Software Engineering Requirements Elicitation Process

READERS HUB

Software Engineering

Project by:

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Stakeholders: Bookstore owners, Readers

Interview questions: (Bookstore owner):

1. What challenges do you face in connecting with your online audience, and how do you overcome them?
2. Would you prefer a software platform that offers seamless integration with online bookstores for purchasing options?
3. Are you satisfied with the level of engagement and interaction you have with your online audience?
4. How do you currently manage your inventory and sales?
5. How do you currently market your bookstore? How do you expect the online platform to support your marketing efforts?

Interview with the customer/user:

1. How important is the ability to rate and review books on an online platform?
2. How valuable do you find personalized book recommendations based on your reading history?
3. What privacy settings would you expect to have control over regarding your reading lists and reviews?
4. What are your overall impressions of the proposed Reader's Hub Site?
5. Are there any features or aspects that you feel are missing or need improvement?

Questionnaire: (For the customer/user):

Link: https://forms.gle/qnUHAHn8CsxQmKc66

Close-ended Qs:

1. Age:
2. To what extent would you describe yourself as an avid reader, ranging from occasional reader to devoted bookworm?
3. Do you currently engage with online platforms or communities related to reading?
4. Have you received personalized book recommendations from online platforms before?
5. How often do you purchase books online through integrated bookstore options on platforms?
6. Do you track your reading progress or participate in reading-related activities on online platforms?

7. Have you explored affiliate marketing partnerships between online platforms and bookstores for purchasing books?
8. Would you be open to trying new technology solutions designed to enhance your online reading experience?

Open-ended Qs:
1. Are there any specific challenges you face when trying to connect with other readers online?
2. What role do online platforms play in shaping your reading habits and preferences?
3. Can you share examples of online platforms or tools you've found particularly helpful in your reading journey?

About the interview with the bookstore owner:

During our visit to Readings, we initially spoke with the owner about their website, who directed us to a staff member overseeing it. We discussed challenges in connecting with the online audience, preferences for software platforms, current engagement levels, inventory management, marketing strategies, and ways to enhance online marketing efforts. This discussion provided valuable insights into Readings approach to its online presence, highlighting its dedication to improving customer experience and engagement.

Interview with the owner:

1. The main challenge in connecting with our online audience is ensuring that our content resonates with them amidst the vast online landscape. To overcome this, we prioritize understanding our audience's preferences through feedback mechanisms, tailoring our content and promotions accordingly. Additionally, we actively engage with our audience through social media by asking them questions, hosting book readings and signing with local authors and organizing book clubs for our readers.

2. Yes, seamless integration with online bookstores would greatly enhance the purchasing experience for our customers as having a software platform that effortlessly integrates with online bookstores would streamline the buying process, providing convenience and efficiency for both us and our customers.

3. While we value the engagement we have with our online audience, there's always room for improvement. We continually assess our engagement metrics and seek

feedback from our customers to ensure we're meeting their needs effectively. Overall, we strive to enhance our online interaction by providing responsive customer service.

4. We utilize inventory management software to track reorder products and manage deliveries efficiently.

5. Our bookstore's marketing efforts primarily revolve around social media and local promotions. We leverage platforms like Facebook, Instagram, and Twitter to showcase new arrivals, share book recommendations, and engage with our audience. With the online platform, we expect to expand our marketing reach by targeting specific demographics, utilizing targeted advertising, and optimizing our online presence for search engines.

About the interview with the users:

During our research phase, each member of our group conducted one-on-one interviews with avid readers, introducing them to our software and seeking valuable insights. Participants were asked about key aspects such as the importance of rating and reviewing books online, the value of personalized recommendations, desired privacy settings for reading lists and reviews, impressions of the proposed Reader's Hub Site, suggestions for improvements, and expectations regarding responsiveness to user feedback.

Interview with the customer/user:

Interview 1:

1. Very important. That's what starts the book discussion I believe. I have only tried GoodReads once and maybe Amazon also has the same feature, but I didn't like it because it felt like you couldn't really connect with the other readers. They just post a review and rate it; you do the same and you can't really have a one-on-one discussion with each other.

2. A lot. I have seen that most people prefer certain genres, authors or writing styles. It's rare for someone to be open to reading just any book they come across. Personalized book recommendations are important for readers for decide what to read next.

3. I think there should be an option to either to make a review public or private and a reading list public or private. Kind of like how Spotify has an option to make albums public or private. Instagram also has such for its saved collections. Same for Pinterest collection pins.

4. I like it. I think it would be something book lovers would want to use.

5. Sometimes people don't argue respectfully and if someone has a differing opinion from them, they start using abusive language so maybe the site should have its rules and regulations that if someone behaves like this they would be removed etc.

Interview 2:

1. The ability to rate and review books on a platform like The Reader's Hub is incredibly valuable for several reasons. Interaction with fellow readers and shared experiences foster discussions, recommendations, and the exchange of ideas, enhancing the reading experience and personalized recommendations and quality assessment can help readers discover books aligned with their preferences and whether a book is worth investing our time in.

2. Personalized book recommendations based on my reading history are incredibly valuable to me. Recommendations based on my reading history consider my preferred genres, writing styles, and themes. With a vast sea of books available, personalized recommendations save time and effort by filtering out irrelevant titles, ensuring that I can discover books aligned with my tastes.

3. As an individual who values privacy and online safety, I would expect certain privacy settings to be available on The Reader's Hub platform regarding my reading lists and reviews. I'd like the option to choose whether my profile is visible to everyone, only to registered users, or to a customized list of friends. Same with reading lists, I should be able to decide whether my reading lists are visible to others. I'd like control over the visibility of my book reviews. While public reviews contribute to the community, private reviews allow me to express personal thoughts without external scrutiny, like adding a note for myself at the end of a slide.

4. Reader's Hub Site is an exciting initiative for book enthusiasts nationwide. The focus on serving passionate readers and cultivating a dynamic community resonates with me as connecting with fellow book lovers and exchanging ideas is invaluable. The recommendation algorithms tailored to individual reading preferences are a game-changer as discovering books aligned with my tastes saves time and enhances my literary adventure. Collaborating with online bookstores streamlines the book-buying process, making the one-stop solution for discovery and purchase convenient.

5. The proposed Reader's Hub Site is promising, but a few enhancements could further elevate the user experience. Fostering more active discussions and user-generated content with live chats, virtual book clubs, or author Q&A sessions can be great add-ons. Tailored recommendations beyond genres, like mood-based suggestions or personalized reading lists would be fantastic features to add. Regional book recommendations, local author spotlights, and community events would certainly give a more localized touch, that I believe a lot would enjoy.

Interview 3:

1. I believe rating books plays a big part in the popularity of a book. Most of the books that have higher rating on apps such as Goodreads go upon to be best sellers. Reviews also allow readers like me to choose which books we would like to read more and hence, buy. And if a book has higher rating, it's more accessible and appears more online as well on TikTok and Instagram It's clear you understand the significance of ratings and reviews in shaping book popularity. Your perspective highlights how crucial they are for readers in making informed decisions about their next read.

2. I think it is very important as I'd love to read more types of books that suit my personal taste.

3. I'd prefer that the people I'm following and my followers can see my reading lists and reviews. Reviews should have an option for them to be public or just my followers. Same for reading lists I suppose.

4. I am definitely looking forward to this site, it's seems the perfect blend of what other apps are offering and the features that we readers would love to have, all in one place. And I really appreciate the measures being taken to ensure a safe experience for the young ones.

5. I'd like the involvement of the authors in this platform could really amp it up. It allows a one-on-one connection with their readers and get to know the book better.

Questionnaire results from the customer/user:

Close-ended responses:

Age:
21 responses
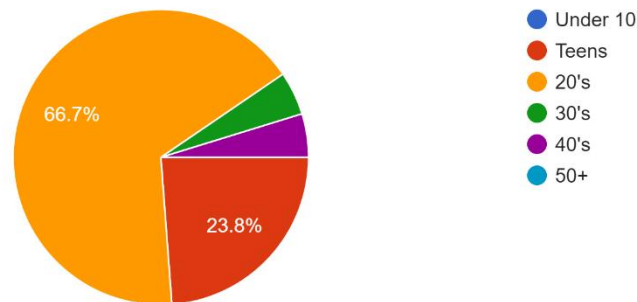
Note: The survey findings reveal a significant portion of our user base, with 66.7% falling within their 20s, indicating a predominant young adult demographic. Following closely behind, teenagers constitute the second-largest group at 23.8%. The data suggests an absence of users under the age of 10.

To what extent would you describe yourself as an avid reader, ranging from occasional reader to devoted bookworm?
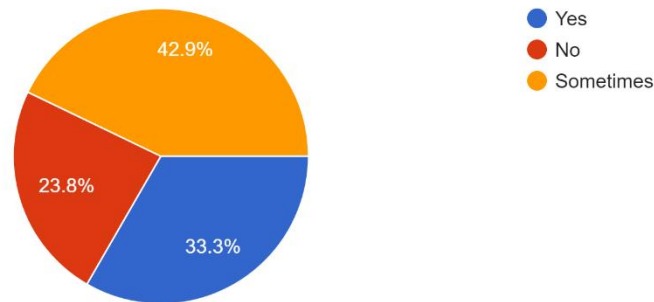21 responses
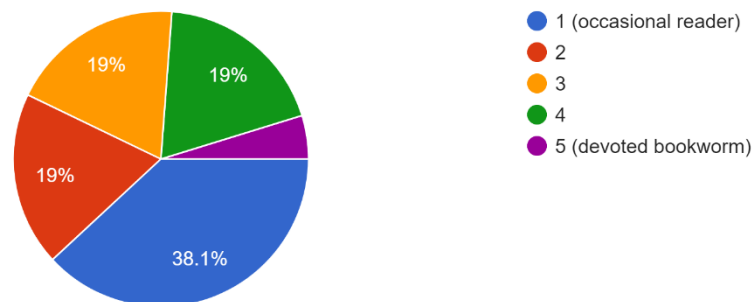
Note: The survey question aimed to gauge participants' reading habits by asking them to self-assess on a scale from occasional reader to devoted bookworm. The responses varied, with the majority falling in the middle range, indicating a mix of regular reading habits, while a smaller percentage identified as either occasional readers or devoted bookworms. Specifically, 38.1% identified as occasional readers, 19% each as level 2, 3, and 4, while only 4.8% identified as devoted bookworms.

Do you currently engage with online platforms or communities related to reading?
21 responses

Legend:
- Yes
- No
- Sometimes

42.9%
23.8%
33.3%

Note: The survey sought insights into participants' engagement with online platforms or communities related to reading. Responses varied, with 33.3% indicating active involvement, 23.8% reporting no engagement, and 42.9% expressing intermittent participation.

Have you received personalized book recommendations from online platforms before?
21 responses

Legend:
- Yes
- No
- Maybe

61.9%
14.3%
23.8%
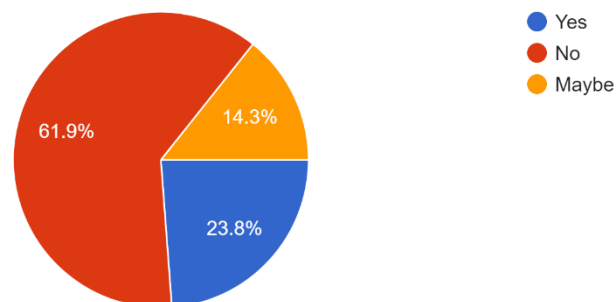
Note: The survey explored participants' experiences with receiving personalized book recommendations from online platforms. Results showed that 23.8% of respondents had received such recommendations, while 61.9% had not. Additionally, 14.3% indicated uncertainty or mixed experiences regarding personalized book suggestions.

Do you track your reading progress or participate in reading-related activities on online platforms?
21 responses

Legend:
- Yes
- No
- Sometimes

23.8%
57.1%
19%
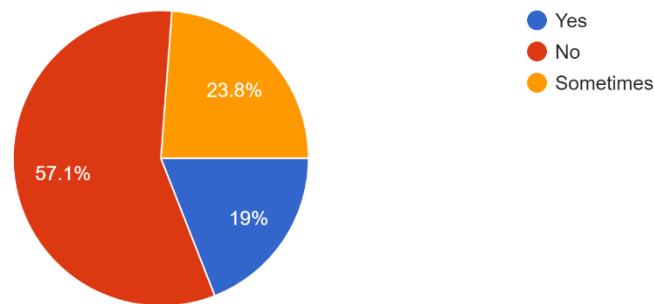
Note: The survey inquired about participants' engagement with reading-related activities and progress tracking on online platforms. Results showed that 19% of respondents actively participate, while the majority, 57.1%, do not engage in such activities. Additionally, 23.8% indicated occasional involvement in these online reading-related activities.

Have you explored affiliate marketing partnerships between online platforms and bookstores for purchasing books?
21 responses

Legend:
- Yes
- No
- Maybe
- Ive done affiliate marketing but not for reading platforms.

9.5%
81%
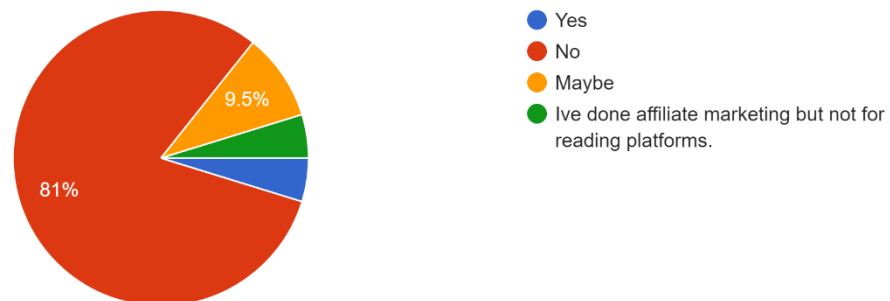
Note: The survey investigated participants' familiarity with affiliate marketing partnerships between online platforms and bookstores for book purchases. Results indicate that only a small percentage, 4.8%, have explored such partnerships. The majority, 81.1%, reported no knowledge of these affiliations, while 9.5% expressed uncertainty. Additionally, a minor portion, also 4.8%, stated they have engaged in affiliate marketing but not specifically for reading platforms.

Would you be open to trying new technology solutions designed to enhance your online reading experience?

21 responses

- Yes
- No
- Maybe

23.8%

19%

57.1%
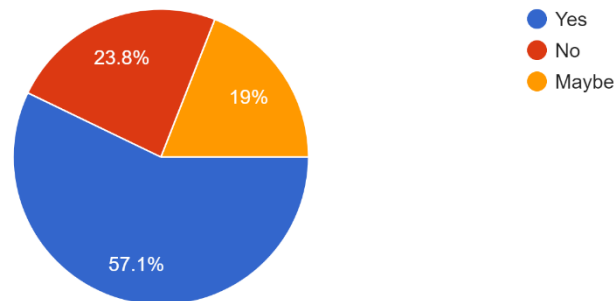
Note: The survey aimed to gauge participants' openness to adopting new technology solutions designed to enrich their online reading experience. Results showed that a majority, 57.1%, expressed willingness to try such innovations. However, a notable portion, 23.8%, indicated reluctance, while 19% remained uncertain, suggesting a potential openness contingent on further information or demonstration.

Open-ended responses:

1. Many respondents highlighted the challenge of finding online communities aligned with specific reading interests, particularly for niche genres, leading to fragmented discussions and a lack of active participants. Additionally, several individuals noted the overwhelming amount of online information, making it difficult to filter through and find meaningful discussions. Moreover, the impersonal nature of digital communication was cited as a barrier to building genuine connections and engaging in deep conversations. Despite these challenges, there was a consensus that efforts to bridge the gap between different readers online could greatly enhance the overall literary experience for enthusiasts.

2. Many respondents underscored the convenience offered by online platforms, emphasizing how they streamline the initial steps towards reading by granting easy access to a diverse array of books sans physical copies. Additionally, several participants noted the platforms' pivotal role in fostering literary exploration, allowing them to discover new authors and delve into varied genres with the aid of book reviews and personalized recommendations tailored to their preferences. Moreover, a significant number of individuals highlighted the profound impact of online platforms

on their reading routines, expressing gratitude for the motivation to read regularly and the assistance in maintaining consistency and organization in their literary pursuits. The influence of user-generated content, particularly on platforms like Reddit or Goodreads, was widely acknowledged, with many respondents citing its significance in their decision-making processes regarding book selections. Algorithms employed by online platforms were also recognized as influential tools in shaping reading preferences, offering tailored recommendations based on individual tastes. Furthermore, respondents emphasized the role of online book clubs, forums, and social media platforms in fostering connections among like-minded readers and facilitating engaging discussions about literature, thus cultivating a sense of community within the digital sphere. Overall, there was a consensus among respondents regarding the pivotal role of online platforms in shaping contemporary reading habits and preferences.

3. Goodreads garnered praise for its comprehensive features, including virtual bookshelves, progress tracking, reviews, and opportunities for reader connections through groups and forums. Instagram accounts dedicated to books, known as Bookstagram, were also lauded for their visually engaging content, recommendations, and discussions. Others mentioned finding value in platforms like Wattpad for accessing original stories and Z-Library for its extensive collection of downloadable e-books and PDFs. Libby, an app providing access to library e-books and audiobooks, and Kindle, renowned for its broad range of e-books, were commended by several participants. Reddit emerged as a useful platform for engaging in discussions, receiving recommendations, and sharing reading experiences within dedicated subreddits. Additionally, respondents highlighted the role of Google in finding information about books and authors, while platforms like Open Library offered access to free e-books. Moreover, BookBub's personalized book deals and recommendations delivered directly to users' email inboxes were appreciated.

Functional Requirements:

1. User Registration and Authentication:

   Users should be able to register accounts securely and authentication mechanisms should be in place to ensure user privacy and security.

2. User Profile Management:

Users should be able to include personal information, reading preferences, and activity history in their profiles.

3. Book Catalog:

   Books should be categorizable by genre, author, publication date, etc.

4. Personalized Recommendations:

   Users should have a platform which should offer personalized book recommendations based on user preferences and reading history and recommendation algorithms should consider factors such as genre, author, ratings, and user reviews.

5. Interactive Features:

   Users should be able to rate and review books. Discussion forums should be available for users to engage in literary discussions.

6. Integration with Online Bookstores:
   Users should be able to purchase recommended books directly from the platform through seamless integration with online bookstores.

Non-Functional Requirements:

1. Performance:

   Pages should load quickly, and actions should be processed promptly.

2. Scalability:

   The platform should be scalable to accommodate a growing user base and increasing data volume. Scalability should be achieved through efficient architecture and infrastructure design.

3. Usability:

   The user interface should be intuitive and easy to navigate.

4. Security:

   Encryption should be used for data transmission and storage. Access controls should be implemented to prevent unauthorized access to sensitive information.

5. Reliability:

   Backup and recovery mechanisms should be in place to prevent data loss in case of failures.

6. Compatibility:

   The platform should be compatible with a wide range of web browsers and devices.

7. Maintainability:

   The codebase should be well-documented and modular to facilitate maintenance and updates.

8. Language and Cultural Adaptation:

The software interface should be available in Urdu and/or English, catering to the language preferences of users in Pakistan.

Content should reflect the cultural nuances and preferences of Pakistani readers.

9. Geographical Relevance:

   The book catalog and recommendations should prioritize titles relevant to Pakistani readers, including works by local authors and those addressing topics of interest in the region.