Usability Testing Technical Report

Usability Study of the Grapevine Public Library Website

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1. Introduction:

- **Overview:** The information in this report comes from a usability research that was done on the Grapevine Public Library website. The purpose of the study was to evaluate how well the website assisted users in completing particular tasks and how user-friendly it performed.

- **Purpose and Objectives:** The main objectives of the study were:
  - To determine if users can find when the library is open on weekends.
  - To determine how users can apply for a digital card.
  - To determine if the library provides volunteer opportunities for youth.

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2. Data Collection and Analysis:

Unmoderated usability testing

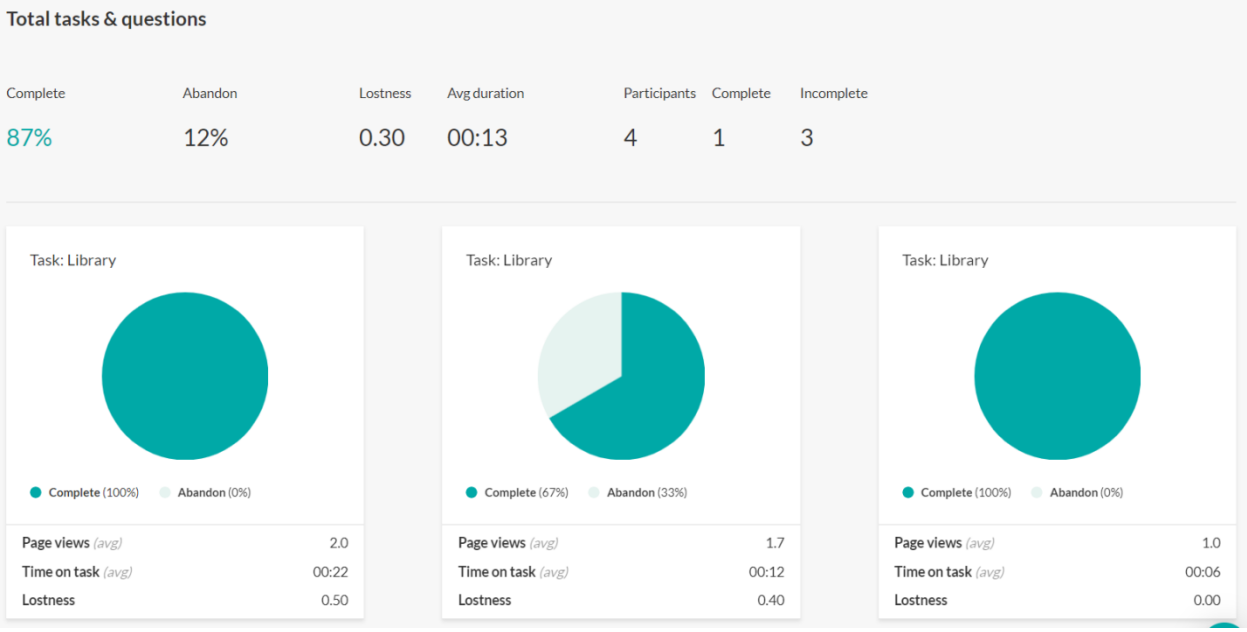
1. Grapevine Library

Type: Standard

Determine if the user can find when the library is open on weekends.

Statistics

- Complete: 87%
- Abandon: 12%
- Lostness: 0.30
- Avg Page Views: 2.0
- Avg Duration: 00:13



Efficiency Metrics:

- **Lostness Metric:** 0.30

  The tasks' lostness measures, which have an overall lostness value of 0.30, show different degrees of user uncertainty. In particular, Task 2 (Library) had a lostness of 0.40, Task 3 (Library) showed no confusion with a lostness of 0.00, and Task 1 (Library) had the highest lostness at 0.50. These measurements indicate that although most activities were completed quite easily, participants found Task 1 to be more difficult.

- **Average Number of Page Views:** 2.0

  For every assignment, participants navigated through varying numbers of pages, with respect to the average number of page views. Task 1 in the Library required 2.0 page visits on average, Task 2 in the Library required 1.7 page views, and Task 3 in the Library was finished with an average of just 1.0 page view. This suggests that Task 1 required more page visits from participants and was therefore more difficult or less intuitive.

- **Average Duration:** 13 seconds

In terms of average duration, tasks took an average of 13 seconds to complete overall. With an average time of 22 seconds, Task 1 (Library) was the longest, followed by Task 2 (12 seconds) and Task 3 (6 seconds) being the quickest. This implies that while Task 3 was simple and easy to finish, Task 1 took the longest and may have confused participants the most.

Summary:

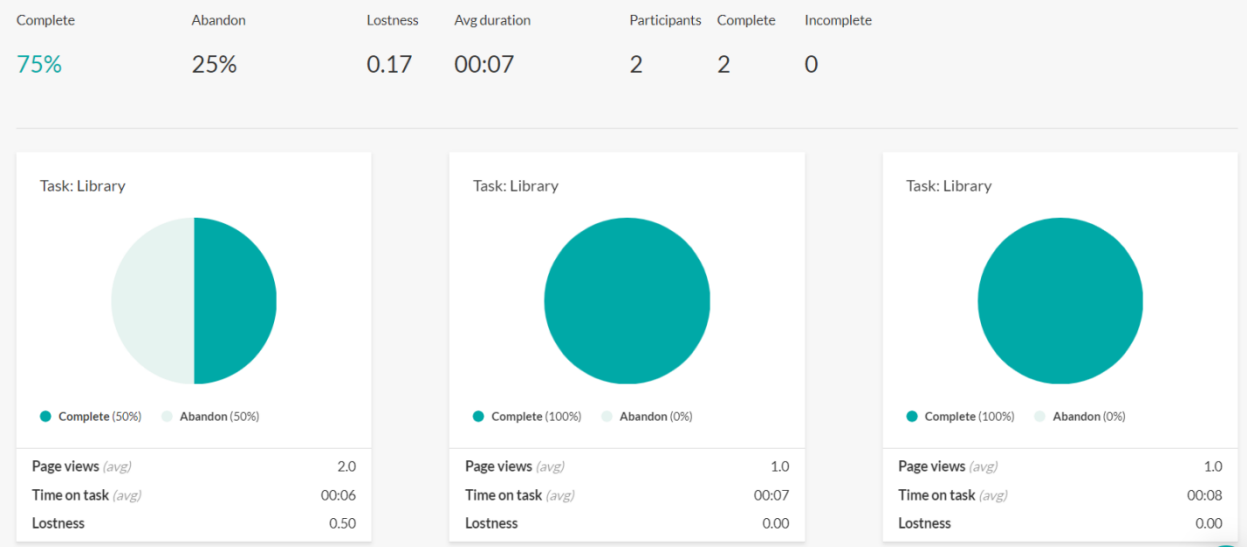
The majority of participants successfully completed the exercises, as seen by the high total completion rate of 87% for the tasks. Nevertheless, 12% of the activities were dropped, indicating that task design or user engagement might use some work. The lostness measurements show that while there was some confusion in Tasks 1 and 2, overall, participants navigated well. The data on page views and length further corroborate this; for Task 1, participants required an average of 22 seconds and 2.0 page views, while Task 3 only required 1.0 page view and an average duration of 6 seconds. This discrepancy implies that Task 1 may be less straightforward or more complex than previously thought, necessitating a review and possible redesign to enhance the user experience.

Recommendations:

1. **Improve Task 1 Clarity:** Examine the task instructions or interface again for any possible areas of misunderstanding, as Task 1 has a greater lostness and takes more page views and time.
2. **Simplify Navigation:** To cut down on lostness and abandonment rates, fewer steps must be taken to accomplish objectives.
3. **Provide Better Guidance:** For jobs where users exhibit a higher degree of lostness or require more time, consider using tooltips, help sections, or walkthroughs.
4. **Monitor and Modify:** Examine task performance metrics on a regular basis to pinpoint areas that require more development. Then, test modifications to gauge their effects.

User Feedback: By implementing these suggestions into practice, organisations may improve overall navigation efficiency, shorten task completion times, and improve user experience.

Moderated Usability Testing



- **Complete: 75%**
- **Abondon: 25%**
- **Lostness: 0.17**
- **Average page views: 2.0**
- **Average duration: 00:07**

- Task 1 (Library) had an average lostness of 0.50, a 50% completion rate, and a 50% abandonment rate. On average, participants looked at 2.0 pages and took 6 seconds to complete the exercise.
- With a 100% completion rate and a lostness of 0.00, Task 2 (Library) took 7 seconds to complete on average, and participants read an average of 1.0 page.
- With a lostness of 0.00 and a 100% completion rate, Task 3 (Library) took 8 seconds to complete on average, with participants viewing 1.0 page.

Recommendations

- It is imperative to fix the issues noted in Task 1 in order to increase user engagement and task completion rates. Significant lostness and a high desertion rate suggest that this task might be unduly difficult or ambiguous. Confusion may be decreased by making the task simpler or by giving more precise instructions. Furthermore, examining how users behave on this job to pinpoint certain problems can yield useful information for focused enhancements.

  Keeping the current approach seems successful for Tasks 2 and 3, which performed well with 100% completion rates and no lostness. It is advised to monitor these jobs continuously, though, to make sure they continue to be user-friendly as additional modifications are made. Usability testing and regular user input collection can assist improve tasks and the overall user experience.

Conclusion

- The tasks that are given have a 75% completion rate, and 25% of them are left undone. This implies that even though most participants finished the activities successfully, a sizeable percentage did not, suggesting that there may be problems with user engagement or task difficulty. The overall lostness index is 0.17, which suggests that while most participants found the activities manageable, there were some difficulties. The task completion time on average is 7 seconds, indicating overall efficient task execution.

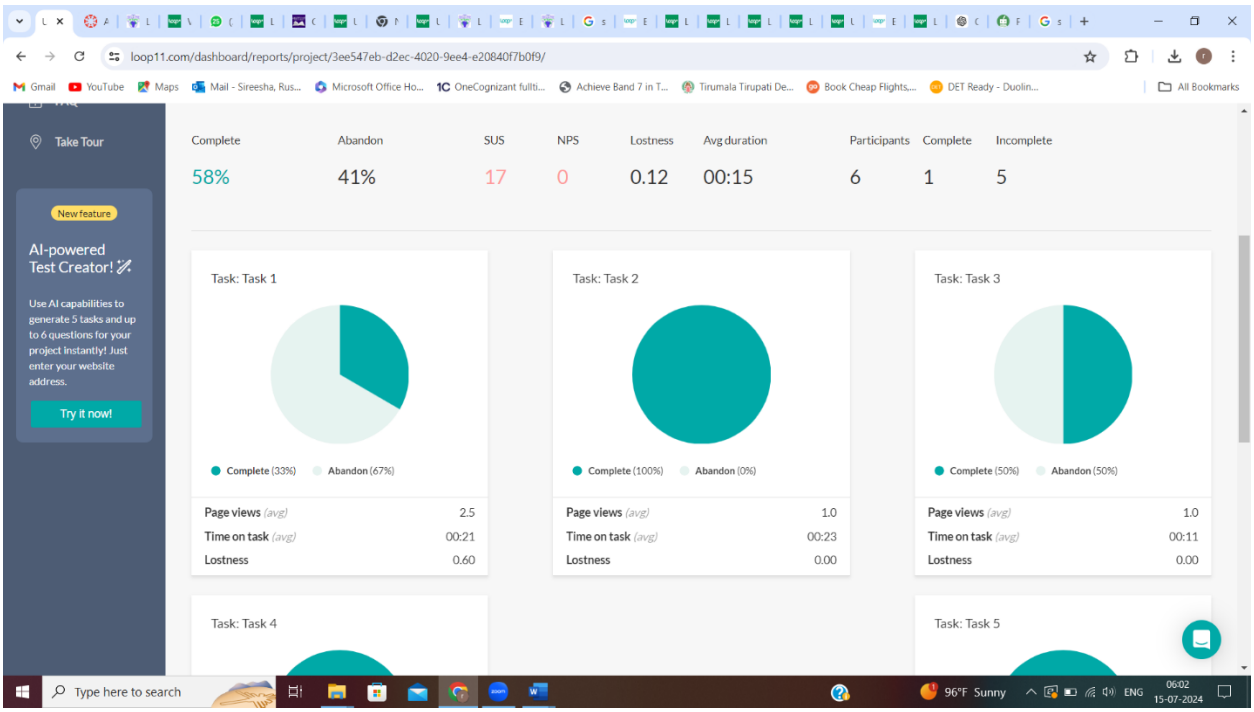
Overall Recommendations

1. **Simplify and Clarify Task Instructions:** Task 1's substantial lostness and high desertion rate suggest that participants find it difficult or confusing. The task instructions might be made clearer and more easily understood in order to increase completion rates.
2. **Boost User Assistance:**

To assist users in completing tasks, include tooltips, help sections, or interactive tutorials. This can lessen participant confusion and guarantee that they know what's needed to do each assignment.

3. **Moderate and Iterate:** Maintain a tab on task performance metrics all the time, including length, page views, lostness, completion and abandonment rates. Make incremental adjustments and make sure tasks stay user-friendly by using this data.

UX Test Creator



Comparison of Moderated and Unmoderated Usability Testing:

METRICS	MODERATED	UNMODERATED
Complete	**75%**	**87%**
Abondon	**25%**	**12%**
Lostness	**0.17**	**0.30**
Average Duration	**00:07**	**00:13**
Participants	**2**	**4**
Tasks(total)	**2 complete, 0 incomplete**	**4 complete, 1 incomplete**
Task-1 Lostness	**0.50**	**0.50**
Task-1 Complete	**50%**	**100%**
Task-1 Page views	**2.0**	**2.0**
Task-1 Abondon	**50%**	**0%**
Task-2 Lostness	**0.000**	**0.40**
Task-2 Complete	**100%**	**67%**
Task-2 Abondon	**0%3**	**33%**
Task-2 Page views	**1.0**	**1.7**
Task-3 Page views	**1.0**	**1.0**
Task-3 Lostness	**0.00**	**0.00**
Task-3 Abondon	**0%**	**0%**
Task-3 Complete	**100%**	**100%**

Conclusion

Several significant distinctions between moderated and unmoderated measurements can be seen when comparing them. While the completion percentage of the unmoderated sessions was greater (87%) than that of the moderated sessions (75%), the abandonment rate was lower (12% vs. 25%). Despite this, the moderated sessions demonstrated improved overall user navigation, with a quicker average task completion time (7 seconds vs. 13 seconds) and a lower lostness score (0.17 vs. 0.30). Task-specific analysis shows that during the moderated sessions, Tasks 2 and 3 were finished more quickly, but Task 1 remained similarly difficult in both settings. This implies that providing clear direction during moderated sessions greatly enhances user performance and lessens confusion.