"Sentence-Level Editing" or "InlineEditor" usability review

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1 Introduction

The InlineEditor extension for Mediawiki has grown from the idea to edit wikitext on a level below pageor section-level, which is the current way of editing a page. The basic idea is sentence-level editing: making sentences in the original representation of the page clickable, to edit individual sentences. This idea has expanded to editable items beyond only sentences, and the InlineEditor extension based on this idea provides a framework for editing this way.

To review what actual users think of this, usability testing should be conducted. In this document we'll look at goals and metrics, as well as an actual test to be done at November 16th 2010, in Groningen. The Wikimedia Foundation also intends to do usability research based on this editor.

2 Goals

The main goal of the research into a different type of editing is to improve the content of wikis, with the focus on large sites such as Wikipedia. This can be broken down into a few sub-goals:

- Attracting and retaining participants, ranging from those who make occasional edits, to (potential) active editors. [1]
- Improving the quality of edits, i.e. more or better references, links, etc.
- Lowering the barrier to do more complex tasks, on every level. That is, for a novice user it should become easier to make the first few edits, and for an intermediate user it should become easier to learn advanced techniques.

There might be other goals that can be identified, but these are most significant for this research. It also shows that it is difficult to assign metrics to these goals: for example, should we focus on few users learning complex techniques, or a lot of users doing minor edits? What exactly defines a good edit? Would an increased number of novice participants actually improve content or disrupt processes of established users? There are many potential interactions we cannot predict.

3 Metrics

To do usability research, we need to know what to measure. There are a few key indicators or metrics that can indicate the potential impact of a new editing interface.

- How fast would a user of a certain level do a task of a certain difficulty. Note that all combinations are possible, advanced user doing simple task, intermediate user doing normal task, etc.
- After the first edit, how often and long are subsequent edits of novice users.
- How much time does it take for a user at any level to start doing more complex edits.
- Does the user feel invited and comfortable to make an edit.

It is still quite hard to measure these things in a small-scale experiment. However, they are useful as guidelines for the usability test.

4 Editors

There are two editing environments built on the InlineEditor framework. The first is one where the user can choose to edit based on different functionality: "Text" (sentences), "Lists", "References", "Media" (images, etc.), "Templates", "Full page". The advantage of this is to be able to give help or an optimized editing interface for each of these different functionalities. The disadvantage is that the user will not learn to edit larger parts of wikitext.

The other approach is to differentiate based on size: "Sentences", "Paragraphs", "Sections", "Full page". The advantage of this is that users encounter more wikitext whenever they move up a level, but they have to do more research themselves as on how wikitext works.

5 Test setup

The test of November 16th 2010 in Groningen will be done with two groups: first year and master students of Information Science. These groups are heavily biased towards young, bright, and technological skilled people. However, it should indicate some of the more obvious problems of all the tested editors. Each participant will be asked to perform a few tasks in a 15 minute think-aloud experiment. The screen and voice will be recorded using an open-source screencapture program, and this recording will be published online. [2] For this a contract will be signed. The name of the participant will not be published. All the three editors (functional, size, and original as the control group) will be given the same amount of time to test and the same tasks will be used. Afterwards the user will be asked to fill out a form with a few questions.

The test will be conducted on a private wiki filled with the page of Groningen taken from the Dutch Wikipedia. This article will be shortened (as it is quite long) and optimized for the current algorithms of the editors.

As it is a small-scale test, quantitative measurements will be unreliable. Even more so because of the think-aloud setting. Because the user will talk during the process, tasks will be done at a different speed than usual. Therefore, only qualitative measurements will be used, such as the way a user completes a task, what kind of problems the user runs into, how the user feels while doing a task (secure or insecure,

excited or afraid, etc.), how the groups rank (i.e. "Task X was way harder for group A to complete than for groups B and C").

6 Script

This script is based on a script published by the Wikimedia Foundation. [3][4] Note that the actual test will be done in Dutch.

6.1 Introduction and setup

- Thank you for coming in.
- I'll be recording both your screen and our audio conversation. These recordings are going to be posted on the internet and available for those interested in this research to view at least part of them. If you don't want this, we'll stop now and continue with the next participant.
- We're collecting feedback on Wikipedia. Basically I'll ask you some questions and then watch you use the webiste.
- This will take about 15 minutes.
- Afterwards, I'll ask you to fill out a form with a few questions.
- Do you have any questions so far?

6.2 Explanation

- Your job is really easy, you just have to be yourself and act as you naturally would. I don't actually work directly for Wikipedia, I'm just collecting feedback. As you interact with the site, please be honest with your positive and negative thoughts. There's no right or wrong answers, and nothing you say will hurt my feelings.
- You are not being tested, the Wikipedia pages are being tested.
- Tell me a little about yourself.
- Can you tell me what you know now about the process of editing?
- There's one thing that I would like you to do differently. Please think aloud as you use the web site today. For example, if you are reading something read it out loud and feel free to say anything that comes to your mind as you read for example that's interesting or what in the world are they talking about? Also, talk out loud while you're doing a task, so I can understand what you are thinking and doing. And, if you get to a point where you would naturally stop working, let me know.

6.3 Tasks

- We'll be using a copy of Wikipedia, sort of, with only the page Groningen.
- In the first paragraph there is a typo. Can you fix that typo?

- If you wanted to add a sentence or paragraph of info to this page, how would you do that? Go ahead and show me. (pre-fab sentence to give user if they don't know what to add: "Er gaat niets boven Groningen!")
- (if user doesn't mention References) Did you see the section about references? Can you add a reference to the city site (http://www.groningen.nl)?
- (if user doesn't mention External Links) Did you see the section about external links? Can you add a link to the university site (http://www.rug.nl)
- Let's say you just moved to Groningen and wanted to change the population field to be one greater. How would you do that? (Point out where this information is on the actual entry if necessary.)
- (if time permits) Do you see this image of the Martinitoren? Can you change it so it's on the left of the screen?
- (if time permits) Can you swap these two paragraphs?

7 Form

As the time for the tests is very limited, the participant is asked to fill out a form with the following questions:

- First and last name
- Age
- Gender
- How often do you use Wikipedia?
- How often have you edited before?
- Do you have a username on Wikipedia? If so, what is it?
- Do you have any suggestions on how to improve the editing of Wikipedia?

References

- [1] Wikimedia Strategy Goal "Attracting and retaining participants" http://strategy.wikimedia. org/wiki/Attracting_and_retaining_participants
- [2] Camstudio open-source screencapture software http://camstudio.org
- [3] Wikimedia Usability Initiative Moderator Script http://usability.wikimedia.org/wiki/ Moderator_Script
- [4] Bolt Peters Moderating Techniques http://boltpeters.com/articles/moderating.html