Usability testing:

Diff understanding (Wikipedia, Google, Overleaf).

Background

[#1 wish on the Community Wishlist Survey (2022), Better diff handling of paragraph splits.](#)

The number one wish on this year's (2022) Community Wishlist Survey was *Better diff handling of paragraph splits*. This wish has appeared more than once on the different wishlists. It calls for an improvement on the diff viewer when a paragraph split is added - as it appears as deleted and re-added rather than just repurposed.

In this test, we are going to check users' understanding of diffs when doing common edits such as adding text, deleting text, and adding a paragraph break through different approaches in different services. This can give us a hint on what they expect to see on the diff viewer, so that we can start exploring and maybe proceed toward a certain visual concept.

Research questions

1. Are the different diffs and their representation of common edit patterns understandable to users?
2. Are the details presented in each individual approach (like colors, symbols, two columns or in-line display, text position, counting unit, etc.) comprehensible and logical for users?
3. Gather and analyze users' impressions and comments on each representation.
4. Identify areas that are understandable and potential areas for improvement, in order to transfer those insights/opinions into our project.

Test format

This will be an unmoderated remote based-task test, conducted using usertesting.com, to recruit participants and record sessions. The test will be conducted with 4 users for each of the services/softwares – 18 users in total (18-35 years old, male and female participants).

Services/softwares that are going to be tested:
- Wikipedia:
    1. Mobile web
    2. Desktop: Wikitext diff
    3. Desktop: Visual editor diff
- Google Docs: suggestion mode
- Overleaf

The test cases will be:
- Adding content within a line
- Deleting content within a line
- Adding a paragraph split

Screener questions

- Q1: Which of the following sites have you used before? Select all that apply.
    - Google [May select]
    - Wikipedia [Must select]
    - Youtube [May select]
    - Instagram [May select]
    - Facebook [May select]
    - Amazon [May select]
    - Twitter [May select]
    - None of the above [Reject]

- Q2: Have you ever edited a Wikipedia article?
  - Yes, many times [Reject]
  - Yes, once or twice [Accept]
  - I don't remember [Accept]
  - No, I haven't [Accept]

- Q3: Have you ever conducted a comparison between two different versions of an online document or article?
  - I know what it means, and I've done it. [Accept]
  - I know what it means but I've never done it. [Accept]
  - I don't know what it means and I've never done it. [Reject]

Opening scenario

Imagine you
- **[Google Docs]** are working on a document and someone is giving you suggestions on it, so you decide to go through them.
- **[Wikipedia]** are monitoring the contents of a Wikipedia article and you want to ensure its quality by reviewing the recent changes made to the article.
- **[Overleaf]** are working on a document and decide to review the history of it, in order to visualize the differences between two versions.

Protocol

Desktop (wikitext)

1. Please navigate to the link provided in this task.

[url asset – deck]
https://docs.google.com/presentation/d/1yP9x0IB2zcOEEddyRrMxhGAthNUfV_SmD-s_KlVmnlU/edit?usp=sharing

2. You should now be viewing a Google Slides presentation. Please note these slides are not clickable. Go into Slideshow mode clicking on the white "Slideshow" button on the upper right to view the deck more clearly.

3. Please go to slide number one if you aren't there already.

4. Take a moment to go through the screen. What are your first impressions of it?

5. Please talk out loud and describe what you think the two columns represent.

6. Which line number do you think the change was made on?

7. Please read through the screen: What changes do you think TEST2311 made to this article?

8. What do you think the blue color represents?

9. What do you think the - (minus) and + (plus) symbols represent?

10. Do you find anything on this screen that is not clear?

11. What is something that you think is clear and understandable on this screen?

12. Please go to slide number two now.

13. Taking into account what's showing now on slide two, what changes do you think TEST2311 made to the article?

14. What do you think the yellow color represents?

15. Now, go to slide number three.

16. Looking at the screen, what edit do you think TEST2311 made to the article?

17. What do you think the blue and yellow mean this time?

18. Please go back to slide number one.

19. The change that was made to this article was that the user added content, specifically the words "the books". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content addition?

20. Now, please go to slide number two.

21. The change that was made to the article was that the user deleted content, specifically the word "interpret". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content deletion?

22. Lastly, please go to slide number three.

23. The change that was made to the article was that the user added a paragraph break after the word "anonymously". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for a paragraph break?

Desktop (visual editor)

1. Please navigate to the link provided in this task.

[url asset – deck]
https://docs.google.com/presentation/d/1sFlSGkZRBpOuGeXlnbKOrRQV508hen9jms_wIMqnf5w/edit?usp=sharing

2. You should now be viewing a Google Slides presentation. Please note these slides are not clickable. Go into Slideshow mode clicking on the white "Slideshow" button on the upper right to visualize the deck more clearly.

3. Please go to slide number one if you aren't there already.

4. Take a moment to go through the screen. What are your first impressions of it?

5. Please talk out loud and describe what edit you think was made to the article.

6. What do you think the colored highlight represents?

7. Do you find anything on this screen that is not clear?

8. What is something that you think is clear and understandable on this screen?

9. Please go to slide number two now.

10. Please read through the screen: What changes do you think TEST2311 made to this article?

11. What do you think the red color represents?

12. Now, go to slide number three.

13. What edit do you think was made here?

14. Please go back to slide number one.

15. The change that was made to this article was that the user added content, specifically the words "the books". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content addition?

16. Now, please go to slide number two.

17. The change that was made to the article was that the user deleted content, specifically the word "interpret". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content deletion?

18. Lastly, please go to slide number three.

19. The change that was made to the article was that the user added a paragraph break after the word "anonymously". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for a paragraph break?

Mobile web

1. Please navigate to the link provided in this task.

[url asset – adding a word on mobile web]
https://en.wikipedia.org/w/index.php?title=User%3ATEST2311%2Fsandbox&type=revision&diff=1108737021&oldid=1108737003

2. You should be viewing a Wikipedia "difference between revisions" page from user TEST2311. Please take a moment to go through the screen without clicking on anything. What are your first impressions of it?

3. Do you find anything on this screen that is not clear?

4. What is something that you think is clear and understandable on this screen?

5. Now, please scroll down until you see the green highlight. Can you describe what changed in this article?

6. Pay attention to the color with which the change is shown. What do you think it represents?

7. Now, please navigate to the new link provided in this task.

[url asset – deleting a word on mobile web]
https://en.wikipedia.org/w/index.php?title=User%3ATEST2311%2Fsandbox&type=revision&diff=1108737162&oldid=1108737021

8. You should be now viewing the same screen structure but with a red highlight instead of a green one. Please take some time again to describe out loud what edit you think was made in this article.

9. Do you think red is an appropriate color for the change you think was made? If not, why?

10. Lastly, click on the link provided in this task.

[url asset – adding a paragraph break on mobile web]
https://en.wikipedia.org/w/index.php?title=User%3ATEST2311%2Fsandbox&type=revision&diff=1108737257&oldid=1108737162

11. Please take some time to look at the screen. Then, talk out loud: Can you describe what changed in this article?

12. What do you think the green and red mean this time?

24. Please go back to link number one.

[url asset – adding a word on mobile web]
https://en.wikipedia.org/w/index.php?title=User%3ATEST2311%2Fsandbox&type=revision&diff=1108737021&oldid=1108737003

25. The change that was made to this article was that the user added content, specifically the words "the books". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content addition?

26. Now, please go to link number two.

[url asset – deleting a word on mobile web]

https://en.wikipedia.org/w/index.php?title=User%3ATEST2311%2Fsandbox&type=revision&diff=1108737162&oldid=1108737021

27. The change that was made to the article was that the user deleted content, specifically the word "interpret". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content deletion?

28. Lastly, please go to link number three.

[url asset – adding a paragraph break on mobile web]

https://en.wikipedia.org/w/index.php?title=User%3ATEST2311%2Fsandbox&type=revision&diff=1108737257&oldid=1108737162

29. The change that was made to the article was that the user added a paragraph break after the word "anonymously". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for a paragraph break?

Google Docs

1. Please navigate to the link provided in this task.

[url asset — deck]

https://docs.google.com/presentation/d/11WBAkZRJNq5gn77Jh26023CkMJiHqyAZLgkAn7cL8Dk/edit

2. You should now be viewing a Google Slides presentation. Please note these slides are not clickable. Go into Slideshow mode clicking on the white "Slideshow" button on the upper right to visualize the deck more clearly.

3. Please go to slide number one if you aren't there already.

4. Please take a moment to go through the screen. What do you think was the suggestion made to this document?

5. Pay attention to the color with which the change is shown. Do you think this color is appropriate for the change you think was made? If not, why?

6. Do you find anything on this screen that is not clear?

7. What is something that you think is clear and understandable on this screen?

8. Now, please go to slide number two.

9. Please talk out loud and describe what suggestion you think was made.

10. The color is the same as the previous suggestion you looked at. Would you make use of a different color for the suggestion you think was made? If yes, which one?

11. Please go to the next slide.

12. Please talk out loud: Can you describe what suggestion was made in the document?

13. Please go back to slide number one.

14. The suggestion that was made to this document was that the user added content, specifically the words "the books". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content addition?

15. Now, please go to slide number two.

16. The suggestion that was made to the document was that the user deleted content, specifically the word "interpret". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content deletion?

17. Lastly, please go to slide number three.

18. The suggestion that was made to the document was that the user added a paragraph break after the word "anonymously". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for a paragraph break?

<u>Overleaf</u>

1. Please navigate to the link provided in this task.

[url asset – deck]

https://docs.google.com/presentation/d/11pQcEsE2kZeageYr4H8oRBHsIqoBHhQfSXgDIUE6H7I/edit?usp=sharing

2. You should now be viewing a Google Slides presentation. Please note these slides are not clickable. Go into Slideshow mode clicking on the white "Slideshow" button on the upper right to visualize the deck more clearly.

3. Please go to slide number one if you aren't there already.

4. Please take a moment to go through the screen. What are your first impressions of it?

5. What do you think was the change made to this document?

6. Pay attention to the color with which the change is shown. Do you think this color is appropriate for the change you think was made? If not, why?

7. Do you find anything on this screen that is not clear?

8. What is something that you think is clear and understandable on this screen?

9. Now, pay attention to the numbers that are shown on the left side. What do you think they mean? Is there anything confusing about them?

10. Now, please go to slide number two.

11. Please talk out loud and describe what change you think was made.

12. The color is the same as the previous change you looked at. Would you make use of a different color for the change you think was made? If yes, which one?

13. Please go to the next slide.

14. Please talk out loud: Can you describe what changed in the document?

15. Please go back to slide number one.

16. The change that was made to this document was that the user added content, specifically the words "the books". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content addition?

17. Now, please go to slide number two.

18. The change that was made to the document was that the user deleted content, specifically the word "interpret". Would you have expected to see the existing representation that's on the slide, or would you have anticipated something else to show for content deletion?

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