BOOK BUG

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Project Proposal

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ABSTRACT

Reading is not only a habit but it is an addiction, Reading addicts read number of books every day, but remembering the page you were left reading last time is not an easy task. We generally use bookmarks for hard copies of the book, In case of e-books we have option to make a bookmark which is provided by the e-book reader application. But in case, the reader may be having both hard copy and soft copy of the book and he may be switching between both now the problem arises how to coordinate between hard copy and soft copy. Book Bug is simple solution which bookmarks hard copy of the book digitally. The concept behind this application is interacting with real world objects from a digital object [like mobile device, Tablet, PC].

The basic implementation of Book Bug is optical character recognition (OCR). User takes the image of the page number and the book front cover. Details like book title, edition number, and authors name is extracted from the front cover as well as the page number is also extracted. The data is stored and when user wants to read that book again he again show up front cover of the book with his camera on the digital device. Application will retrieve the page number from the data stored previously and show up on screen. In addition to this if the user decided to copy text from the hard copy of book he can simply take the image of text the application will extract the digital copy of the text.

REFERENCES

[1] http://opencv-code.com/tutorials/how-to-read-the-digits-from-a-scratchcard/#more-807

[2] http://www.samhaskell.co.uk/blog/reading-real-books-aloud-using-free-software

[3] http://blog.ayoungprogrammer.com/2013/01/equation-ocr-part-1-using-contours-to.html