

CSc 322 Software Engineering Lab

An E-book sharing system specification

In this system, users can share and review E-books in a new way. Three types of users:

1. Super-users (SU): all RU's allowed operations, new-user approval decisions, book approvals/updates and complaints processing, set up the points for different reading durations.
2. Registered users (RU): all VS's allowed operations, contribute books, read and rate/review books/reviews, send complaints to SU on book contents.
3. Visitors (VS): browse available E-book catalog and the reviews/ratings, apply to be a new RU.

System features:

1. Provide a catalog of available E-books, each E-book should have a cover-page and summary to be displayed in the catalog, and the number of points needed to read the book for a certain time, e.g., 10 pts for 10 min, 20 for 30 min and 30 for 1 hour (in your system the time units should be seconds instead of minutes to make it easy to test).
2. For any RU to read a book, s/he should have points in the system \geq the pts asked by the book for a certain amount of time. Once the RU start to read the book, a timer is set according to the time the RU purchased, the book can be closed by the RU before the purchased time, or the system will close it when the time comes. The duration of the reading time for one book by one RU is accumulative.
3. The RU can review and rate a book only if s/he read it before, each review and rating is weighted by the amount of time the reviewer reads the book—the rating of an RU who reads the book with 2 hours should have a larger confidence that that by another RU who only read it 10 min.
4. The RU can contribute a book to the system and asks for a certain number A of points to be deposited to his/her account (this is the only way an RU can get points), the SU decides the number B of points to be rewarded to the contributing user. If $B < A$, the RU will be notified for approval, if not, the contribution will be denied.

5. Your system should have a function to search for bad words in the books. Any RU can have their own choice of bad words, the RU can complain the book based on his/her search. An RU can also complain a book after s/he read the book. A book receiving 3 complaints will be removed automatically, the point B for this book when the RU contributed this book will be deducted from his/her account with additional -100 points as penalty. If the complaint is very serious, e.g., copyright violations, the SU can choose to punish the contributing RU even with only 1 complaint. An RU whose books are removed twice or who contributed one copyrighted book will be ejected from the system and put in the blacklist who can never register again.
6. Every time an RU log into the system, 5 books that are similar to the ones s/he read before will be recommended. If an RU never read any book, then the top five books that were most read in the system will be recommended.
1. An RU can invite another RU to read a book, once accepted, they both can read the book for their purchased time, and they split the asking points.
2. Each RU can check his/her reading history/stats; anyone, including a VS, can browse the stats for each book.
3. A book that no one read for a certain time will be removed and 5 points are deducted from the contributing RU.
4. A new creative feature worth 10% of the total project credit based on each team's own choice.

General:

1. Should have one user-friendly GUI holding all features together (don't pop up many windows for different features)
2. The system need not be Internet based, a stand-alone app is fine.