FABLES: AN AUDIOBOOK APP

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Abstract : Emerging technologies have expanded the method of delivering information over these years. It has also changed the way people think from all walks of life. This can be well illustrated with help of audiobooks. Audiobooks are not only a boon for those that are visually impaired, but are also incredibly useful for anyone who is keen on reading, but cannot make time for it. Unlike the traditional way of reading, audiobooks bring enthusiasm into reading by putting the characters of a story to life. This sense of liveliness incorporated in these are one of the major reasons that make them stand apart from the rest. Audiobooks are not limited to only a specific target group. Rather, it continues to manifest eagerness among all, irrespective of their age & gender. The reality is there are unbelievable amounts of time during the day that you cannot use your eyes to read a book or look at a screen. Great writing needs to be in people's' brains, and the way it gets there shouldn't be a matter of religiosity. In this paper, we present, " Fables: An audiobook mobile app ", a mobile application, to enhance the reading experience of user. We chose, "Fables" as the name for our app since Fables exists to unleash spoken words that inspire, offer insight, teach, and persuade.

Index Terms - **Audiobook, Mobile Application, Genres, Subscription.**

I.   INTRODUCTION

An audiobook is a newer concept, on which much vital exploration has been done & is still on the go. Audiobooks can be defined as a recording of a book. However, modern audiobooks app not only include just blind text to speech converter but also describe the emotions, tone of characters presents in a story in a creative way. While, audiobooks may sound like a completely new concept for today's generations, but it's the opposite. Audiobooks have their roots in our older tradition where story-tellers used to recite a story loudly & were admired for their ability to entertain.

Objectives of an Audiobook: -

1. **Multitasking**: It can be easily heard while doing other tasks such as traveling, cooking, etc.
2. **Entertainment**: It is proved to be a very valuable source of entertainment as learning, listening, speaking skills are enhanced simultaneously.
3. **Learning**: While the stories are read aloud with appropriate pronunciation, it increases fluency & boosts one's comprehension skills.
4. **Strain-free eyes**: It reduces, to a larger extent, the strain-induced to the eye caused by reading e-books.
5. **To bring joy in reading**: Disliking the act of reading is an urgent issue to solve because discovering joy from reading is essential to comprehension.
6. **Accelerated Learning**: You will be able to read many books via audio-books. Ultimately, it will help you to read more.
7. **Filling the dead space**: Taking advantage of all of that dead time will teach you a great deal.
8. **Uplifting**: Inspirational Quotes & Passages can uplift your spirits & motivates you to do great things while learning at same time.

II.   LITERATURE SURVEY

[1] Embracing Audiobooks as an Effective Educational Tool:-

To illustrate the current changes in digital reading, this paper discusses a medium that has gained huge global popularity because of the development of digital technologies. It is also a medium that challenges a traditional conception of what it means to read a book because—can you read with the ears?

[2] Beyond Media Borders: -

Their study revealed that technologically and materially, the audiobook has nothing in common with the printed book; rather, it shares its technology and formats with music. Thus, the technological histories of the audiobook and of recorded music run parallel. The starting point was Edison's invention of the phonograph in 1877, the original aim of which was to record speech.

[3] Preferences and attitudes of audiobook users in Sweden: Surveying Swedish audiobook groups on Facebook: -
They investigated the changes in time spaces –i.e., when and where – which occur when reading is done by listening and not by seeing. They examined three comparative issues: whether there is a difference in listening patterns between young adults and the general population, between men and women and between young adults based on gender. The study looked at the daily, weekly and yearly listening. The results showed that users listen quite a lot and quite evenly during the day, which would imply that a lot of audio reading occurs during the typical work or school time. This is further backed up by a decline in reading during the evening and weekends, which we usually consider leisure time. Authors conclude that reading so much during the day and through the day implies that reading by listening might enable an increase in daily reading time, and this could be contributed to the extreme mobility of the subscription services.

[4] Using Audiobooks to Promote Comprehension of Cause-Effect Relationships in Social Studies Texts: -

This study used audiobooks as a scaffold for students to read expository text. Students were given a portion of the text to read independently, then were assessed upon completion of the reading using a cloze assessment. Comparing the averages between the assessments following the reading without the audiobook and the averages using the audiobook, six of the nine students' averages increased with the use of the audiobook.

[5] Time to read: Exploring the time spaces of subscription-based Audiobooks:-

This study found that the users of Book Beat spent significant amounts of time reading.Focus of this article is mainly on subscription services. It discusses about the various modern-day audiobook apps like Amazon owned Audible-it differs from other models because of their restricted premium feature. It also emphasizes on various different methods that can be used to acquire data about the reading pattern of different people. Further, it also takes into account the legal and ethical considerations of subscription services.

[6] Using Audiobooks to Meet the Needs of Adolescent Readers: -

This paper explores the several reasons for reading audiobooks and analyses how these can be proved to be useful for struggling adolescent readers. Audiobooks will provide an efficient method for high and middle school teachers to teach these categories of students and help them increase their literacy level. On the other hand, the author also jots down some guidelines & suggestions for using audiobooks. For e.g., he suggests incorporating audiobooks in place of reading assignments to improve grammar, fluency, etc.

[7] Evaluating expressive speech synthesis from audiobooks in conversational phrases: -

The aim of this study was to evaluate different speech style synthesis in audiobooks. Different people prefer different voice styles. Some of them prefer loud sound, or soft, lax sound or very expressive intense sound. On evaluation, it was found that most of the people prefer the voice styles to be customisable.

III.　　EXISTING SYSTEM

The existing systems work on e-books and electronic data. People have to pay too much attention to phonological and morphological skills. Struggling readers consider reading to be merely calling out words and that few have the ability to derive an image in their mind of reading. Readers tend to lack capacity to determine the prosody and rhythm of sentences. Reading through screens on e-books make people least interested in reading and learning new knowledge as it gets boring and people start losing fun. Audiobook is derived from an older concept of oral tradition of story-telling. Much research has yet to be done in this field. Though many successful audiobooks mobile apps have been launched like Amazon Owned-Audible, Librivox, etc. But these apps are made just for entertainment purposes. It has not considered books for adolescents. If books would have been designed for young children, of age 10-19, it would prove to be highly fruitful for them as it would help their literacy grow, and increase their comprehension and fluency.

IV.　　PROPOSED SYSTEM

Fables, the audiobook app, provides the user with two membership plans:(1) Premium plan with a paid subscription that allows access to all books and (2) Free plan which allows access of limited books to all users. All the books are available in the e-book format as well as the audio format for better understanding. Every book has Play and Pause buttons to control the speech synthesis. A bit of anecdotal Feedback is also available in the form of Ratings. A book can be added to Favourites and also can be marked as Read. We also have the option of viewing the already read books and favourite books. The payment options are also the commonly used ones and it is secure and safe too. We have tried to make the system as simple as possible so that it can be conveniently used by all type of users irrespective of their age, gender, etc.

V.   DESIGN

5.1 DFD Level 0 (User): -

Firstly, the user launches the application and login to the system. The application then displays books wherein the user can select any based on his preferred genre.
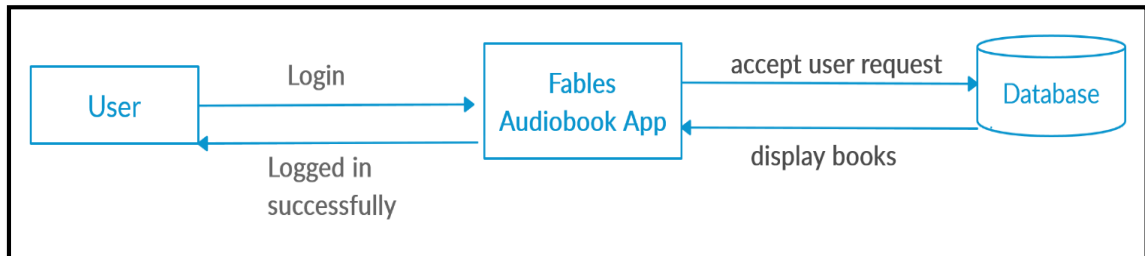

Fig 5.1 DFD Level 0 (User)

5.2 DFD Level 0 (Admin): -

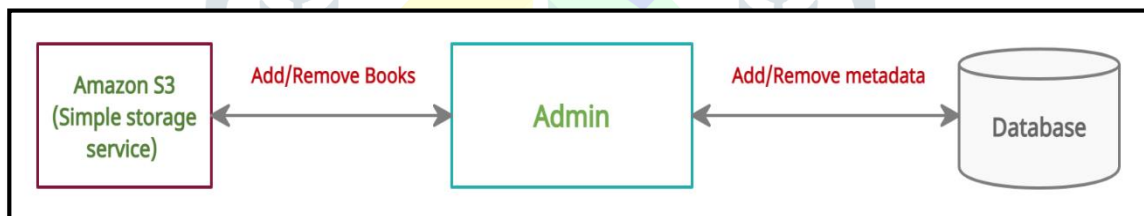Admin's task includes adding/removing books from the database.

Fig 5.2 DFD Level 0 (Admin)

5.3 DFD Level 1:

Once user successfully login into the system, he can view numerous books and select any based on his preferences. After selecting a book, he has two choices: whether to read as text, or hear as audio. Once the user has finished reading, the system updates his reading history in the database.
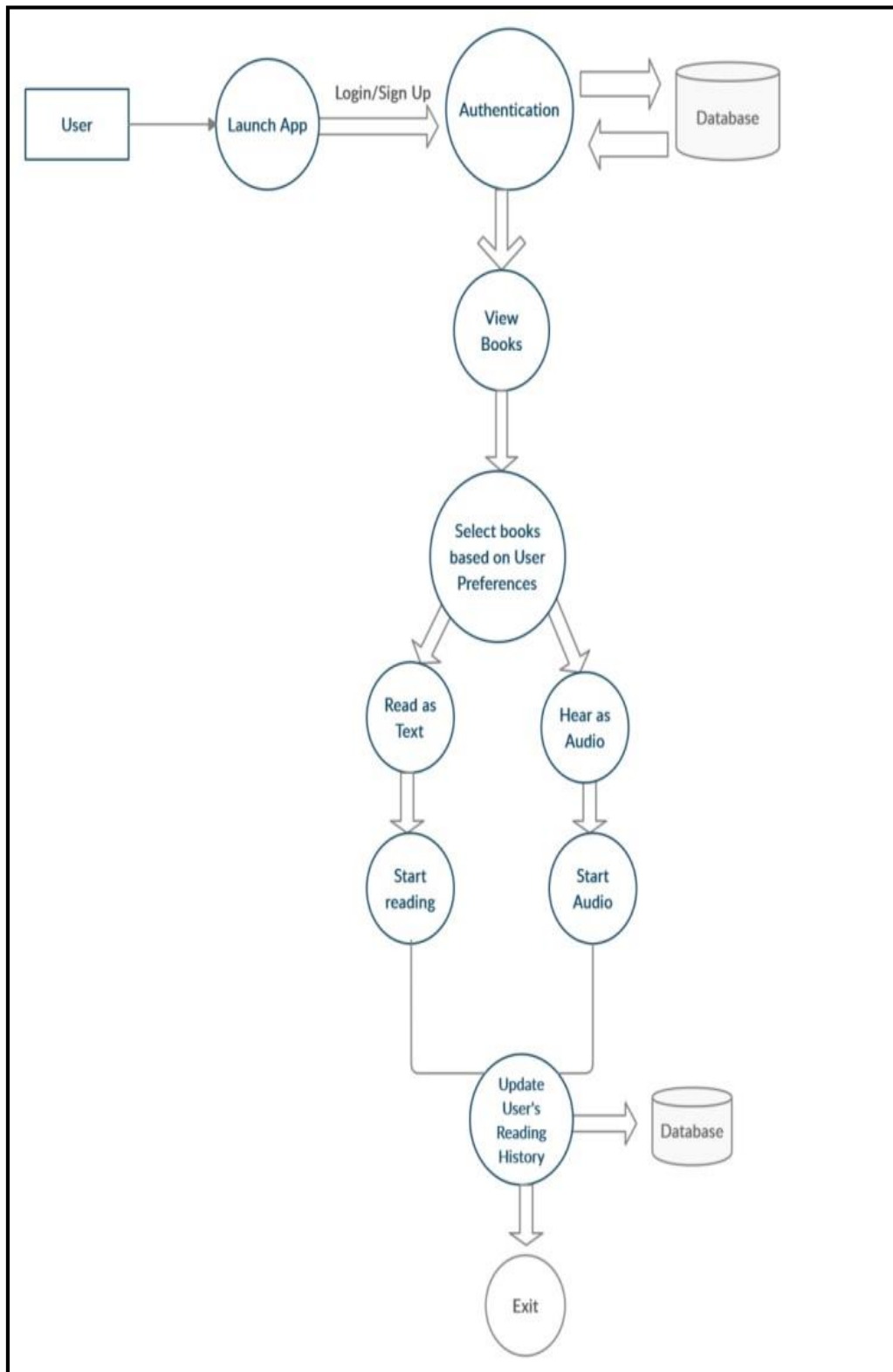
Fig 5.3 DFD Level 1

5.4 DFD Level 2: -

In Fig. 5.4, the additional features like Bookmarks, Subscriptions are provided for enhancement of the application. If user wishes to mark a book as favorite's, he can mark it as favorite. Furthermore, he can also get subscription in order to enjoy access to premium books.
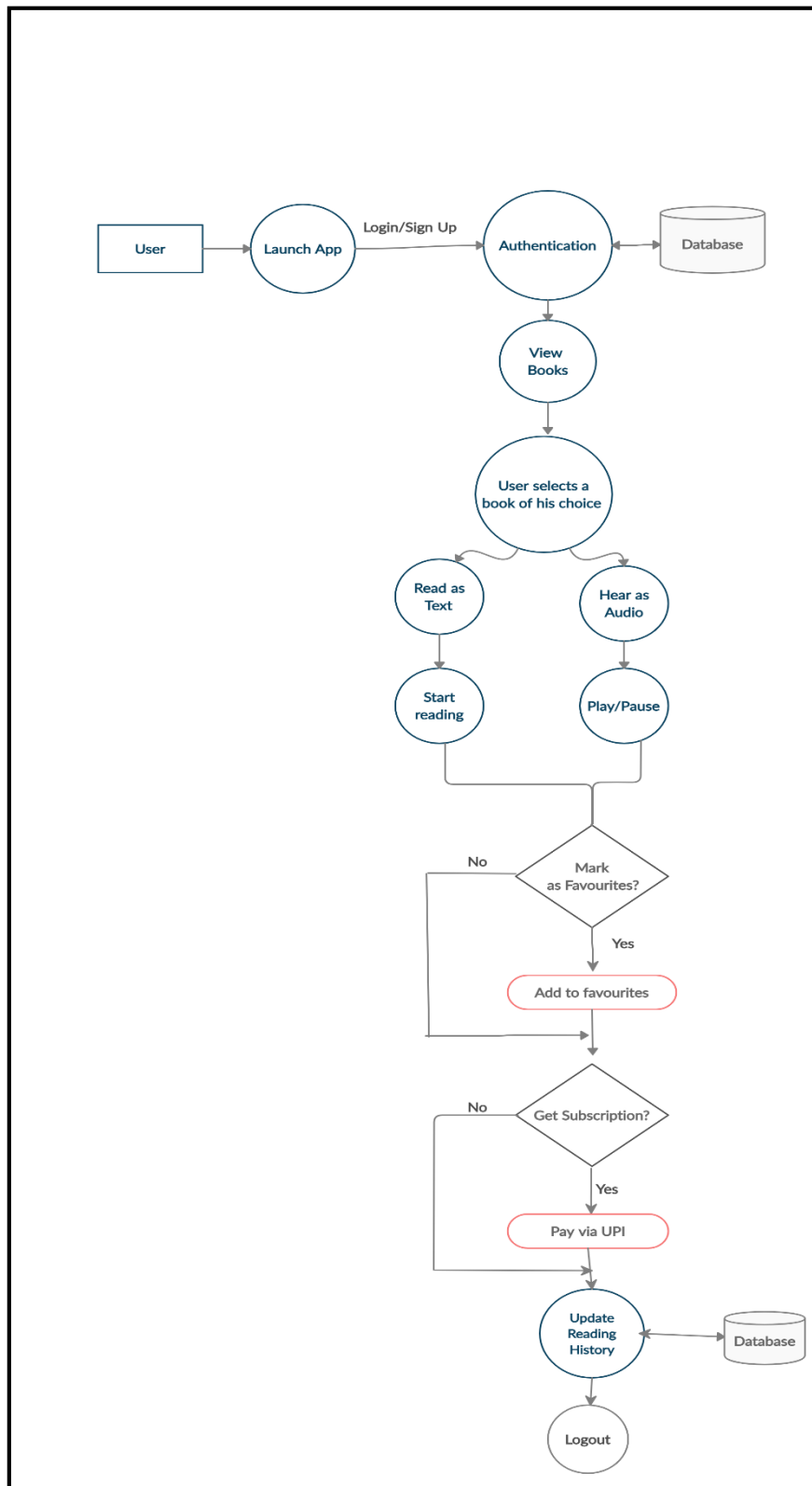
Fig 5.4 DFD Level 2

5.5 User Interface Diagram: -

As shown in the below figure, the user interface is very simple and easy to understand. When designing this interface, our main aim was discoverability. We have tried to make sure that by looking at the app itself, user will get to know about different functionalities present in the app. Icons are used for better appearance and understandability. The subscription payment process is also made secure by connecting it with accessible & commonly used UPI supported platforms like Google Pay, WhatsApp Payments, etc. Furthermore, some measures have been undertaken to make this app look aesthetically pleasing with the use of calm and pleasing colours. It has been also made sure that the font is elegant and easily readable to all age criteria.
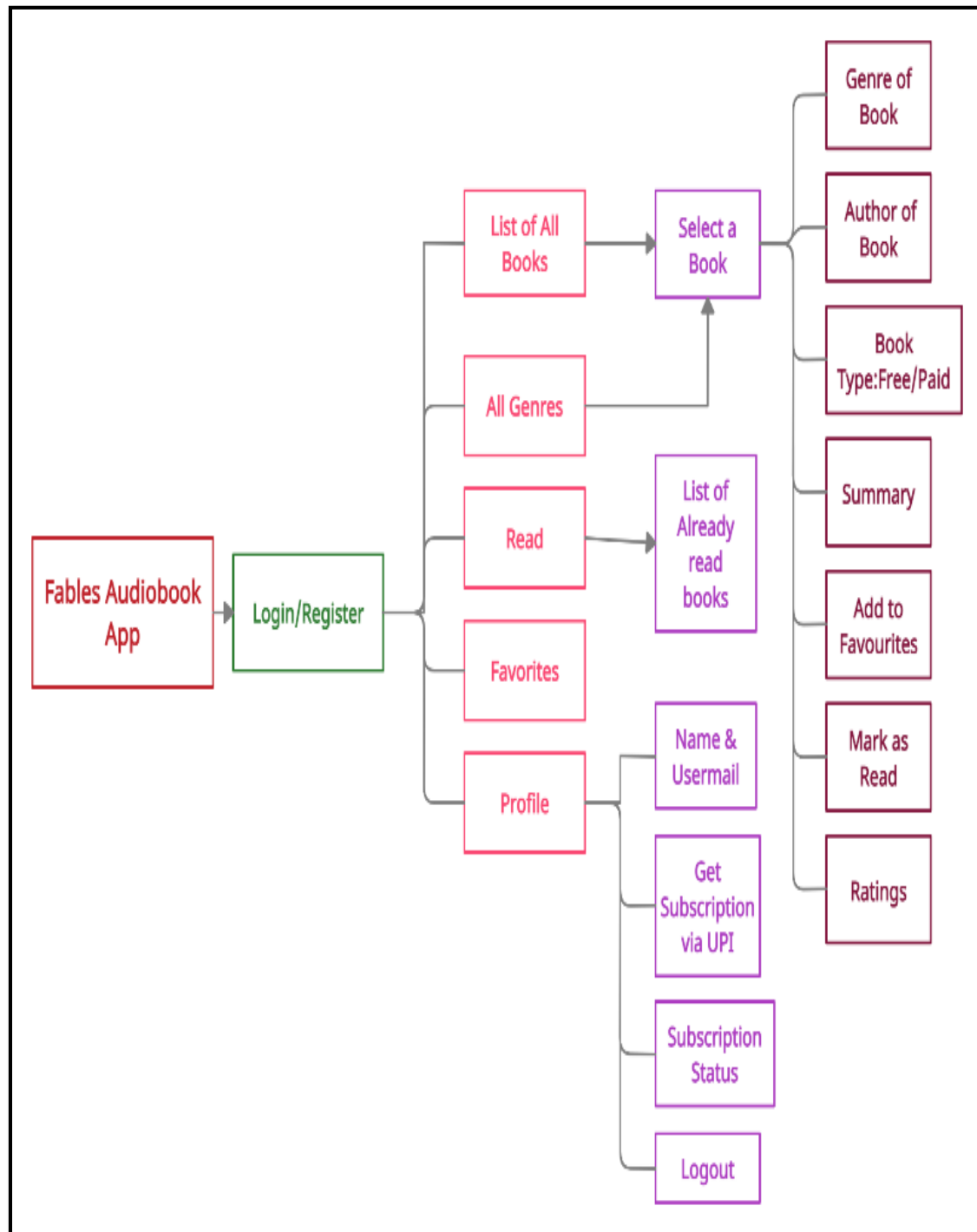
Fig 5.5 User Interface Diagram of Fables

VI.   RESULTS

6.1 Login/Register Page: -

This page enables the user to login in few effortless steps. If not registered already, there is a registration page too.
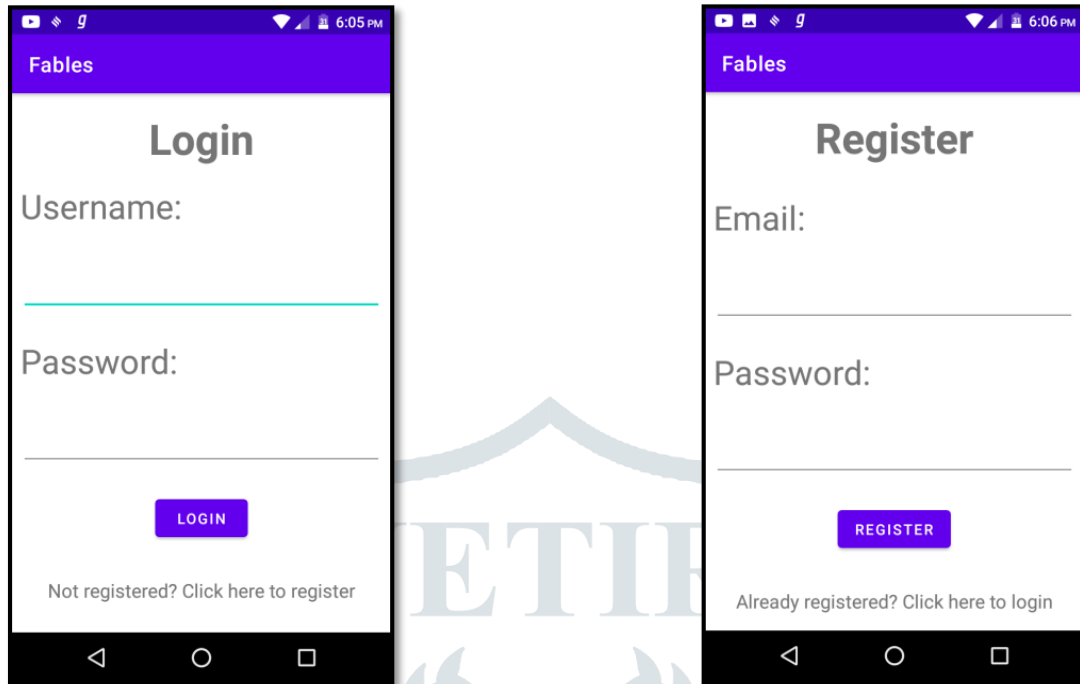
Fig 6.1 Login and Register page

6.2 Home Page & Book Page: -

This is the main screen that opens up after successful login. It consists of all the books from which user can select any of his choice. On selecting a book, the respective book page with all details like summary is displayed
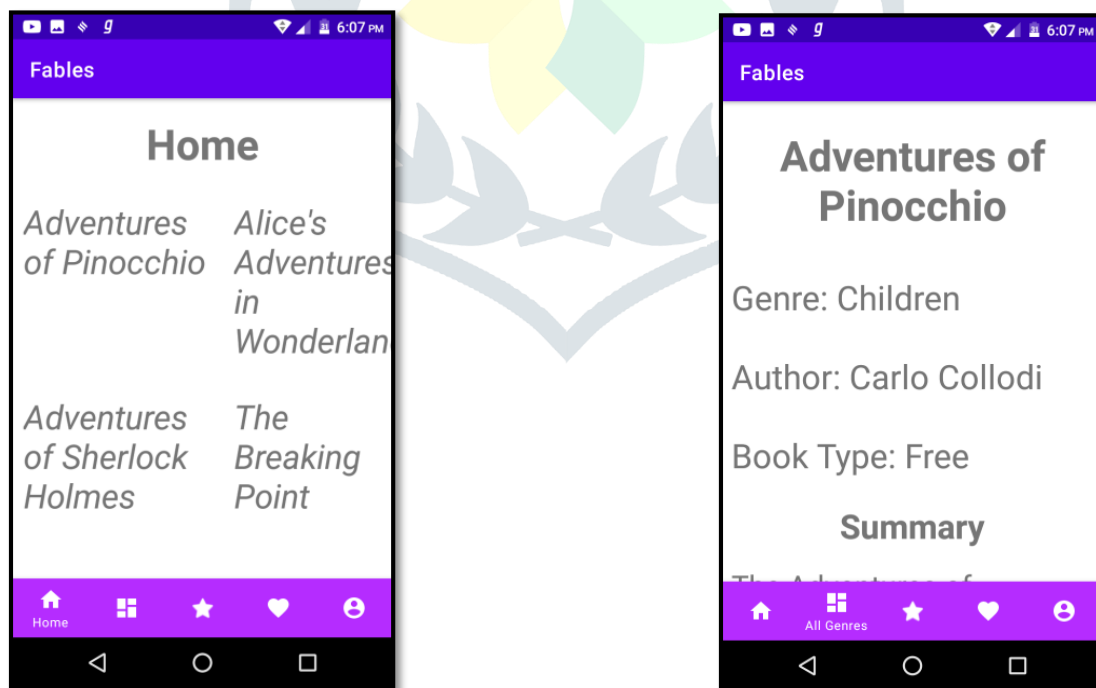

Fig 6.2 Home and Book Page

6.3 Favourites and Already Read Page: -

The favourites page contains the books that are "Added to Favourites" by users. The Already read page has the list of books that are "Marked as Read" by the user.
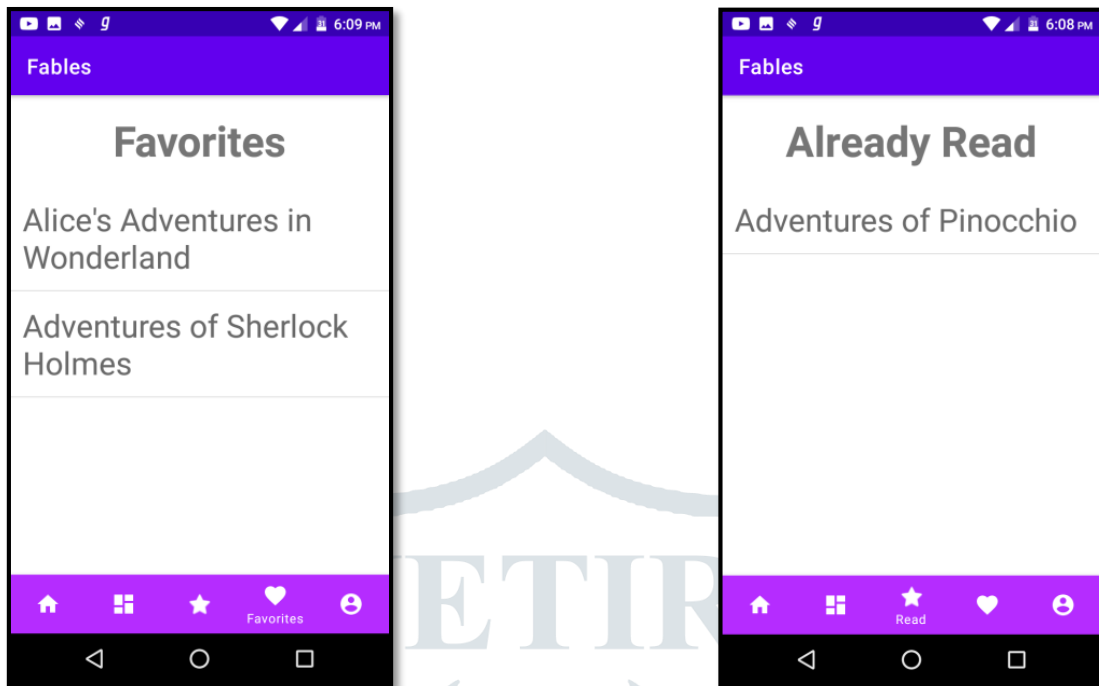
Fig. 6.3 Favourites and Already Read Page

6.4 Ratings and Profile Page: -

This page has special feature of getting feedback from users by the way of Ratings. While, the profile page consists of user details and indicates whether subscription status is Active/Inactive.
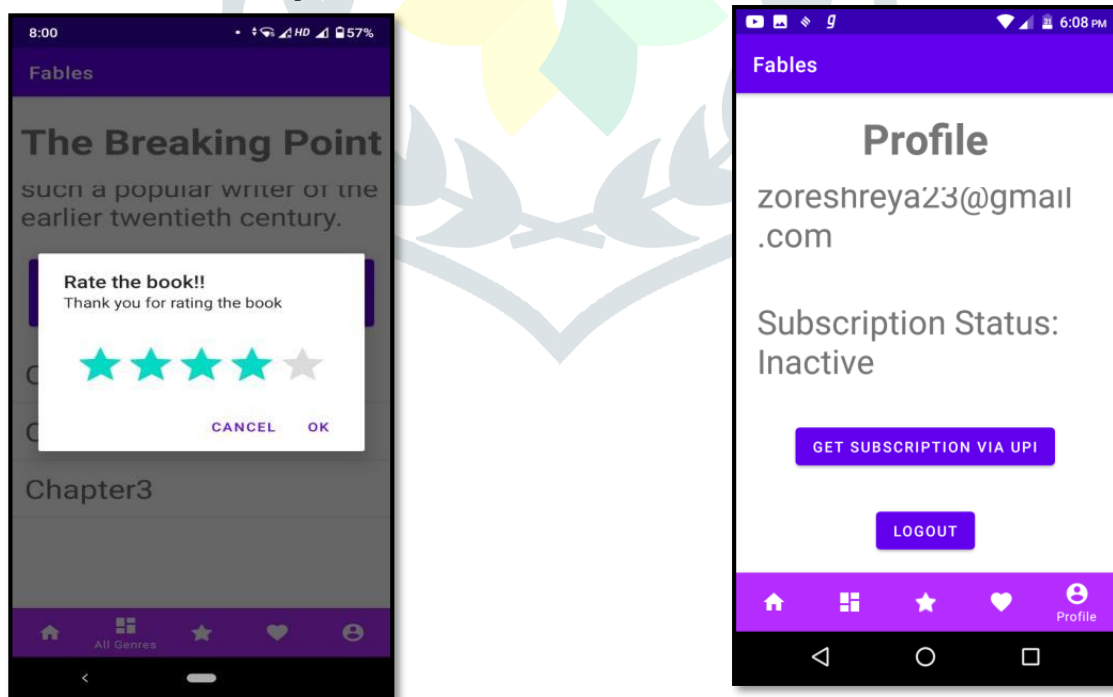
Fig. 6.4 Ratings and Profile Page

6.5 Subscription Payment Page and Add to Favourites/Mark as Read Page: -

The subscription payment page, on clicking "Get subscription via UPI", it displays an alert message displaying various payment options that are available on the user's android. Add to favourites/Mark as Read are some extra features given to the user for creating a sense of control in one's mind.
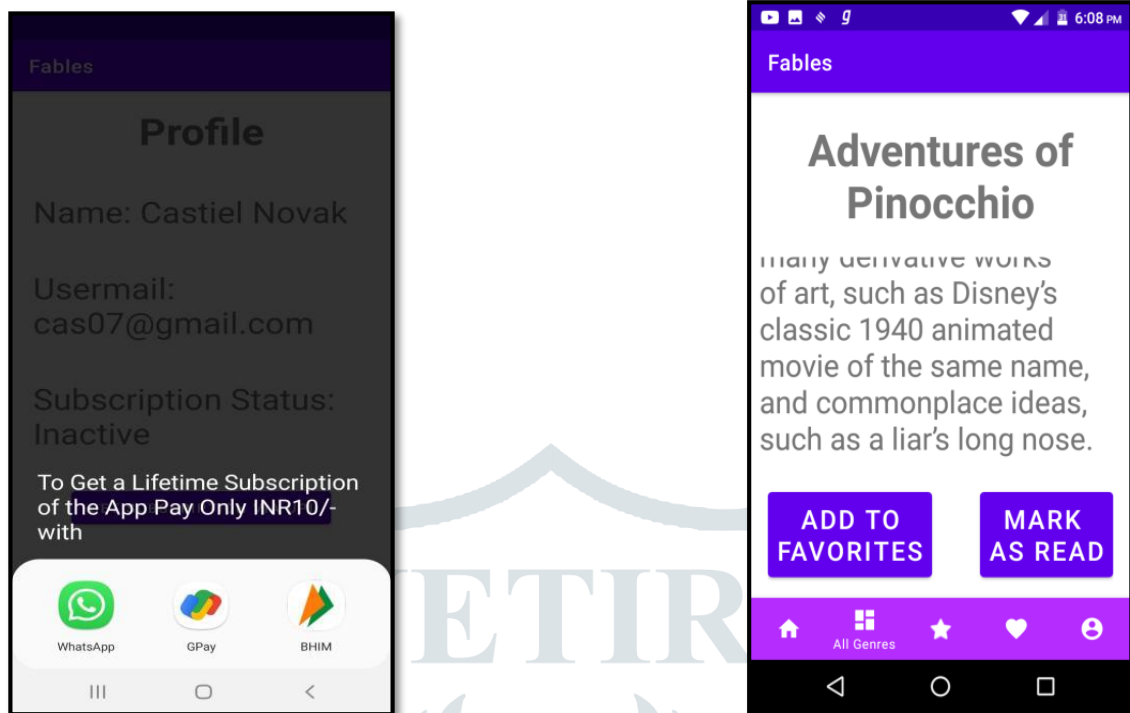

Fig. 6.5 Subscription and Add to Favourites Page

VII. FUTURE SCOPE

A. Addition of a Recommendation Engine that automatically suggests book based on user's preferred genre.
B. Productivity can be increased by addition of more books.
C. Higher level of encryption can be provided.
D. More personalisation features for e.g., dark mode can be added to the app.
E. Also, adding comments of users on various books can prove to be an additional enrichment to the app.
F. Wide range of payment options can be provided for subscription purposes.

VIII. CONCLUSION

The aim of this paper is to create a framework for an Audiobook app. It has also discussed about various features that can be included in the app for better performance than the current existing system. Also, it suggests about more features that can act as a perk for the app.

IX. ACKNOWLEDGEMENT

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