

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 10, Issue 3, March 2022

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

Impact Factor: 8.165

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International Journal of Innovative Research in Computer and Communication Engineering

| e-ISSN: 2320-9801, p-ISSN: 2320-9798| <u>www.ijircce.com</u> | |Impact Factor: 8.165

Volume 10, Issue 3, March 2022

| DOI: 10.15680/IJIRCCE.2022.1003025 |

E-Book Application for Mobile Devices Using React Native Technology

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ABSTRACT: As technology advances, web technology advances, and the widespread use of mobile devices has made it possible for books to evolve naturally into interactive books. In open and distance education, the change from published books to e books and then interactive books has also been a topic of conversation. When the concept of e-books first emerged, there were no distinctive characteristics. The early experimenters regarded e-books simply as digitalized versions of regular books. With the advent of new technologies, e-books can now provide learners with feedback, resulting in interactive book technologies. Tablet computers, smartphones, e-ink technology, and another outfit with touchscreen interfaces have all innovating in interactive books as they catch up with technological advances. We aim to create a mobile application specifically for Reading different kinds of books for free, using React Native technology. Mobile app development is one of the fastest-growing and in-demand skills nowadays, and in that specifically React Native is more popular as the applications created using this technology can be used in both IOS and Android. The app can be the user's very own library for e-books and audiobooks.

KEYWORDS: e-book; React-native; Mobile app development; Bookstore.

I. INTRODUCTION

In recent years, Because of developments in wireless technology and the expansion of market potential, the number of mobile device users has surged in recent years. The rapid development of mobile e-commerce technologies has resulted from the emergence of this technology. This provides on-the-go Internet access to the vast online market world, regardless of geographical or temporal constraints.

The process of developing software for mobile and other digital devices, with Android and iOS being the most popular platforms, is known as mobile application development. Many applications can be preinstalled on mobile devices and other digital assistants, downloaded from a mobile app store, or accessible via a mobile web browser. Java, Swift, C#, and HTML are examples of programming and markup languages used in the software development process.

Electronic books, often known as e-books, are self-contained digital textbooks with an initial structure that resembles traditional books, which can be read on an electronic display and used by students. The process of developing software for mobile and other digital devices, with Android and iOS being the most popular platforms, is known as mobile application development. Students may now keep thousands of e-books on their tablets, cell phones, and computers, giving them access to vast personal libraries in their hands and pockets, thanks to advances in information and communication technology. These mobile libraries provide a low-cost literacy structure that allows for self-paced, interactive learning at any time and place. Although e-books have grown in popularity in computer-based education across a wide range of topic domains and educational levels, past study has shown no consensus on their suitability for elementary students. According to several studies, e-books are beneficial to literacyAnimation, zooming in and out, musical scores, sound effects, textbook printing, built-in dictionaries, hotspots where the reader may interact with a character or item, foreign language translations, and more are all available in modern e-books. Interactive e-books aid in the development of effective reading skills and the empowerment of learners. They are also effective literacy tools that give learners with valuable opportunities through interactive content.

II. LITERATURE REVIEW

Since 2007, when the general public began to contemplate that "books" might come in pixels rather than pages (McGuire and O'Leary, 2012), e-books have grown in popularity. The popularity of numerous technologies, such as smartphones and smart pads, has been simplified. Mobile technology is becoming more widely used, and it is having a huge impact on digital media consuming. The amount of time spent on mobile digital media (51%) surpassed that of desktop and laptop digital media. period (42%) during the past two years (Bosomworth, 2015). The rise in mobile usage could be a good thing. explain why people are reading more on their phones. In 2011, 41% of all e-book readers

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used e-readers, 23% used tablets, 42% used PCs, and 28% used cell phones to read e-books. In 2014, e-book reading on tablets and e-readers increased by 55 and 57 percent, respectively. By 2014, the percentage of people reading e-books on computers had dropped to 29%, while the percentage of people reading on their phones had risen to 32%. (Zickuhr and Rainie, 2014).

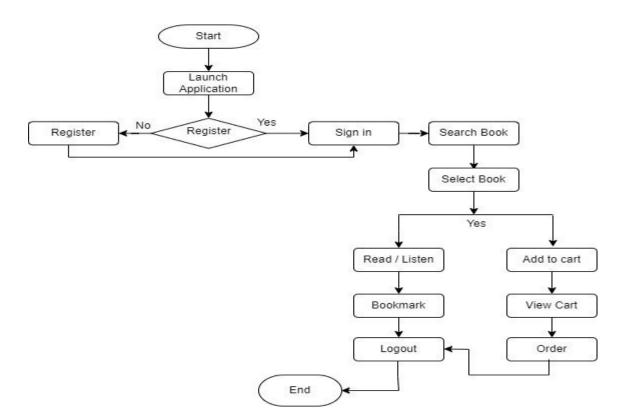
Digital libraries, according to the Digital Libraries Federation, have the majority of their collections in digital format and may be accessed through computer. To summarise, digital libraries are the process of transforming printed libraries into digital libraries by converting written works into digital format or files maintained in a database of an organisation. Paradigm shifts from traditional libraries to digital libraries. There will also be a paradigm shift as library services (conventional) evolve into digital libraries (e-library) (Ishak, Dec. 2008).

III. PROPOSED SYSTEM

We will put together reading books and audiobooks for users in a single app in the proposed system. Even if he has to pick it up, he can read and listen. We are creating this by combining the Exiting two Different app features, so the user does not need to download the Two Different applications. And at the same time, all kinds of books will be available in this application for users so it is an all-in-one Book Application. This will save the user time. It will have different sections as there are different types of books. In comparison to the existing app, this one will be both more user-friendly and more effective. As we have used React Native Paper, the UI for the navigation amongst the app has turned out to be unexpectedly great.

Our platform offers users the opportunity to read popular books by different authors or listen to their audiobooks. Another feature we provide is the capability for users to search for the books they wish to read next, based on different categories and orders. Users will be provided with enough description of the book along with current status of the book like ratings across the internet, that will be embedded in a beautiful UI, there will also be a book search functionality. Users might also be able to bookmark their favourite books.User can also Buy the book if he/she is personally fan of reading book in a traditional way. The books would be provided with a minimal margin cost making it affordable to theuser. In nutshell, this app will be a total blast for those who like to read different authors in their spare time. The main objective of an online book store is to provide the essence of online books via a simple yet powerful medium, which is enabled using React Native technology and different packages provided by the same.

IV. FLOW DIAGRAM



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V. ADVANTAGES

- E-books are equipped with interactive elements for a better reading experience.
- Anyone who wishes to read or listen to a book can use this method.
- React-native technology used in this system provides better performance as compared to other traditional applications.
- It is accessible at much lower prices online compare to bookstores and also provides fast purchasing.
- They have often accessed the book whenever they need even traveling with no problem carrying hard books.
- One of the biggest advantages is that it is a combination of reading books and audiobooks so that it is more efficient and time-saving.

VI. CONCLUSION AND FUTURE WORK

The project's purpose was to develop a mobile application for an online E-Book system. The project's purpose was to design a mobile application that would allow users to create an account, log in, search for specific books of interest, read a specific book, listen to a specific book, add a book to a cart, bookmark a book, and purchase a book (s). The online E-Book application also allows users to log out.

The proposed system is much more efficient compared to the existing one. This app will be a total blast who wants to read different types of the book or hear them. The project's goals were met by observing the software development process as well as software design and implementation concepts. Three primary sections were planned and implemented to achieve the project's goal: To begin with, the UI is appealing, intuitive, responsive, and designed with a positive user experience in mind. This was accomplished and executed by adhering to the Android design rules for mobile devices, as well as using react native technologies. Secondly, the design. Thirdly, the implementation of the actual project with all functionalities.

Finally, it's crucial to note that this application might potentially be developed by using the react native framework to add more interesting features. We might, for example, offer a feature that allows users to save their purchase history. Furthermore, the app might include a function that allows users to not only rate books but also promote them to their friends.

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