

E-Book System

Prajapati Jay¹, Patel Parth², Patel Prit³, Patel Vraj⁴

¹⁻⁴Student, Computer Science Engineering, ITM Universe, Vadodara, Gujarat, India

Abstract - The new E-Book System is an Android based application, which increases the readability of the user who found interest in reading different books. User can read the books in digital form without carrying the bulky and heavy paper-based books. A system searches for segments among multiple publications dealing with a given topic or set of topics, and compiles these segments into a custom-created electronic-book. In a commercial environment, such custom-created e-books are offered for sale to a user or set of users who have expressed interest in the given topic or set of topics. Optionally, the system is aware of the publications that are in a user's existing library, and avoids the inclusion of redundant material in the custom-created e-book for that user. The Search Engine played a vital role in the information technology. Information in the form of text or a visual image is easily available over the internet. The Visual Search Engine aims at helping users locate and rapidly get information of items of interest. The Visual Search take input in the form of keywords or visual images and provides information about artworks, books, items and product's catalog etc. The other feature is to convert text part of books In audio which is a text to speech conversion. This will be helpful for user to hear a story of any book in a medium of audio.

Key Words: E-Book, Visual Search, Text to speech, Firebase, Security

1. INTRODUCTION

In this paper, i.e E-Book System we are designing an android application for the peoples who likes reading or who has a hobby of reading different books.

As digital world is conquering the world, it is also necessary to co-op with the latest tools and technologies. One of the main areas is conventional book system. The conventional method which used to carry books is very frustrating and not easy to handle due to bulky and heavy weights. Papers are made from trees, more the paper used more the trees are used to make paper. This can lead to deforestation which results into increases in global warming. can save millions of trees. (It is estimated that a single tree, with 45ft of the usable trunk and a diameter of eight inches, will produce around 10,000 sheets of paper. To consider this in another way, one ream of paper (which is 500 sheets) will use 5% of a tree.) E-book System is the alternative to conventional paper-based books. In this system, the books are available in digital form in our mobile phones. By introducing the E-book, it will be easy to manage, operate and read the books due to attractive pictures and graphics

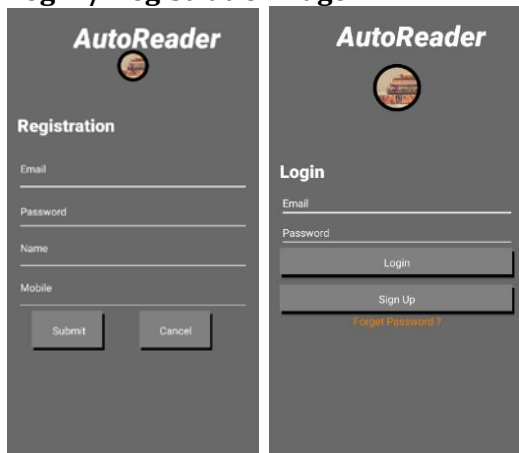
and also publishers can add video links related to books to make it convenient to the reader. As a publisher or author, selling the paper-based book over world becomes more complicated due to certain limits. As books turn into digital or electronic format, the manufacturing cost reduces and the reach of the author wouldn't be limited to particular region. Also cost of updating the book also reduces, as he/she has not to publish new edition seperatly. The Search Engine played a vital role in the information technology. Information in the form of text or a visual image is easily available over the internet. The Visual Search Engine aims at helping users locate and rapidly get information of items of interest. The Visual Search take input in the form of keywords or visual images and provides information about artworks, books, items and product's catalog etc. The other feature is to convert text part of books. In audio which is a text to speech conversion. This will be helpful for user to hear a story of any book in a medium of audio. In the recent pandemic of COVID-19, many people create reading as one of their habits. But the availability of physical books is less as all libraries, stationaries are closed. In this situation, e-book can be helpful as it only requires mobile.

2. SCOPE

The android based E- Book System is based on the books in digital form. Also in this system, reader can bookmark the the pages or books which he/she prefers to read in coming time. Also in this System, we introduce new feature called visual search, in this feature, if user has a book with him/her and wants that book in digital form then he/she has to click the picture of the book cover and finds the required book. Another feature is text to speech, in this feature the selected page gets converted into audio and plays for user so that it can heard to reader.

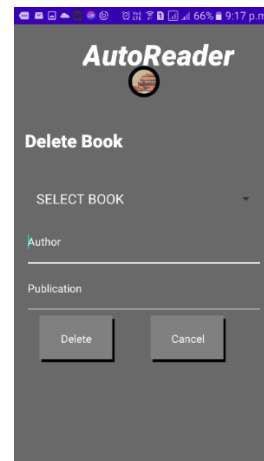
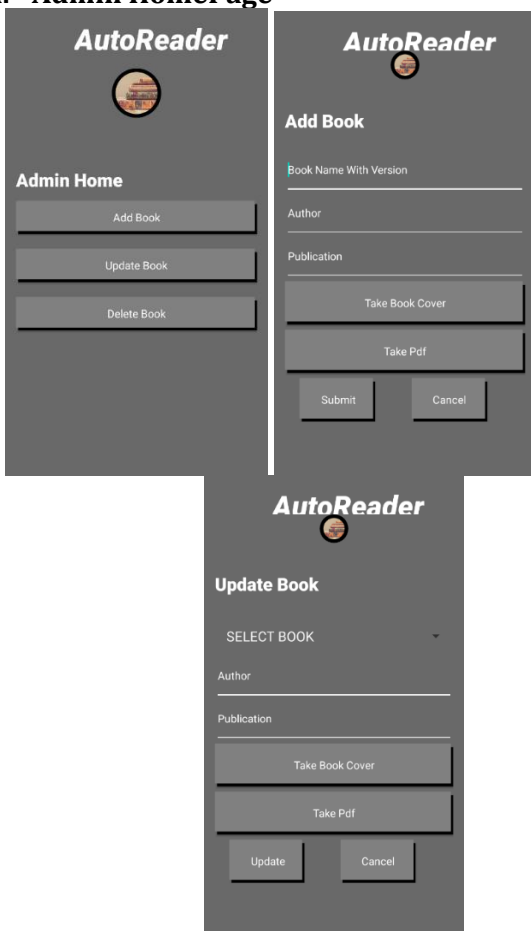
3. DESIGN AND METHODS

i. Login / Registration Page



In this page user/admin has to login using his/her username and password. If user is not registered he/she has to register first by providing basic details.

ii. Admin Home Page



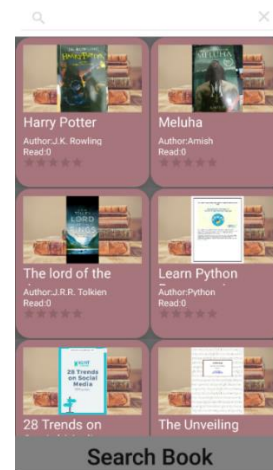
After successful login of admin, user can add, update or delete book.

Add book: Admin has to provide book name, author name, publication, and provide cover page of book and book in pdf format.

Update Book: If admin has to do some changes in book, admin has to select the book which he/she wants to update in database, he has to provide author name and publication. Also has to take book cover and upload updated pdf.

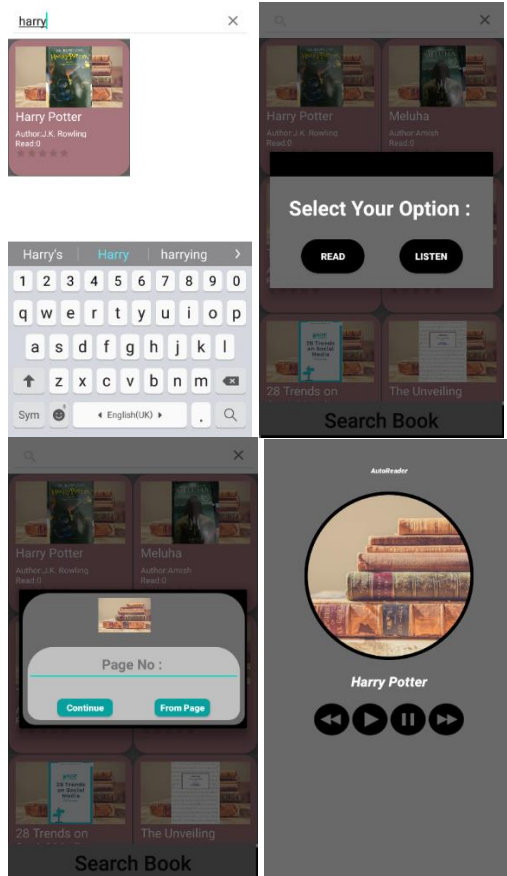
Delete Book: In this page, admin can delete the book. He/She can select the book from database and delete it.

iii. User Home Page



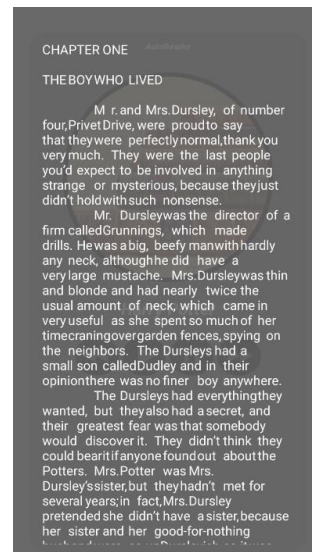
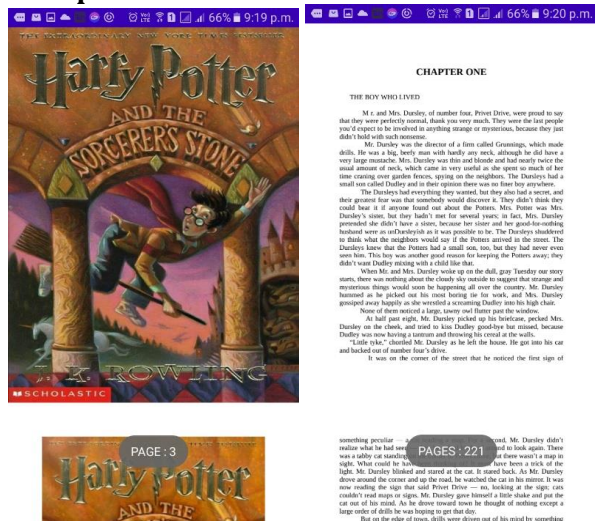
After successful login of user, user directed to the home page where user can able to see the book available in e-book format.

iv. Features



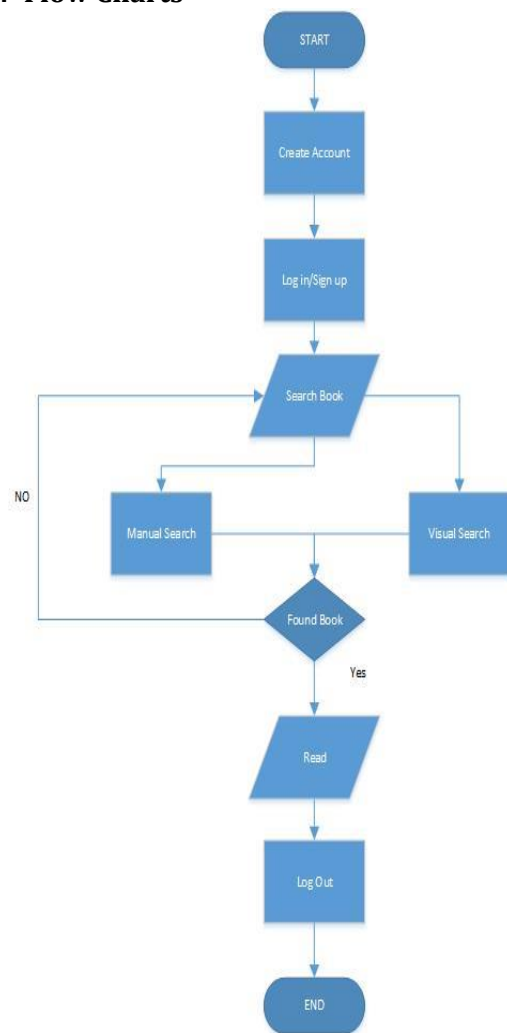
When user selects the book, user has to select the option whether he/she has to read or listen the content of the book. If user selects the “Read” option, user has to provide from which page number he/she want to read from. Or if user selects “Listen” option, user has to provide from which page number he/she want to listen from.

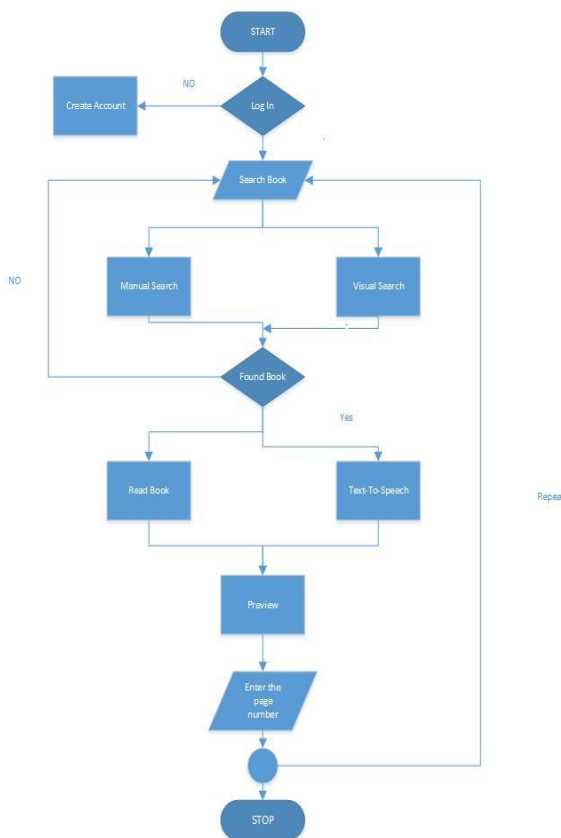
v. Open Book in PDF form



After user selects the read option, this is the final output of the book where he can read the book.

vi. Flow Charts





4. LITERATURE REVIEW

i. **Title:** System and Method for displaying pages of e-book

Inventor: Kim, Youngri Lee, Sanghyup

Description:

- This patent describes the Mobile devices with an e-book reader function generally display only the pages of an e-book according to a user's input information.
- This page replacement is not a process for turning pages; rather the page replacement more closely corresponds to a web browsing operation.

ii. **Title:** Customized E-books

Inventor: Puppini, Diego

Description:

- A computer-implemented method for displaying a customized version of an e-book client operated by a user.
- The portion including a plurality of content sections; accessing a user profile for the user.

iii. **Title:** Synchronized Consumption Modes For E-books

Inventor: Casey, Matthew R.

Description:

- Thus, a user of the e-reader can carry the e-reader device on his or her person and use the

device to read the e-books whenever time permits.

- Moreover, e-books can be accessed and synchronized using a variety of cloud services.
- The audio book version may be narrated by a human actor or other voiceover professional that reads the text with added nuance such as tone or inflection that enhances the enjoyment of the listener.

iv. **Title:** Multi-Level E-Book

Inventor: Tomson, Kyle (SALEM, OR, US)

Description:

- The present invention relates generally to an electronic book or an e-book for teaching and more specifically for an e-book that contains multiple levels of reading content to relate the same underlying content in an educational environment.
- The present invention teaches an interactive e-book with a coherent type of content presented in multiple formats as tailored to students of varied skill levels and needs to permit a diverse range of students to be presented with a uniform coherent body of instructional material tailored to specific reading or instructional needs.

5. OBJECTIVES

The objective of this project is to develop a mobile based system that mainly focused to read books in the mobile

- eBooks generally include the complete text of the printed textbook, along with all figures and illustrations.
- eBooks usually have a table of contents that you can click to navigate to specific chapters or sections.
- You can usually search for text in eBooks.
- You can usually navigate to a specific page number by typing the page number in a text box.
- You can often bookmark pages in the eBook.
- You can often add highlighting and notes to the eBook. Your highlighting and notes are saved between sessions and are available to you anytime when you open the eBook.
- You can usually zoom in and out when viewing the eBook.
- You can sometimes click on links in the eBook which open media such as videos. Some of these additional media are interactive.
- You can usually print pages from the eBook.
- You can sometimes save the eBook to your device for offline viewing.
- You can sometimes use an interactive glossary or click on certain terms in the text to view the glossary definition.

- Often the eBook will have a toolbar for navigating the eBook and implementing its various features.

6. CONCLUSION

E-Book System is an android application developed to increase readability and easy to operate. The main function of the application is the user can read the books anywhere and anytime without carrying the physical books. Due to attractive graphics and pictures, readers get easy to understand the content. Also video links can help to understand clearly about book.

7. FUTURE WORK

We can include the range of languages in visual search and Text-to-Speech to upgrade this application in the future. In the result of this, we could search the book with the cover page of languages other than English such as Hindi, Chinese, Latin and other living languages. Moreover, we would able to convert the words of these languages into relevant speech form.

We can add the feature of dictionary in this application which would help people to find the meaning of unknown word.

8. ACKNOWLEDGEMENT

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9. REFERENCES

<https://www.freepatentsonline.com/>
Ebook Reader app for Android and iOS (ebooks.com)

BIOGRAPHIES



Prajapati Jay
Student, Computer Science
Engineering Department
ITM Universe,
Vadodara



Patel Vraj
Student, Computer Science
Engineering Department
ITM Universe,
Vadodara



Patel Parth
Student, Computer Science
Engineering Department
ITM Universe,
Vadodara



Patel Prit
Student, Computer Science
Engineering Department
ITM Universe,
Vadodara



Mr. Divyanshu Atre (Guide)
Assistant Professor,
Computer Science and Engineering
Department, ITM Universe,
Vadodara