



SKYNET TECHNOLOGIES

CASE STUDY

Cloud-Based AI eBook Reader App Skyrockets Their Sales and Subscriptions by 200%!



Project Details



Industry

Education



Project Size

Small



Services

Web-based application development



Platform

Backend – Laravel, advanced PHP libraries such as ghost script, ImageMagick, Frontend - jQuery UI, PDFJS, JSPDF, Hammer JS, Backbone JS, Database - MySQL, Design - Bootstrap, AI - Python with PyTorch and gTTS libraries

The Brief

Smart and Seamless eBook Reader

A client was keen on making an AI-based eBook reader application through which a publisher uploads the books either in pdf or epub format and only the subscribed readers can access them through this application without affecting the revenue. The books should be in the encrypted format and the subscribed user should be able to download them in native 'xyz' file format. When the users want to read a book again, they must upload these 'xyz' files into the system and access the book. With the help of AI technology, the application should be able to read out the text for the user and with a single tap, should be able to provide the meaning of the difficult words on the pages. The user should also be able to add assorted color annotations, add notes on the pages, and bookmark them for a later read.



The Challenges

While building the application, the company did have its own set of challenges that were creating minor to major inconveniences. The list goes like:

1. Converting a book in pdf/epub file format into HTML.
2. Implementing the same structure for two different file formats - pdf and ePub.
3. Providing a swipe option as the users traverse through the pages, bookmark facility, and draggable sticky notes that can be used as per the user requirements.
4. Saving the file into 'xyz' format, making it non-readable by other applications, and loading the same data into the system.
5. Incorporating AI Technology for text and audio search, in-built word dictionary, and even read out the text for the readers.
6. Mobile responsiveness with all the web functionalities intact and dynamic pages for easy compatibility on all devices.
7. Minimizing the latency time and load efforts when there is a bigger file upload that may take time.



The Solution

While the client has been looking for a way out to meet all the laid down goals and objectives and overcome the inevitable challenges in the process, SkyNet Technologies came to the rescue. With our services, we helped our clients to gain double subscriptions and increase sales by 200%.

1. We have used PDFJS and BackboneJs to read the PDF and Epub files respectively and convert them into HTML format. We also use ghost script with ImageMagick library for storing them into the server.
2. Once the files are converted into HTML format, we have defined a common structure for both PDF and Epub files and convert their default structure into our structure.
3. We have used HammerJs for easy swipe options, saved the bookmark pages into the user database for easy retrieval, and created our own function using jQuery UI for a drag-and-drop sticky note functionality.
4. The entire data is encrypted while saving the pages and converted into 'xyz' format. We also provided another extra layer of security by encrypting the local data at the application end and disabled the developer tools on the browser.
5. Using AI technology and Deep learning, we have eased the search function, know the meaning of the words with a single tap. We have also used Google Text-to-Speech (gTTS) libraries for text to audio file conversions.
6. We have also created a script for styling and user annotations to dynamically improve the mobile experience for the readers.
7. We chose to load only one page at a time and keep the other pages in the backend to minimize the load time.

We have been committed to excellence and have enough expertise in web development applications. We also conduct Beta testing and maintain regular client interactions for feedback and improvisation to accelerate the development process.



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Result

200% Increase in sales & subscription

While the challenges are huge but not insurmountable, at least not for us. Our approach began with understanding the vision of the company while we were brainstorming over the application requirements. We adhered to the Agile methodology to keep pace with the rapid application deployments in the face of changing requirements. We successfully developed the AI eBook Reader app within the stipulated time and pre-defined budgets. We helped clients meet their sales goals and subscriptions.

Custom Laravel Application Development

Our Laravel developers are streamlined to deliver custom Laravel development solutions with business operations and strategies to highlight you as unique in the market. You can also have lucrative features and high-end extensions based on your requirements. For real-time collaboration within the internal teams, we used Trello and conducted regular application reviews with the client to make sure everything is going as per the laid-out plan.

Streamline your business process and maximize the value of your business application with our industry expertise Laravel web development solutions. Contact us at hello@skynettechnologies.com or submit your request free quote for more information.



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Thanks for your time. Any questions?
You can connect with us at:



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