# SYSTEM FOR RECOMMENDING CHAPTER SUMMARIES AND RELATED CONTENTS BASED ON USER INTEREST LEVEL 

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# SYSTEM FOR RECOMMENDING CHAPTER SUMMARIES AND RELATED CONTENTS BASED ON USER INTEREST LEVEL 


#### Abstract

This application discloses a system and method for recommending chapter summaries and related content based on user's interest level while reading electronic books. The system includes an application residing on an electronic tablet, mobile telephone or any other device used for reading. The system automatically determines if a chapter of the book is uninteresting to a user and saves time by showing summaries and additional content relevant to the chapter of the book.

\section*{BACKGROUND}

Readers have different reading speeds based on their interest in a chapter in an electronic book (an "E-book") system. For uninteresting chapters, readers get bored and sometimes read very slowly, thereby wasting or consuming time. This disclosure provides an efficient way to focus a reader's time on interesting chapters and saving time on uninteresting chapters.


## DESCRIPTION

A system and method for recommending chapter summaries and related content based on a user's interest level while reading electronic books is disclosed. The system could be an application residing on an electronic tablet or mobile telephone or any other system used for reading. The application monitors a user's reading speed to determine a level of user interest such as "interested, bored, distracted, etc." If the application finds the user bored or distracted, then it provides the user with a summary of the chapter or related content.

In one aspect, the system measures the user's reading speed based on parameters such as the amount of time spent on a single page, scrolling or page-flipping speed, number of scrolls, etc. In some cases, the system monitors the user's reading speed or time consumed per page with reference to various chapters of the book.

If the system determines that a user's reading speed is slow (i.e. below user's previous reading time/speed thresholds as captured by the user's reading history), the system determines that the user is not finding the current chapter interesting. In one aspect, the determination can also be made when the user has read at least a certain threshold value of the length of the chapter. The user's reading time for this $20 \%$ chapter length is compared with user's past reading speeds of the other chapters (first $20 \%$ part) that he has already read in the book.

In one scenario, if the result of the comparison is below a threshold, then the application provides the user with an option to view the chapter summary. The summary may be as text of suitable size such as a page or a paragraph. The application may search related online blogs, reviews, or websites dedicated to book readers to fetch the summaries. The application extracts the relevant keywords for this search from the relevant chapter. In addition to the summary, the application may also show the user a related chapter review video extracted from any other website. The system could automatically search for the review content or video based on keywords extracted from the current page or chapter the user is reading. Alternatively, the search could be based on title of book, chapter name and chapter number.

In one aspect, the system may calculate an average reading time of the user from the first few pages for various chapters or a threshold number of chapters of the book and compare it with the reading time for the present chapter. For example, if the user consumes one hour on an
average to read 15 pages, but has consumed 3 hours already for the present chapter, then the system could present a notification that the user could watch a 10 minute video review or episode scene instead of reading the complete chapter.

In another aspect, the application may also provide information to the user on expected time savings if they opt to watch the provided video. The application predicts the expected time consumption for reading the remaining pages of the chapter based on time already spent on the first few pages. In one method, a simple multiplication of minutes per page (based on amount of time spent on the first few pages extrapolated to the total remaining pages) may be used.

The application may also recommend various videos related to a TV/film/documentary associated with the current chapter of the book. For example, if the user is currently reading a chapter, the application will recommend to the user a video of the particular scene relevant to the chapter. In one instance, the application may recommend videos based on the user's reading speed.

In some implementations, the user may be provided with an interest rating by chapter or by page at the beginning of each chapter or page based on other users' data. The users' interest rating is calculated based on average time consumed on each page of the chapter by various other users and the number of times users preferred watching the video instead of reading the chapter, or in addition to reading the chapter. For example, the more the average time consumed by various users for a chapter or the frequency of watching the summary video, the lower would be the interest rating. Similarly, the more the number of users opting to watch the video in comparison to reading, the lower the rating.

The method for recommending chapter summaries and related videos based on a user's interest level can be implemented with any existing electronic book applications in a computing device. The system and application automatically predicts if a chapter of a book is uninteresting to a user and saves time by showing summaries, videos or review content relevant to the chapter.

