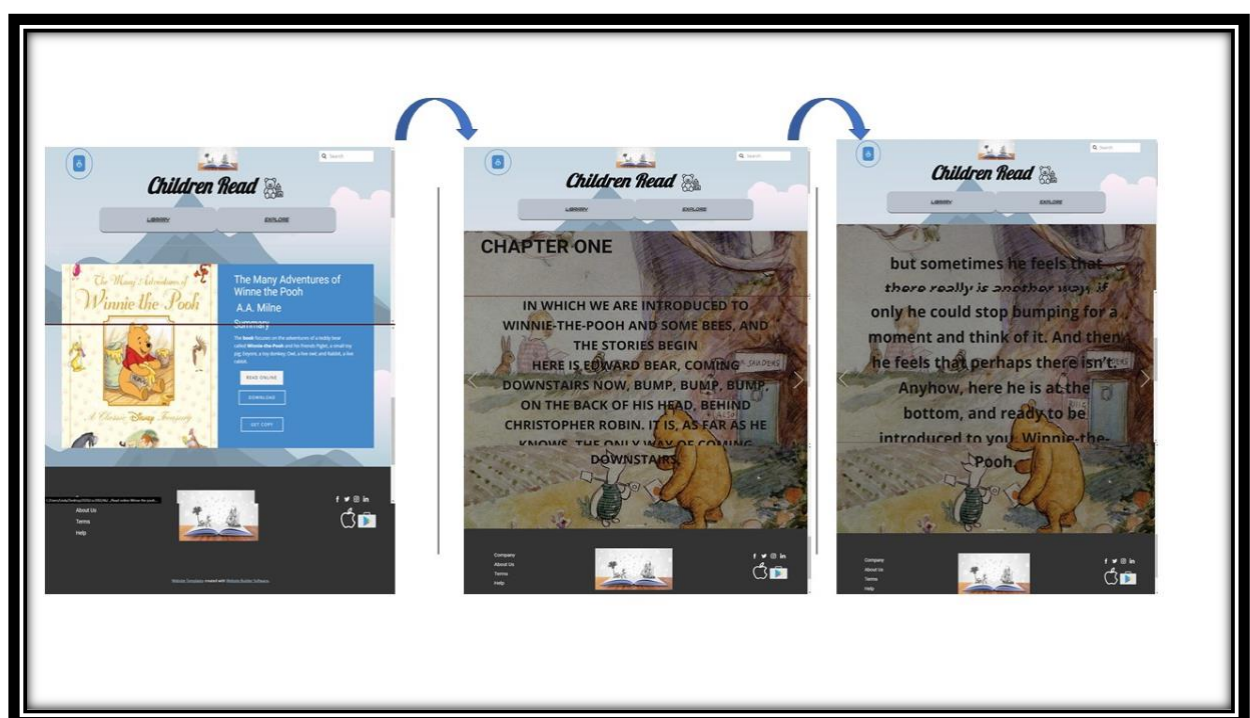
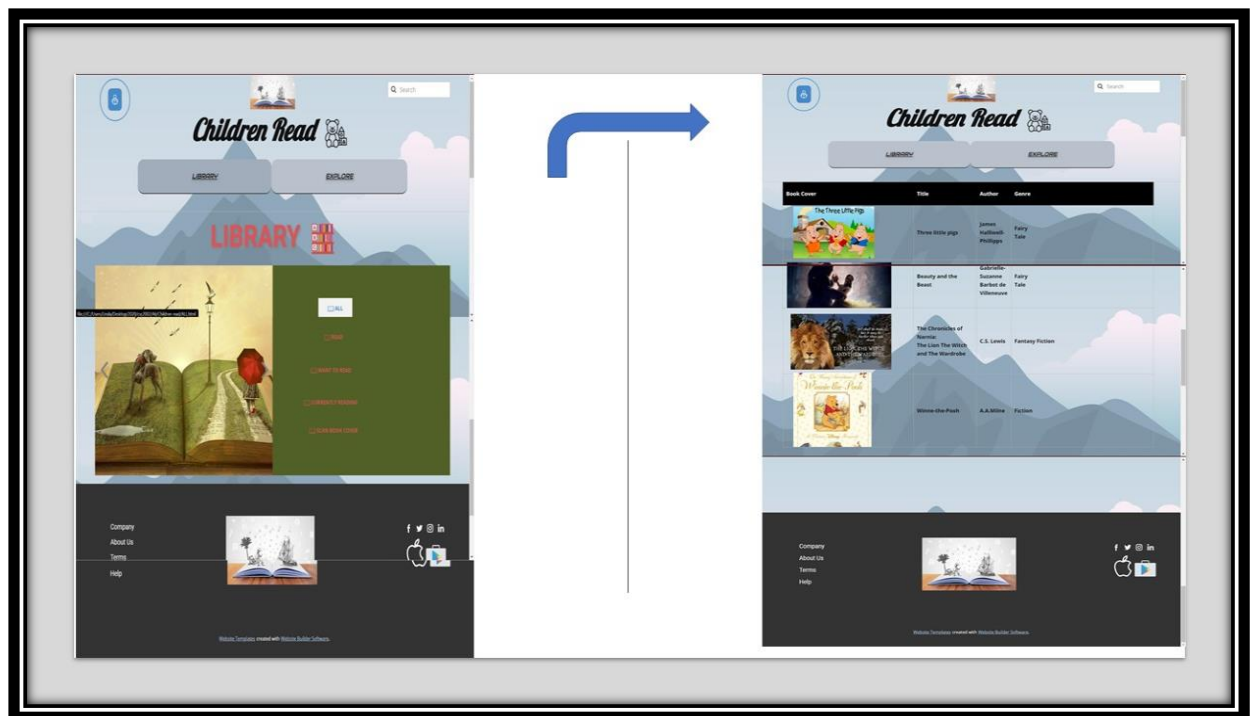
Provide an overall design for your finished app, showing how all your features will interact. Make sure this corresponds to your explanations with the rest of the assignment. You should discuss your target users and state any assumptions. Specifying the device(s) that the app would run on may be helpful too

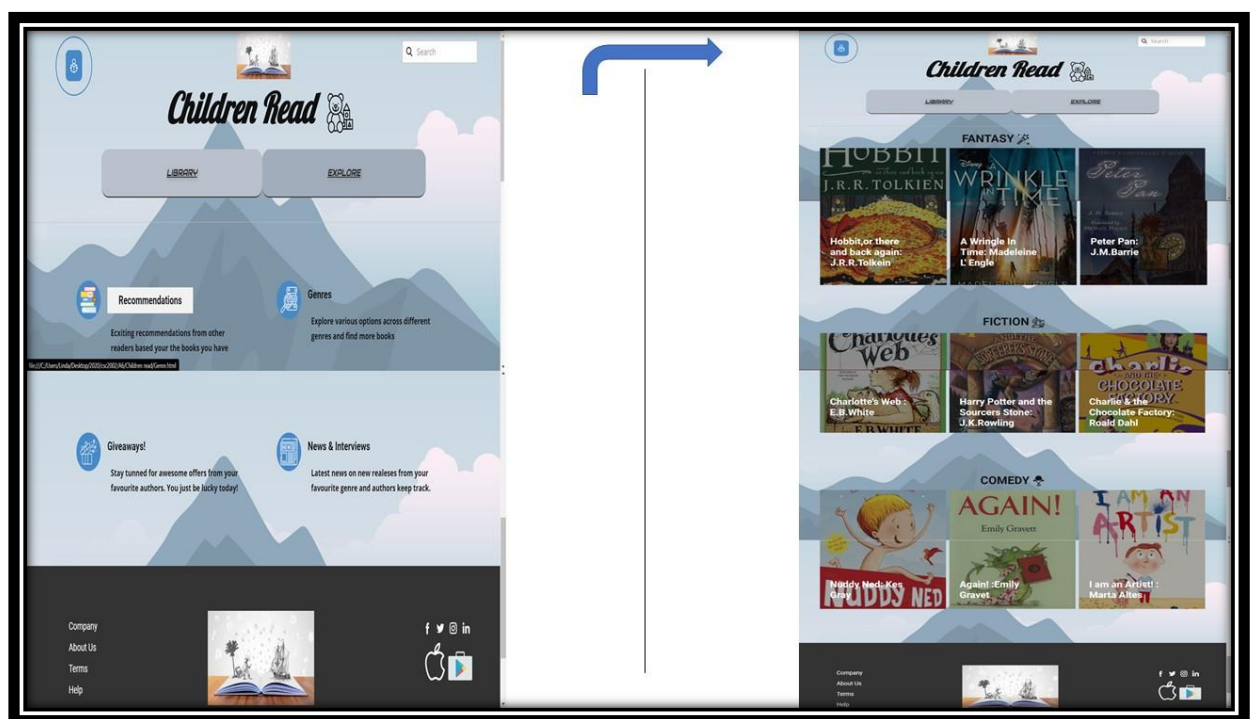
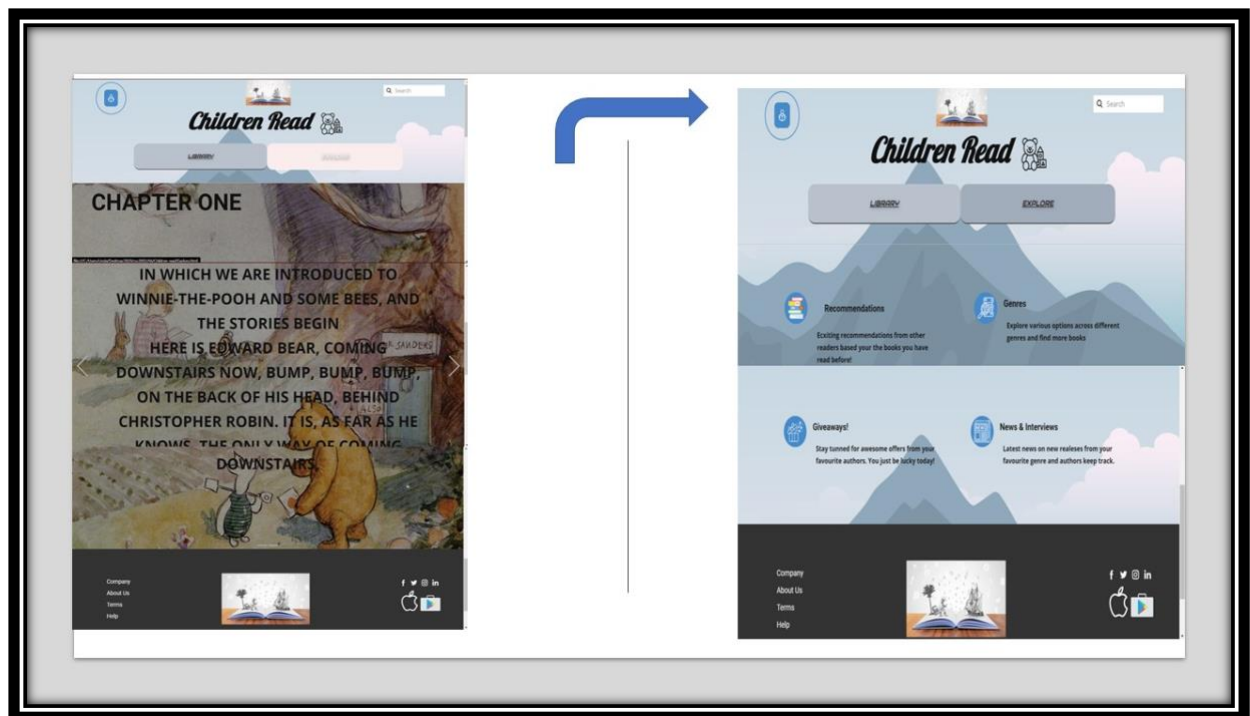
Below is an overview of our Mobile Web Application called prototype “**ChildrenRead**”. The images showcase the different interfaces we made for the application. If the images are not clear a brief video of the transitions below:

1. <https://youtu.be/pK0Qkmhnxrc>
2. <https://youtu.be/A17wjXjvHto>









App Features

A list of features with an explanation for their inclusion. 5 marks each

Fully justify the features that you decided to include. Include details of any research or experience that lead you to choosing them with referencing.

Feature 1: Use of big text font when reading the books, paragraph spacing, Reduce light effect

Reason: From our interviews most, users were worried about the effect of straining of eyes by too much screen time and small font. So, in our application we made sure to make our font size big and shadowed the pictures to reduce brightness to these effects.

Feature 2: Keep track of books

Reason : Users need a way of keeping track of their books that is why we have a sort of a library that has all books, books the reader read before so as to not repeat titles , books reader is currently reading which they can resume from where they left off (sort of like a book mark), books reader want to read in the future and books reader want to request by scanning. This idea was based on the interviews as users thought physical books did better as they have physical bookmarks and by that they said some web applications did not have some books that is why we implemented some of these features to make the process even better.

Feature 3: Group by genre and recommendations

Reason: Users need a way of sorting out their preferences using filters like genre and get recommendations based on the previous books they read before. So, we made sure to sort the recommendations by genres. This way the users can get an even wider selection of books to choose from.

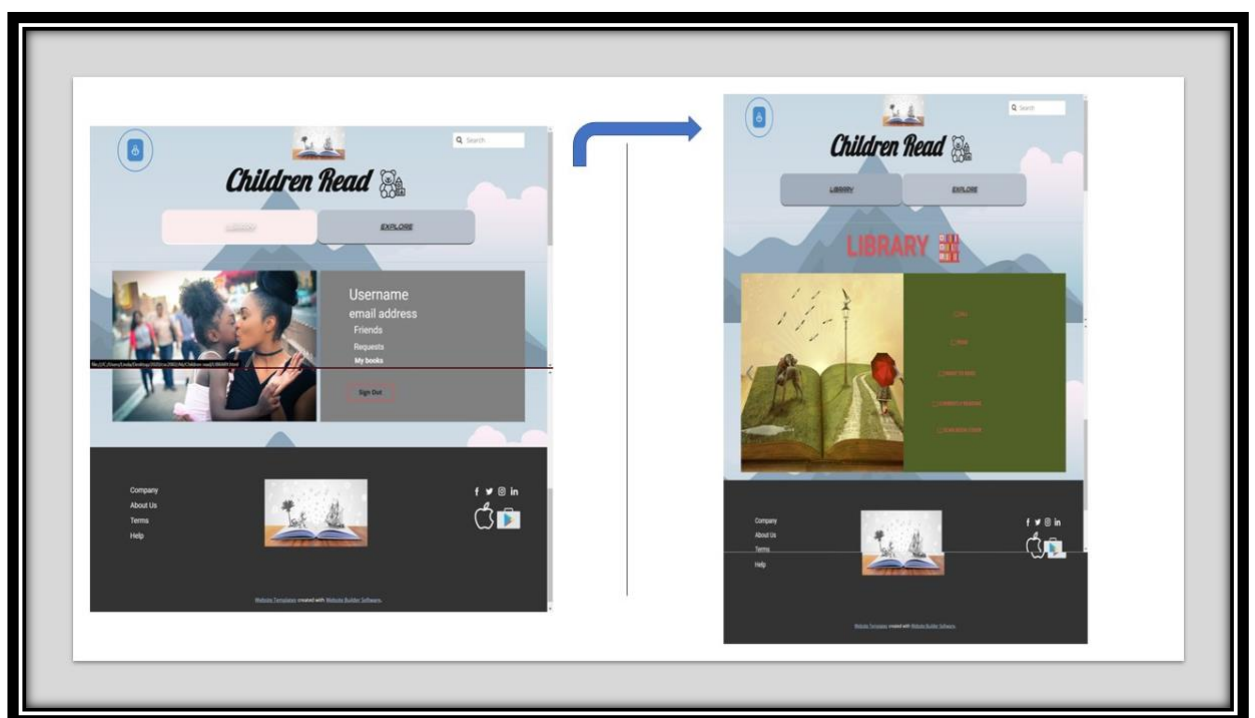
Initial Design of App Features

You should justify and discuss the fidelity of the prototype

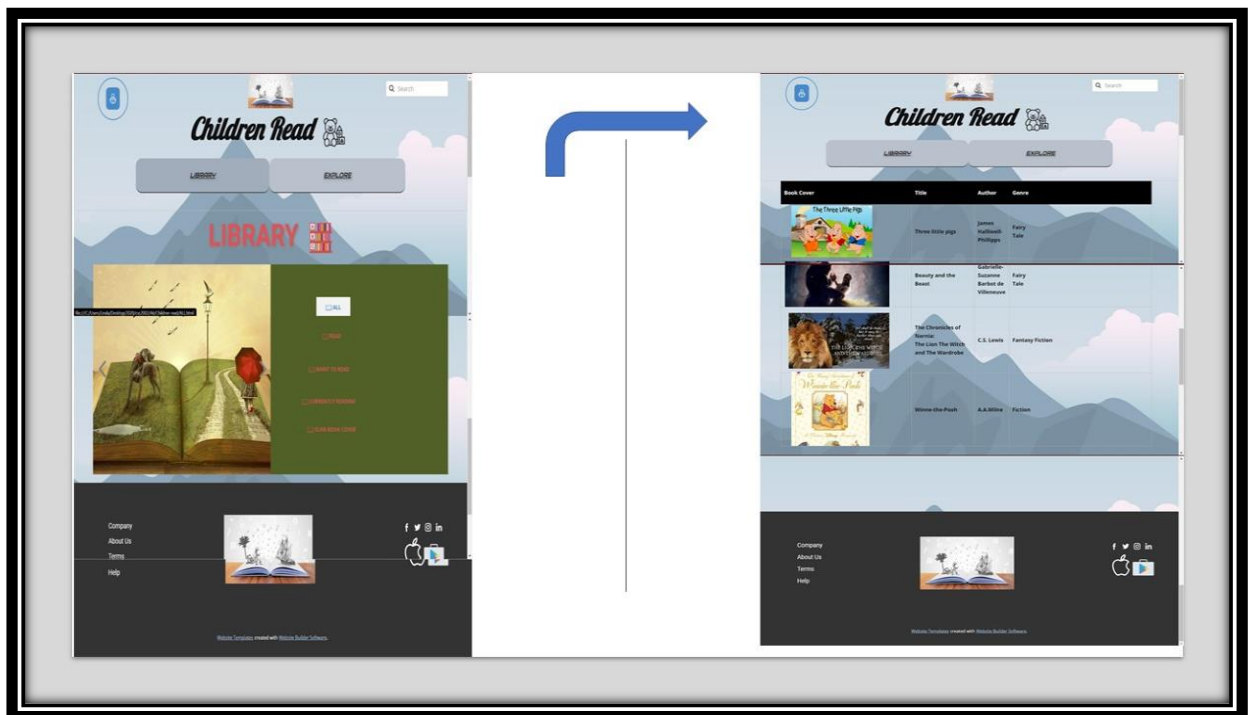
An initial design for each feature. This will consist of several screenshots, with clear markings of how one transitions from one screen to the next. It may be easiest to have a diagram with numbered elements and refer to those numbers in the text. Be sure to show how errors or edge cases would be handled in your design. Diagrams may be hand-drawn if desired but must be clear to the reader.

Document your screenshots, showing how to trigger transitions, and clearly showing the interface for your feature.

1. **By clicking on the Library menu, you get transferred to another interface to view the library. The interface shows the 5 options to choose from the library (All, Read, Want to Read, Currently Reading Scan Book Cover). The functions of these options are already described above. So, we are going to select All. By selecting All we are led to the next interface**



2. The current interface shows the list of all books stating their details (book cover, title, author and genre).



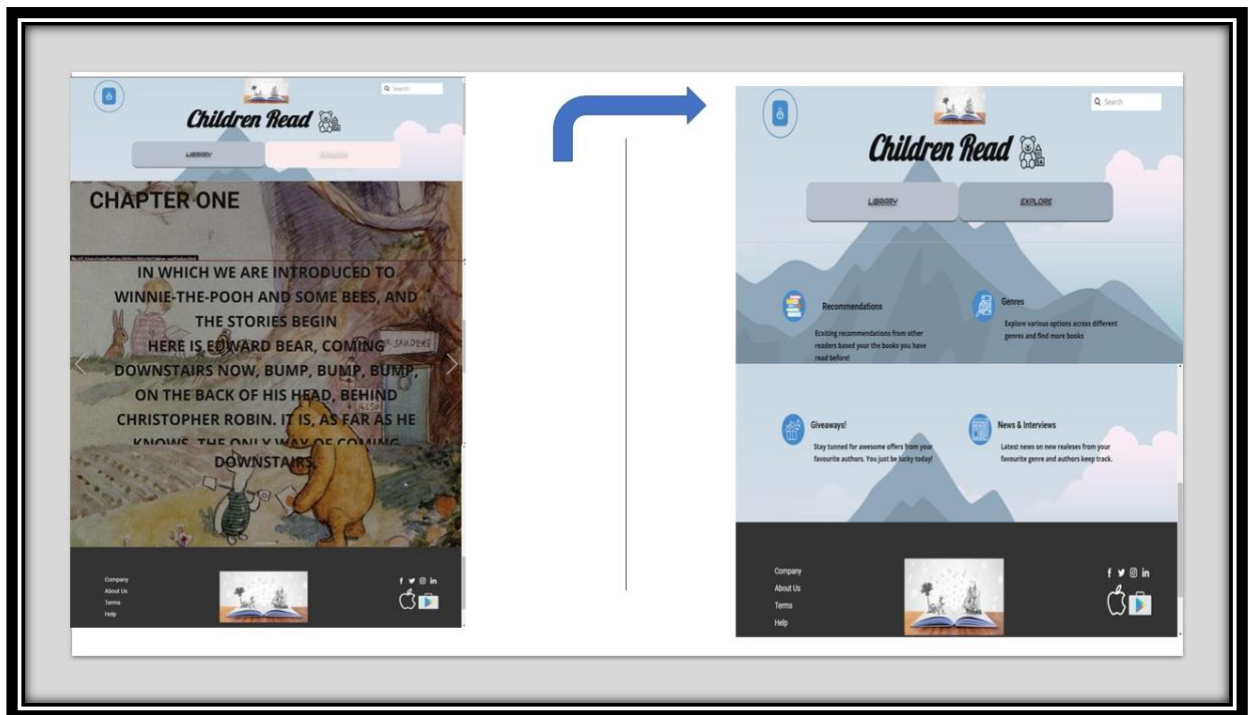
By clicking the book cover you are led to another interface

3. The current interface shows the book cover, author, short summary of the book and button actions to click. You can either read online, download or get a copy or book.



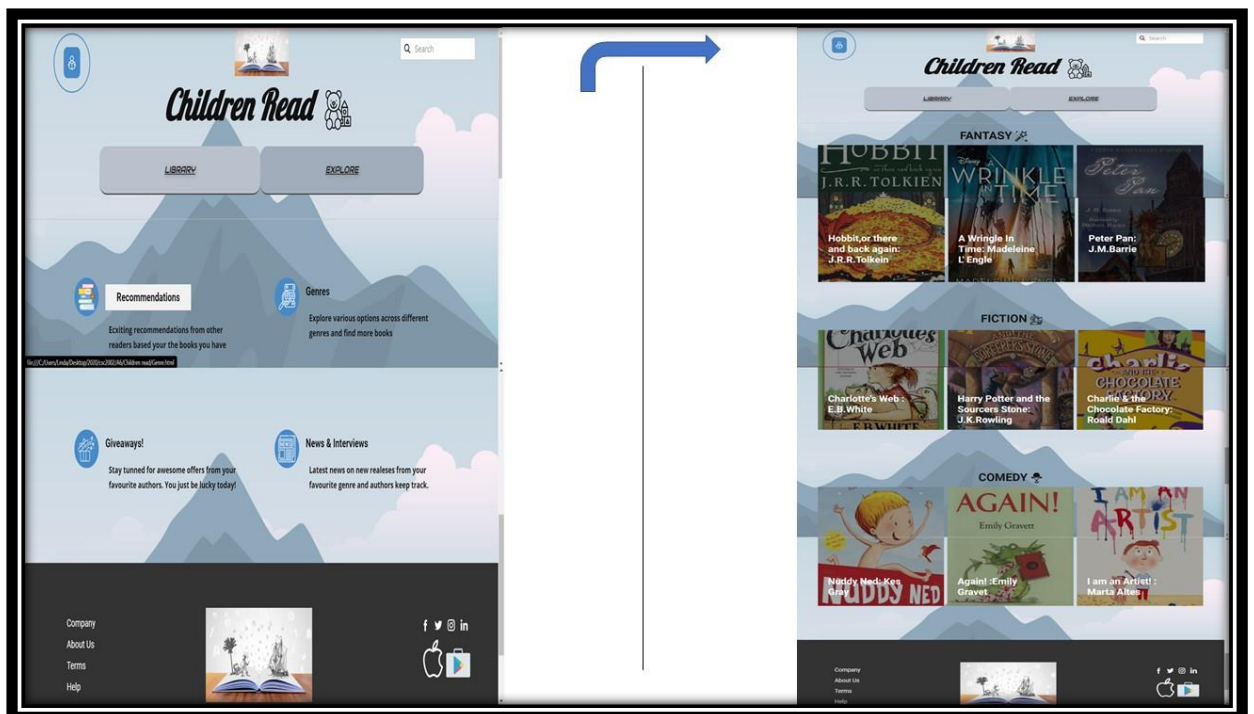
By clicking read online you are led to another interface The current interface shows the book contents and in the top right corner you can click the audio icon to listen to the audio book in a variety of accents to choose from. This makes it interactive. By clicking the Explore menu tab you are led to another interface

4. The current interface shows the Recommendations, Genres, Giveaways and News & Interviews section and brief details about them.



By clicking onto the Recommendations section, we are led to another interface.

5. The current interface shows books grouped by genre and their titles shown.



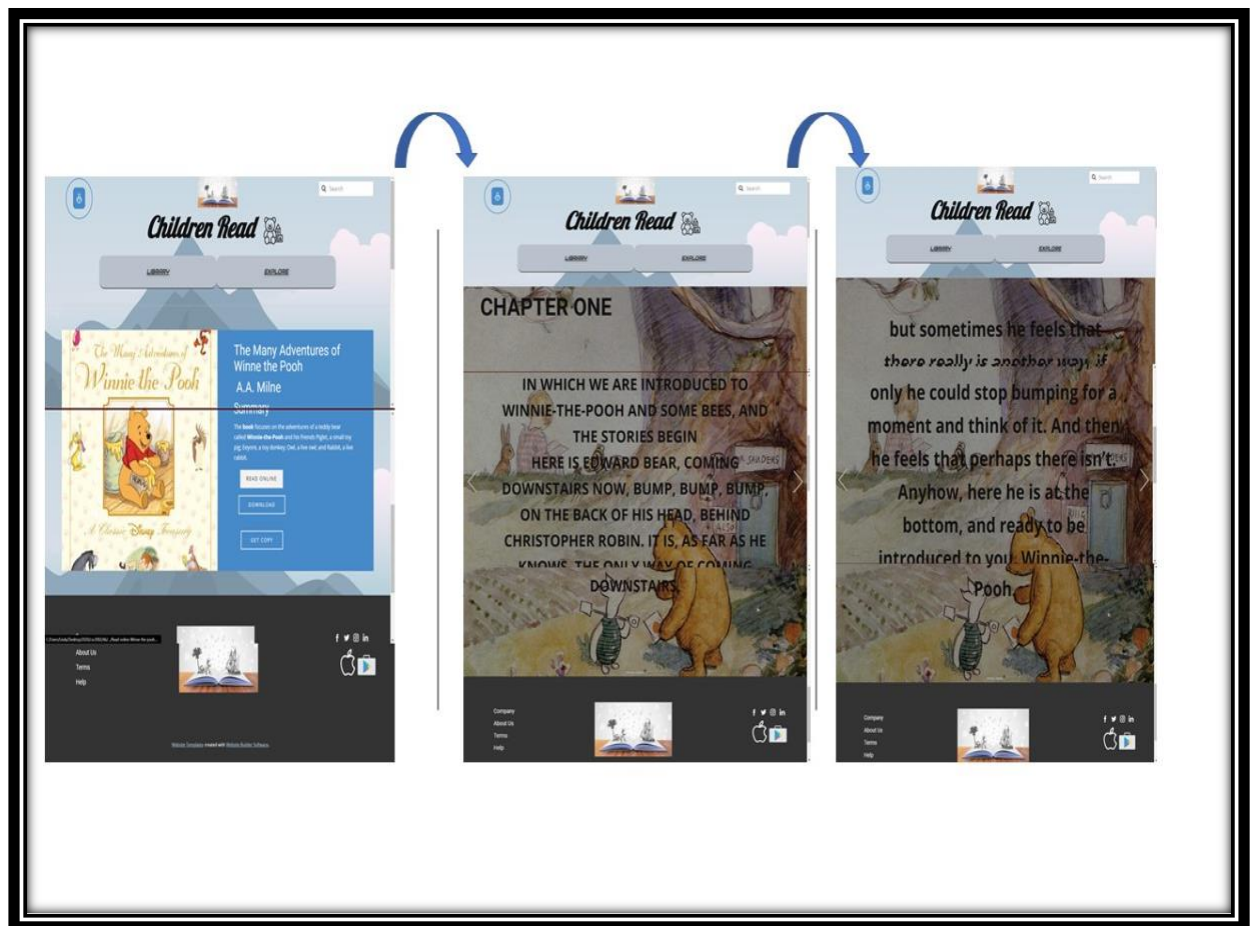
App Design Rationale

For each feature, justify the design; explain why it looks and works the way it does. Do not just state the name of relevant design principles but make an argument for why others will appreciate your design.

Explain your design fully, linking it to the concepts and ideas that you were taught in class. Include in this the ways in which it conforms to the different standards and models, if appropriate. Every design decision should be motivated.

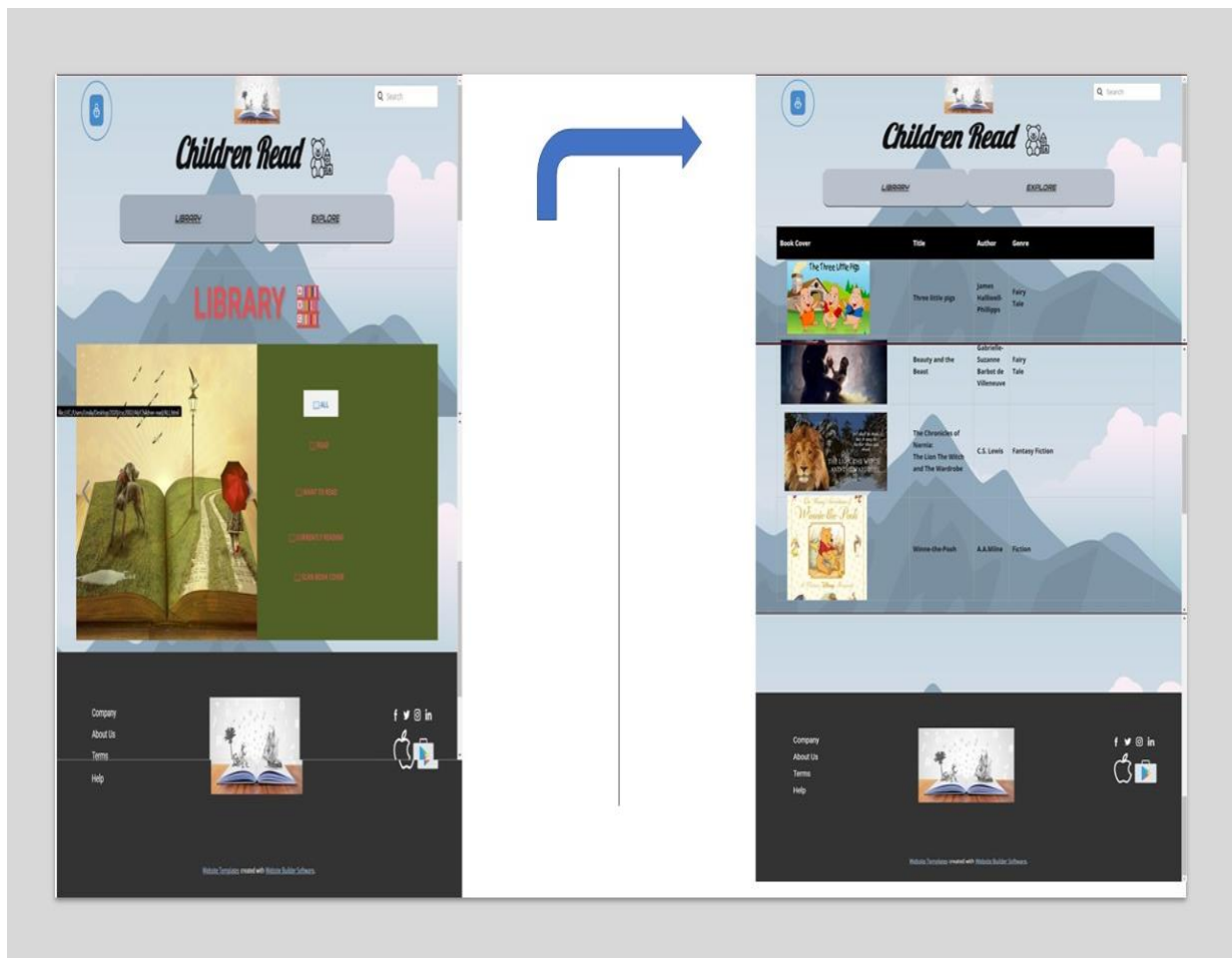
Feature1:

Principle of latest effort was used in this feature. The user must not put too much effort in trying to read the words of the book that is why the font size is huge and the text is dark. This is a frequent use of the application. The application allows flipping of pages by tapping on the arrow to next page.



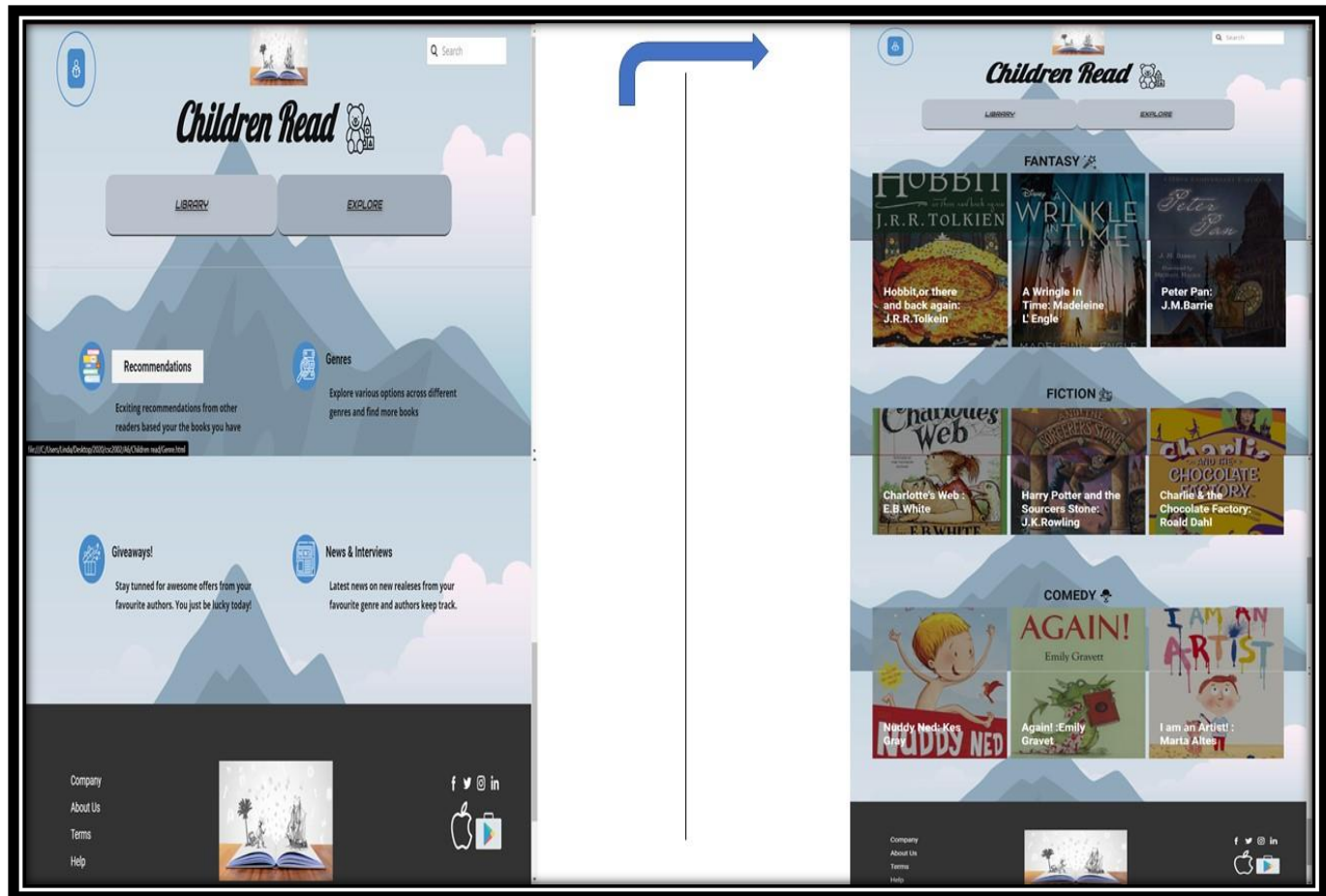
Featured 2:

Recognition Over Recall principal was used in implementing this feature. The user does not struggle in trying to recall what the menu item they selected was since it is clearly written what it is for. After they click it there is a heading showing which interface they are in "Library" in bold. The next interface the list of books shown still gives them a guideline of what they are viewing.



Feature3:

The design principle knowledge & chunking was used as the 4 options which are under the menu option explore where put under the same interface. Recommendation tab and genres almost display similar properties as the books recommended are sorted by genres.



The overall application was designed using the Aesthetic Usability Effect by making the application look colourful this makes it mesmerising and attractive to users. We decided this considering that our audience are children they often get attracted by colourful features drawings. As the principle prompts that “Things that look better perform better in usability tests”. Because of this our application will get good reviews because of the colourful interface. We utilized the Feedback principle that every user action needs the interface to react so that the user can know their action is complete. Lastly, we tried to make sure that our application has a low signal to noise ratio by making sure the density of critical information data is not too much on the screen.

Conclusion:

ChildrenRead is a prototype user friendly and interactive application that we created that meet user needs and even more than the scope demanded. We believe the three main features we implemented will make the process of using digital reading applications and get good reviews from users.

References:

Vula mobile development slides

Power Point slide mobile-07-design-principles.pptx

Power Point slide mobile-01B-what- is-mobile-1.pptx