

WIKIPEDIA COLLABORATION DESIGN

The screenshot shows the English Wikipedia homepage. The main content area features the title "Wikipedia" and the subtitle "The Free Encyclopedia". Below this is a brief introduction and a detailed article about the history and nature of Wikipedia. A sidebar on the left contains links to various sections like Main page, Contents, and Interaction. On the right, there's a large image of the Wikipedia logo (a globe with various symbols) and a detailed sidebar with information such as "Type of site: Online encyclopedia", "Available in: 303 languages", and "Owner: Wikimedia Foundation".

Making editing on Wikipedia more collaborative

"When I edit something, I am editing, and I know that the next day, the next week, someone will come and better the edit. But it's not coordinated beforehand, it's spontaneous. Someone comes; I forgot a comma, I got a word wrong. Someone fixes it. It is a part of collaborative work."

Wikipedia's design has not changed in the past 10 years. New features like Google Translate have been added over time to help editors contribute to articles, but the biggest feature of the encyclopedia remains to allow editors to collaborate. What changes can be made to improve the way editors collaborate to complete articles, discuss, and resolve issues?

Despite not having many changes over the years, Wikipedia is still very usable by editors and readers.

This project was an extension of a research project I worked on investigating how users of the Spanish Wikipedia collaborate. The original goal of the research project was to write a paper afterward.

To read more about the official research project on Wikimedia, click [here](#).

User Research

During the previous research project I worked on, we wanted to see how users from different language editions of Wikipedia collaborate compared to each other. I was working with the team researching users from the Spanish edition. This involved us first having to translate documents like recruitment emails and consent forms for interviews. We then recruited based on the ranking of edits, so we would make sure to interview very experienced users.

| # | Usuario | Ediciones |
|----|---------------------|-----------|
| 1 | Elias | 444 834 |
| 2 | Technopat | 378 590 |
| 3 | Jkbw | 348 477 |
| 4 | Diegusjaimes | 330 104 |
| 5 | MILEPRI | 323 434 |
| 6 | Jarould | 315 679 |
| 7 | Fixertool | 314 073 |
| 8 | Ontzak | 302 960 |
| 9 | Eduardosalg (Admin) | 258 795 |
| 10 | UA31 (Admin) | 255 358 |
| 11 | Copydays | 252 974 |
| 12 | Urdangaray | 246 288 |
| 13 | Leonprimer | 232 067 |
| 14 | Leopolanco | 224 734 |
| 15 | Strakhov | 210 601 |
| 16 | Dorieo | 209 252 |
| 17 | Pichu VI | 206 604 |
| 18 | SuperBraulio13 | 197 789 |

Figure 1. Ranking of edits for Spanish Wikipedia

The more important method for recruiting though was reading through user conversations to see if they have had any situations where they needed to come to a consensus with another user or they had to demonstrate some form of power play, like convincing another user their thoughts or edits are correct.

Relevance [edit code - new section]

The professor was nominated for a [answer], is it the equivalent of the Nobel or Oscar in that discipline? If so, the SRA template is incorrect.

Outstanding nationally and internationally, according to [UTC] [answer] and national award, she is an outstanding teacher

It seems to me that the elm is being asked for peers. The article is neutral and has more references than that of any 3rd division footballer, the kind that abound. If we only house scientists with Nobel prizes or actors with Oscars, you let me know. So far the only way to assess relevance is through references, and references have. If this has changed, please pass me the link where it has been established. Thanks. Greetings Jan 2021 (UTC) [answer]

Good. as far as I understand [answer] indicates that you are in favor of removing the template. What it says is that the award is important and the biography should stand. Who put the template was me after [answer] delete it and write me in my discussion to intervene, making the decision to put this template and discuss here. About what you comment, the relevance is not evaluated by having references, but by analyzing them. Virtually all the references say the same, indicating that you received an award, so the article revolves around a single act, but do not have publications, relevant biography or anything noteworthy that can be indicated? The prizes are sometimes awarded by institutions that want to advertise themselves, I say that it will have some information other than an award, right? And the fact that there are other worse articles does not mean anything, let's discuss this case. All the best. -

She is a master of the "deep" interior !!! Do you also think that if he does not win the Nobel, he is not encyclopedic? Anyway. Here we are. And no. [answer] said something else until he modified his comment. Look at the history. Greetings.

* I support the motion to withdraw the template, this article deserves to be. Regards, [answer]

Hi [answer] of course not. We have recently organized an editorial event on women scientists and therefore I understand that it is often difficult to demonstrate the relevance of certain people. I have the same profession and I believe that winning an award alone does not generate relevance. The Nobel is not awarded without doing anything, there are publications and research behind it, and the Oscar is not won without making important films. That is what I would like to see in the article. All the best.

Well, I would like to see a realistic Wikipedia, with fair rules and that do not change according to the client's face. If we are going to invent ad hoc arguments to delete articles according to the customer's face, we will never progress. Moreover, this is probably one of the reasons why there will never be a blocking policy: because it is easier to delete or block if we make up rules according to the opportunity. Is a teacher. He is not a scientist, which is why he cannot win

Figure 2. Article talk page translated with Google Translate. An admin tries to get editors to write about what the person did to earn an award, not just winning the award itself. Names blocked for privacy.

Interviews

Our goal for the number of participants was 12. We were able to recruit 13 Wikipedia users for the interviews. I Conducted 4 interviews and observed 2. Interviews were about an hour long and consisted of three phases.

The first phase had to do with the participant's background, things like how did they start editing, what kind of topics they like to edit, what their work on the site consists of today, and how familiar they are with the editing policies of the website.

The second phase was where we showed them examples of the conversations they had where they had to reach a consensus with another editor, or editors, and other similar situations. After they had some time to review the exchange, they would also describe what they were trying to accomplish, what they did to try to help their case, and finally, what the outcome of the interaction. We did this with 2-3 conversations, depending on how much time we had.

During the third and last phase, we asked how they felt about authority on Wikipedia. Based on their previous interactions with other users, we also asked what kinds of things can help editors reach a consensus. When asking if they would like to add anything else, some participants gave suggestions for new editors.

Results

All of our participants were very experienced, each one having at least 10 years of experience. Though we did not ask specifically for ages, some still mentioned theirs. Participants were from around ages 28 to 80. Despite the age differences, all participants chose to edit articles that had to do with **topics they enjoyed**. Another common method for finding articles to edit was **choosing articles with issues they specialized in**. This goes back to the previous point, where a professor of history may correct mistakes on an article related to their field

As some users gained more experience, they also moved on to more **specialized tasks**. They have become more involved with Wikimedia, and have even created bots or focused more on formatting data. With the amount of experience the users had, they were all familiar with the policies.

When going over the conversations they had on talk pages, participants would **present past examples and policies** to help them convince another editor. Habits like "looking for various arguments, points of view, and other sources" were common. They would also make sure to act in good faith, but would match the attitude of the other editor if they were being more aggressive. According to one user, "The articles about history and politics are always very intense and it's impossible escaping the discussion, where the data is coming from, etc." Conversations for those topics are usually unavoidable but users try to see both points of view

Participants believe the authority on Wikipedia is "almost an experiment of controlled anarchy." There are not enough admins to control everything, but there are a few along with the Café, a community portal where users can address and vote on issues pertaining to a certain article or Spanish Wikipedia as a whole. "The communities have complicated dynamics because there are

distinct types of authority and a lot of the times they get into conflict, other times there is synergy." In a way though, consensus is still involved since users can't vandalize whatever they want, and discussions are generally quick to solve an issue.

User Personas

From the results of the user research, I created 3 user personas.

| The Hobbyist | The Admin | The Specialist |
|---|--|--|
| The hobbyist contributes to articles for topics related to their interests. They usually edit in their free time to add their own knowledge or correct mistakes. | The admin focuses on resolving issues with users, removing or protecting articles, and marking issues on articles. They are very familiar with rules and policies | The specialist occasionally makes text edits to articles but now focuses more on Wikipedia related organizations or making charts and bots. |
| Pain Points: A lot of articles they view tend to need minimal edits | Pain Points: Not enough admins to keep up with all the articles or issues related to edits | Pain Points: Difficulty finding specific issues they can help with at times |
| Wants: Find and edit many articles based on topics related to their interests | Wants: Keep articles marked with up to date templates, or tags. Resolving issues easily between users | Wants: Edit articles with issues related to their area of expertise, no matter the topic |

Secondary Research

Since I had already completed my user research before starting the project, I then went onto the secondary research. I had never edited an article, though I did learn a few skills like editing a user talk page. I had a lot of trouble finding a particular area to design for, so I looked at many features of Wikipedia, but ultimately I focused on finding an article to edit, and then editing it. Some of these features included Creating New Articles, **Templates**, **WikiProjects**, **Task Center/Maintenance**, and the **navigation** from the task center to an article. I also focused more on these topics from a new user perspective because I would have trouble recruiting the same participants from the initial user research, and time zones make it difficult to schedule an interview. Since there were not a lot of interactions between new users, I looked at resources on Wikipedia teaching users how to edit, and where to find articles to edit. I felt like no matter the help page I went to though, there were always more links and help pages I needed to go to. I felt more confused and overwhelmed at times

because of this. I wanted to think of a way to centralize the different features I came across, like Wikiprojects, Editing by issue, Finding good examples of how to edit.

Competitor Analysis

When thinking about how to help users collaborate, I was reminded of Google Doc's comment feature as well as Atlas.ti. Both allow users to highlight text and leave comments, and in Atlas.ti's case, leave tags to give a qualitative code to a sentence in a paper or transcript. Users can leave messages for each other like this or they can add what they believe best represents a response. This made me think about having users be able to **tag sections or sentences for different issues**, similar to the templates/banners currently used. This could also make edits more clear, by giving new users examples of specific types of edits they should follow. On Wikipedia's Collaborating page, they described the process for how an editor should work with others, but they also mention that it is not a discussion board and that editors should put their time more towards editing than discussing.

collaborative aspects and liked that it tried to keep a neutral stance on subjects. One user stated "I decided to contribute to Wikipedia, which I knew for some time. It's the most revolutionary idea that has occurred in the last 25 years." On average, the editors had about 10 years of experience, sometimes 15. The topics the editors decided to work on usually had to do with their hobbies and interests. If an editor had an interest in music, almost all of their edits would be related to that topic. For a lot of editors, there weren't as many articles when they started so it was easier to create new articles or add a lot of information. Now, they usually try to fix or add to articles that are mostly complete. "Everything I wanted to do was done already, so I moved more towards completing articles that were already created." The addition of new tools, like Google Translate, has also helped them add information to articles.

As they gained more experience, some editors became administrators. A few other editors then got more involved with other Wikipedia-related organizations like WikiData and Wikimedia. In

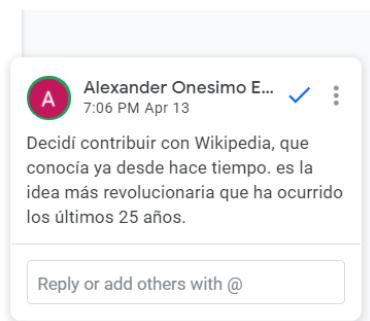


Figure 3. Example of comments in Google Docs

Unknown Speaker 37:11

Well, communicate with your teammates and like work together to solve the puzzles.

Unknown Speaker 37:19

I mean, part of it, at least to me was like, media literacy and like, how [I mean] I kind of figured out like, whether what you read online is like, fake or like real. And like, if the people online if they are made by like AI and made by, you know, versus if they're like actual people that live on this earth.

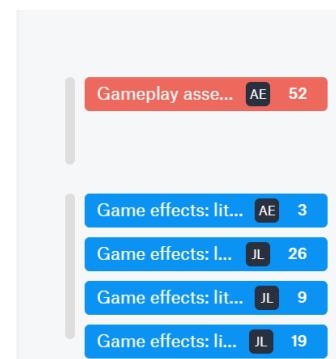


Figure 4. Example of coded sentences in Atlas

Yeah, it's like fact and media, like,

Unknown Speaker 39:04

I was like, F and then there's a T and I'm like, it's gonna be fact, it's gonna be fact.

Unknown Speaker 39:11

Yeah, like, once you're like M E D It was like, okay, obviously media, like there's really no point and solved us, you know? Yeah.

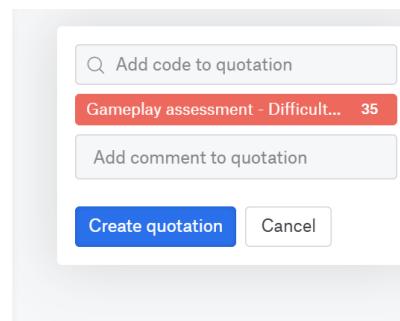


Figure 5. Example of adding a code to a sentence in Atlas

I also looked at other online encyclopedias like Scholarpedia and Encyclopedia Britannica, though these were more to see different layouts since neither of the two allow anybody to edit the articles. They serve different purposes. I did like how the side bar felt less cluttered for both of them though, with collapsible menus.



Figure 6. Scholar Side bar

Initial Ideas

Two ideas were most prominent to me. One idea was having a centralized portal for editing, similar to the community portal. The community portal requires a lot of scrolling though so I wanted to follow the structure of the editing tutorial dashboards instead. The current editing tutorial mainly had videos though.

The second idea I had was using a tagging system for different types of edits, either on the users' talk pages or on article edits. The current tagging system for edits is not very helpful since they are mostly technology related, like what kind of editor or device they used.

I was more inclined to go with the first idea with the editing portal because of the quote about Wikipedia not being a discussion board. So I focused on the first idea for the next stage.

User Testing: Current Selection and Editing Process

While looking through the different features of Wikipedia, I found the community portal.

Help out

You can help improve the articles listed below! This list updates frequently, so check back here for more tasks to try. (See [Wikipedia:Task Center](#) for brief guides.)

| Fix spelling and grammar | Fix wikilinks | Update with new information |
|--|--|---|
| <ul style="list-style-type: none">• ENCA• Poovathanai• Coat of arms of Moravia• Chojin Sentai Jetman• Tax cut <p>More... • Learn how</p> | <ul style="list-style-type: none">• Malaysian Investment Development Authority• Mother Lode Musical Theatre• Sergey Sergeevich Boldyrev• Motheo FM• Bolaji Odofin <p>More... • Learn how</p> | <ul style="list-style-type: none">• Peter Maniatis• Sharath Kamal• TRAXX• Katura Sun• Robert Petkoff <p>More... • Learn how</p> |
| Expand short articles | Check and add references | Fix original research issues |
| <ul style="list-style-type: none">• Nitra Aréna• Garmin Arena• Šála Stadium• Štadión Tatranu• Pavol Demitra Ice Stadium <p>More... • Learn how</p> | <ul style="list-style-type: none">• Railway stations in Angola• Grafton, North Dakota• Colin Jordan• Audiology• Diane Burko <p>More... • Learn how</p> | <ul style="list-style-type: none">• Babe: Pig in the City• Myth of Skanderbeg• Choice of law clause• First tithe• Cinema of Canada <p>More... • Learn how</p> |
| Improve lead sections | Add an image | Translate and clean up |
| <ul style="list-style-type: none">• High Throughput File System• Jakarta Activation | <ul style="list-style-type: none">• Preston Hall, Midlothian• Queen's Park, New Westminster | <ul style="list-style-type: none">• Stalag Luft II• Taras Kostanchuk |

Figure 7. After scrolling down to the Help Out section, you could select what type of issues you wanted to work on, such as Grammar and Spelling or Translation issues.

Subcategories

This category has the following 6 subcategories, out of 6 total.

- ▶ [All articles needing copy edit \(464 P\)](#)
- ▶ [Wikipedia articles needing copy edit from June 2012 \(1 P\)](#)
- ▶ [Wikipedia articles needing copy edit from March 2021 \(6 P\)](#)
- ▶ [Wikipedia articles needing copy edit from April 2021 \(144 P\)](#)
- ▶ [Wikipedia articles needing copy edit from May 2021 \(130 P\)](#)
- ▶ [Wikipedia articles needing copy edit from June 2021 \(186 P\)](#)

Pages in category "All articles needing copy edit"

The following 200 pages are in this category, out of approximately 475 total. This list may not reflect recent changes ([learn more](#)).

(previous page) ([next page](#))

0–9

- [100 Year Starship](#)
- [1988 United States presidential election in the District of Columbia](#)
- [2016 Mahamaham](#)
- [2016 United States Senate election in Missouri](#)

A

- [List of A Town Where You Live chapters](#)
- [Abacus](#)
- [Abdul-Ghani Al-Karmi](#)
- [Abhimanyu](#)
- [Nadezhda Abramova](#)
- [Activity-based learning in India](#)
- [Baaj Adebulu](#)
- [Manabendra Adhikary](#)
- [Afghan cuisine](#)
- [Afrikaner Broederbond](#)
- [Agniphera \(TV series\)](#)
- [Vital Ahačić](#)
- [Mohamed Aichaoui](#)
- [Akoko South-East](#)

Chanot

- [Mugdha Chaphekar](#)
- [Chaudhvin Ka Chand](#)
- [Cheburashka](#)
- [Chembarathi \(TV series\)](#)
- [Chhota Bheem and the Throne of Bali](#)
- [Child Rights and You](#)
- [China Merchants Group](#)
- [Chiral Lewis acid](#)
- [Chōjin Sentai Jetman](#)
- [Choking](#)
- [Timothy Chooi](#)
- [Churchville-Chili Central School District](#)
- [Cilicia](#)
- [Civil Hospital, Larkana](#)
- [Madison Clark](#)
- [Climate of West Bengal](#)
- [Coffeehouse effect](#)
- [Colombo Stock Exchange](#)
- [Complexity Gaming](#)
- [Compost](#)
- [Congolese National Liberation Front](#)

The Extendables

- [Face perception](#)
- [Family of Imran Khan](#)
- [Fasting in Islam](#)
- [Flyweight pattern](#)
- [Fort Bonifacio boundary dispute](#)

F

- [Gasum](#)
- [Gattu](#)
- [General Roman Calendar](#)
- [Ghorpuri](#)
- [Joseph Deighton Gibson Jr.](#)
- [Giffgaff](#)
- [Gladstone Link](#)
- [Gode](#)
- [Alfred L. Goldberg](#)
- [Leonid Golikov](#)
- [Grand Canyon Supergroup](#)
- [Howard Griffiths \(scientist\)](#)
- [Guisin of Baekje](#)

G

Figure 8. After selecting an issue, you could then look at a list of articles to edit with that issue, or you could learn more about the issue itself.

Human–computer interaction

From Wikipedia, the free encyclopedia



This article **may require copy editing for grammar, style, cohesion, tone, or spelling**. You can assist by editing it.
(April 2021) ([Learn how and when to remove this template message](#))

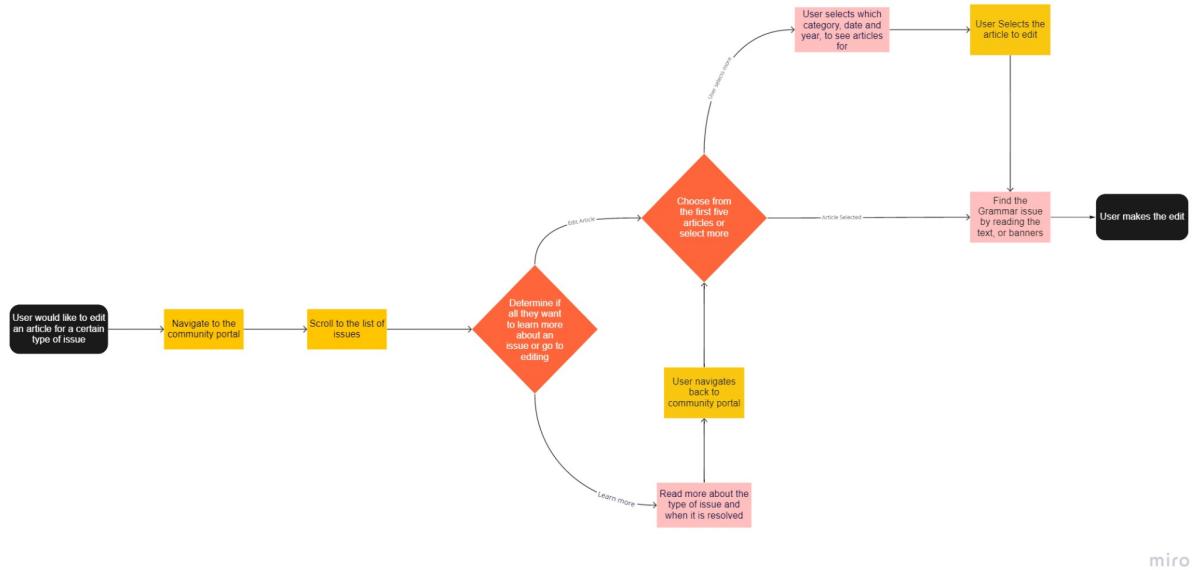
Human-computer interaction (HCI) is a field based in the design and the use of [computer technology](#), which focuses on the [interfaces](#) between people ([users](#)) and [computers](#). HCI researchers observe the ways humans interact with computers, and they design technologies that let humans interact with computers in novel ways.

As a field of research, human-computer interaction is situated at the intersection of [computer science](#), [behavioural sciences](#), [design](#), [media studies](#), and [several other fields of study](#). The term was popularized by [Stuart K. Card](#), [Allen Newell](#), and [Thomas P. Moran](#) in their seminal 1983 book, *The Psychology of Human-Computer Interaction*, although the authors first used the term in 1980^[1] and the first known use was in 1975.^[2] The term is intended to convey that, unlike other tools with specific and limited uses, computers have many uses and their use often involves an open-ended dialog between the user and the computer. The notion of dialog likens human-computer interaction to human-to-human interaction, an analogy that is crucial to theoretical considerations in the field.^{[3][4]}



A computer monitor provides a visual interface between the machine and the user.

Figure 9. Once you select an article to edit, you can see a template, or tag, at the top of the article that shows what is wrong with it. It may take a while to fix though.



miro

I tested this process with 5 new Wikipedia users. I thought they would be able to give more thoughts on what could be unclear in the navigation.

User Flow

Results

Some common pain points were that there were too many links in general, combined with a lot of scrolling. This made it difficult to find where to go next, such as selecting a specific article when asked to. Articles weren't the only pages with banners/templates. Other pages had big banners/templates at the top, some that seemed to have an unclear purpose. These distracted the users from the content they were trying to read. Since a copyediting template, which falls under grammar and spelling issues, may be applied to the whole article, it can discourage users since they felt unsure about how much work they would need to do on the article. Some articles have templates/tags from three years ago, showing that templates may not be the most effective for raising editing issues. With this last piece of feedback, I also began to think of a tagging/template system again for editing on articles, rather than user talk pages.

From Wikipedia, the free encyclopedia

This page is currently receiving attention from the **Guild of Copy Editors**. Information and assistance can be found at the [project page](#) and our [talk page](#). Anyone who copy edits articles, or wishes to start, is welcome to join the project – all help is appreciated!

The GOCE's mid-year election of coordinators is now open for nominations until 00:59 on 15 June (UTC); self-nominations are welcome.

The [May copy editing drive](#) has ended, and barnstars have been distributed. Thanks to all who participated!

This is a **maintenance category**, used for maintenance of the Wikipedia project. It is not part of the encyclopedia and contains [non-article pages](#), or groups articles by status rather than subject. Do not include this category in content categories.

This is a **tracking category**. It builds and maintains a list of pages primarily for the sake of the list itself. They are not part of the [encyclopedia's categorization scheme](#).

i • This category is **hidden** on its member pages—unless the corresponding [user preference](#) (appearance → show hidden categories) is set.
• These categories can be used to track, build and organize lists of pages needing "attention en masse" (for example, pages using deprecated syntax), or that may need to be edited at someone's earliest convenience.
• These categories also serve to aggregate members of several lists or sub-categories into a larger, more efficient list (*discriminated by classifications*).

Shortcuts
[CAT:COPYEDIT](#)
[CAT:ALLCE](#)

Figure 10. Banners on the page for the list of articles in need of copy editing

My next step was to create some designs.

Initial sketches

Wikipedia Editing Portal

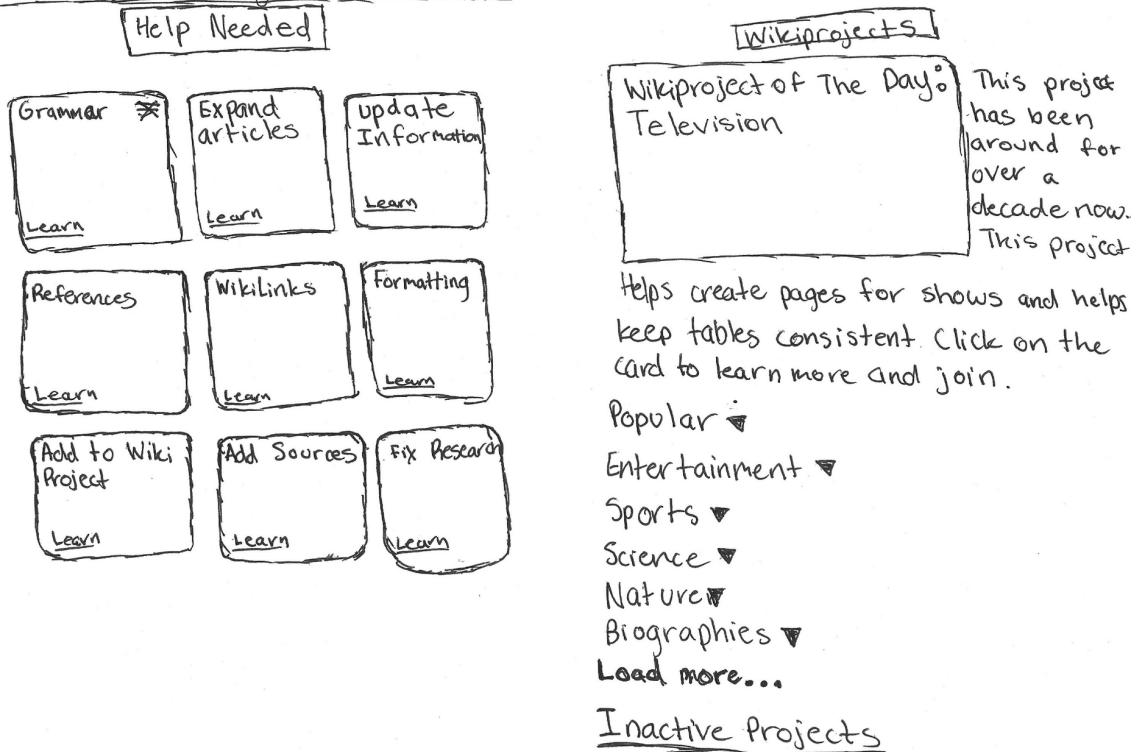
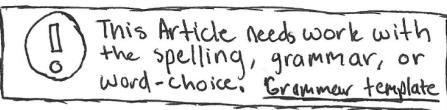


Figure 11.

For the main dashboard of the editing portal, I first wanted to keep the scrolling layout. The screen on the left represents the top part of the page. I changed the nine issues to cards instead of the nine headers like before. I also added a section for Wikiprojects to help users find articles related to topics they might like, and possibly joining other editors in a Wikiproject.

Human-Computer Interaction



Human computer Interaction is...

Research

Grammar [Edit]

Research for Human-Computer Interaction is usually done through prototypes made with Figma, Whimsical or Adobe XD.

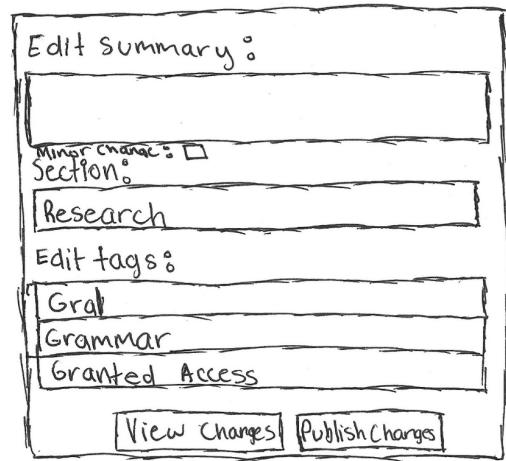


Figure 12.

The second sketch shows an article on the left. There are still important banners at the top, but section headers now have issues, like grammar, marked next to the edit button. This is supposed to take up less space and not be as distracting. The other change is to the edit summary, which is mostly the same as the original. Here, users can now add tags that apply to the edit they made, such as adding citations.

These were the main sketches for the idea I wanted to go with. I focused on similar screens as the ones I had users observe in the usability tests. I created a low-fidelity prototype next.

Low-Fidelity Prototype and User Tests

I created a low-fidelity prototype on Marvel following a similar user journey to the original usability test. I ended up having elements of the editing portal and tagging system, though I didn't think too much about the tagging system yet. I conducted 5 usability tests with the prototype. Since I did not pay for the service though, I was only able to download copies of my heatmaps.

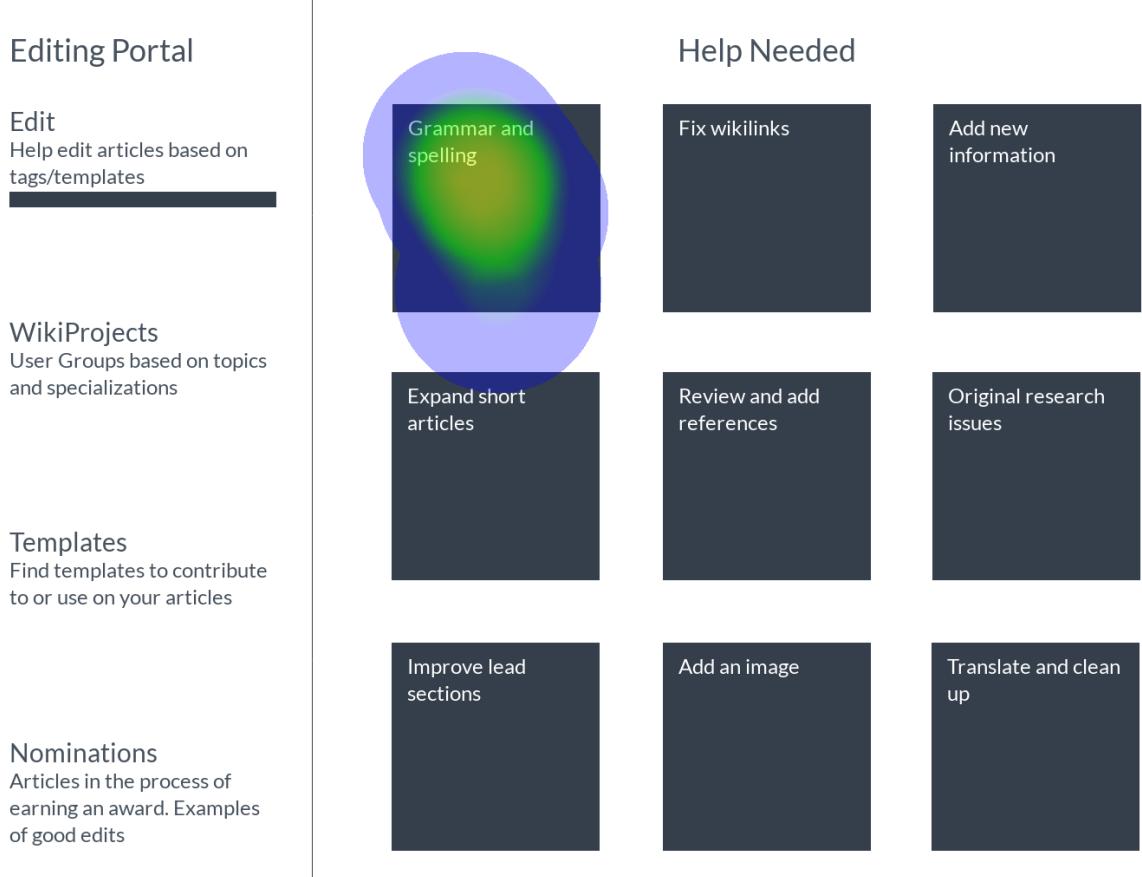


Figure 13. The first screen is the dashboard of the editing portal. There are tabs on the side, so users don't have to scroll as much, and the nine cards, one for each editing issue. This time, the cards don't have articles listed on them. Users were able to find the Grammar and Spelling issues quickly.

Grammar and Spelling

[Back](#)

This category includes all pages marked as needing copy edit by {{Copy edit}} and related templates. Please remember to remove the copy edit tag once you have completed a copy edit of the article.

Search Articles

0-9

10ml LOVE
1839 Coringa cyclone
1971 JVP insurrection

A

List of A Town Where You Live chapters
Abdul-Ghani Al-Karmi
Baaj Adebole
Manabendra Adhikary
Agniphera (TV series)
Mohamed Aïchaoui
Alagramam Jain Temple
All-China Journalists Association
Husayn Fawzi Alnajjar
Mansoor Amjad
Argentine Antarctica
Alberto Arredondo Gutiérrez
Artistic gymnastics
Aru Shah and the Song of Death
Auto Shankar (web series)

B

BACS
Banking in Bhutan
Shab-e-barat
Ashot Beglarian
Behavior management
Behavioral public administration
2020–2021 Belarusian protests
Bharat Broadband Network
Bhishma Parva
Bibleman
Big Brother Brasil 21
Bobo brand
Bocskai uprising
Bodh'aktan
Bon Om Touk
Bowden, Ashprington
Tiffany Brar
The Brave Little Toaster to the Rescue
List of economic crises in Brazil
Broaden-and-build
Bucheki
Robert Byrd

D

Daemokjang
Dallas Review
Sharon Daniel
Danqing
Darr Sann Ye
Deja Vu (Olivia Rodrigo song)
Tom Devine
Dewaitha
Jan van Dijk
Dilshan TG (YouTuber)
Diplomacy of the Caspian littoral states
Disruptive solutions process
Dnipro (magazine)
DoDonPachi SaiDaiOuJou
Doppelkopf
List of Dragon Ball characters
Zhang Yudrakpa Tsöndru Drakpa
Dravida Munnetra Kazhagam
The Dreamstone
Tara Duncan
Mehmet Duraković
Durga – Mata Ki Chhaya
Dvach
Spasiya Dzhurenova

E

Economic ethics
EDSA Busway
Ekhanee Aakash Neel Season 2
El Zapotal
Employees' Provident Fund Organisation
ENCA
1985–86 in English football
Environmental policy of the Joe Biden administration
El Escorial
Eternal Love of Dream
Mike Evans (author)
List of Ezhavas

H

Haberdashers' Aske's Boys' School
Hafsat Ganduje
List of Haiku!! characters

Topic

Month/Year

House of Corsi

Mickey Hughes (boxer)
Human-computer interaction
Nedal Hussein

I

International Primate Protection League
Italian Labour Union

J

Jacobite Syrian Christian Church
Jalgaon Jamod
Jalgaon Municipal Corporation
Tariq Jamil
Janatha Vimukthi Peramuna
Jawaharlal Nehru Engineering College
Jayabheri
Jeongye Daewongun
Jhinjhak
Jubeiha area

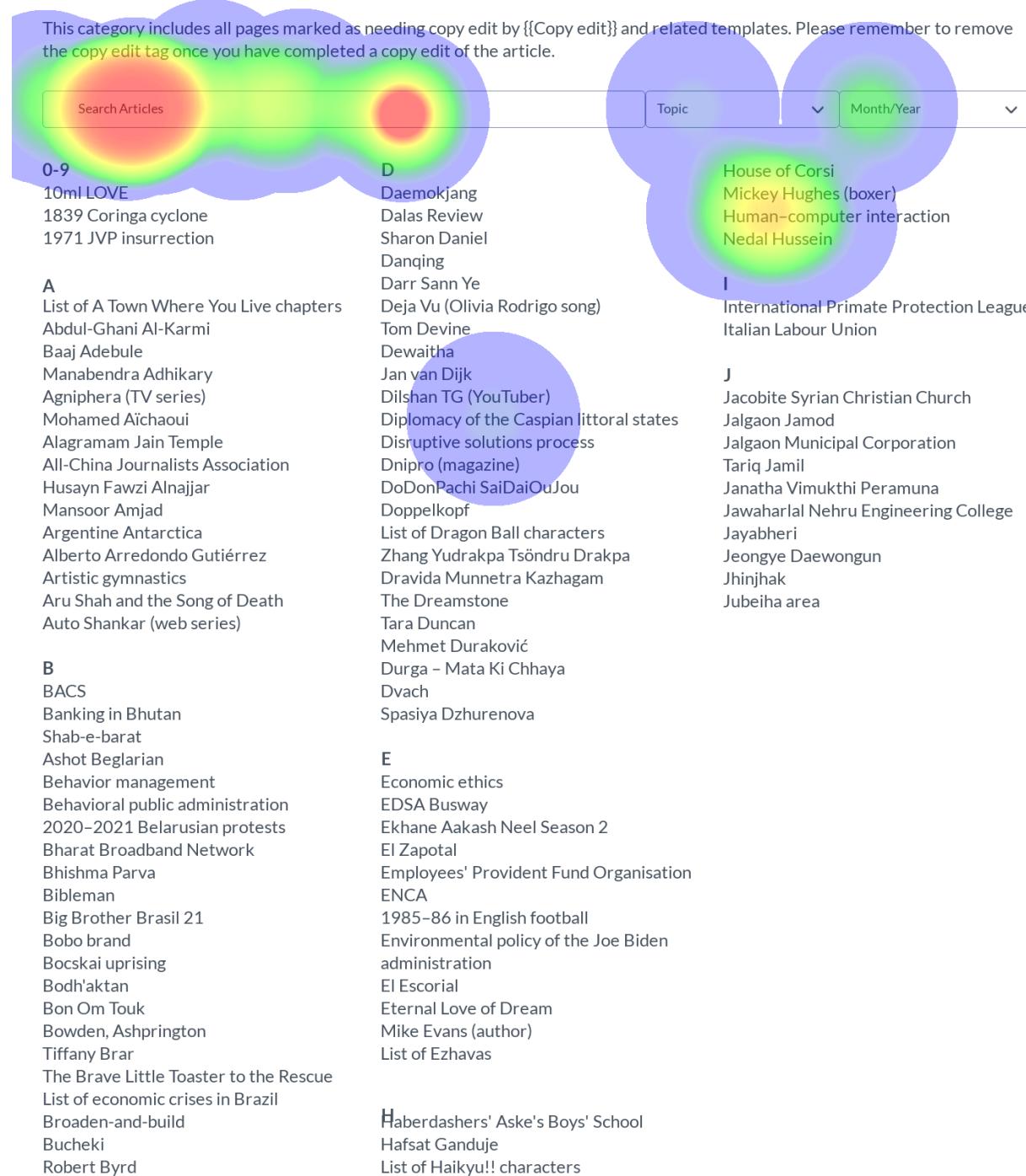


Figure 14. The second screen is the list of articles with grammar issues. I removed the banners previously there and made it so they can filter by date and topic with drop down menus, as opposed to having different pages for different month-year pairs. When I told users to find the

Human-computer interaction article, most of them wanted to use the search bar to find it. Every user was able to find it in the end though.

Human-Computer Interaction

Talk History Edit Filters ▾

Back

This article may require copy editing for [grammar, style, cohesion, tone, or spelling]. You can assist by editing it. [April 2021] (Learn how and when to remove this template message)

Human-computer interaction (HCI) studies the design and use of computer technology, focused on the interfaces between people (users) and computers. Researchers in the field of HCI observe the ways in which humans interact with computers and design technologies that let humans interact with computers in novel ways.

As a field of research, human-computer interaction is situated at the intersection of computer science, behavioural sciences, design, media studies, and several other fields of study. The term was popularized by Stuart K. Card, Allen Newell, and Thomas P. Moran in their seminal 1983 book, *The Psychology of Human-Computer Interaction*, although the authors first used the term in 1980[1] and the first known use was in 1975.[2] The term connotes that, unlike other tools with only limited uses (such as a wooden mallet, useful for hitting things, but not much else), a computer has many uses and this takes place as an open-ended dialog between the user and the computer. The notion of dialog likens human-computer interaction to human-to-human interaction, an analogy that is crucial to theoretical considerations in the field.[3][4]

Content [Show]

Introduction [edit]

Humans interact with computers in many ways; the interface between humans and computers is crucial to facilitate this interaction. HCI is also sometimes termed human-machine interaction (HMI), man-machine interaction (MMI) or computer-human interaction (CHI). Desktop applications, internet browsers, handheld computers, ERP, and computer kiosks make use of the prevalent graphical user interfaces (GUI) of today.[5] Voice user interfaces (VUI) are used for speech recognition and synthesizing systems, and the emerging multi-modal and Graphical user interfaces (GUI) allow humans to engage with embodied character agents in a way that cannot be achieved with other interface paradigms. The growth in human-computer interaction field has been in quality of interaction, and in different branching in its history. Instead of designing regular interfaces, the different research branches have had a different focus on the concepts of multimodality[6] rather than unimodality, intelligent adaptive interfaces rather than command/action based ones, and finally active rather than passive interfaces.[citation needed]

The Association for Computing Machinery (ACM) defines human-computer interaction as "a discipline that is concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them".[5] An important facet of HCI is user satisfaction (or simply End-User Computing Satisfaction). "Because human-computer interaction studies a human and a machine in communication, it draws from supporting knowledge on both the machine and the human side. On the machine side, techniques in computer graphics, operating systems, programming languages, and development environments are relevant. On the human side, communication theory, graphic and industrial design disciplines, linguistics, social sciences, cognitive psychology, social psychology, and human factors such as computer user satisfaction are relevant. And, of course, engineering and design methods are relevant".[5] Due to the multidisciplinary nature of HCI, people with different backgrounds contribute to its success.

Poorly designed human-machine interfaces can lead to many unexpected problems. A classic example is the Three Mile Island accident, a nuclear meltdown accident, where investigations concluded that the design of the human-machine interface was at least partly responsible for the disaster.[7][8][9] Similarly, accidents in aviation have resulted from manufacturers' decisions to use non-standard flight instruments or throttle quadrant layouts: even though the new designs were proposed to be superior in basic human-machine interaction, pilots had already ingrained the "standard" layout and thus the conceptually good idea actually had undesirable results.

Current Research [edit]

Topics in human-computer interaction include the following:

Knowledge-driven human-computer interaction Grammar and Spelling [edit]

In human and computer interactions, a semantic gap usually exists between human and computer's understandings towards mutual behaviors. Ontology, as a formal representation of domain-specific knowledge, can be used to address this problem through solving the semantic ambiguities between the two parties.[23]

Emotions and human-computer interaction [edit]

In the interaction of humans and computers, research has studied how computers can detect, process and react to human emotions to develop emotionally intelligent information systems. Researchers have suggested several 'affect-detection channels'.[24] The potential of telling human emotions in an automated and digital fashion lies in improvements to the effectiveness of human-computer interaction.[25] The influence of emotions in human-computer interaction has been studied in fields such as financial decision making using ECG[26][27] and organisational knowledge sharing using eye tracking and face readers as affect-detection channels.[28] In these fields it has been shown that affect-detection channels have the potential to detect human emotions and that information systems can incorporate the data obtained from affect-detection channels to improve decision models.

Social Computing [edit]

Social computing is basically an interactive and collaborative behavior considered between technology and people. In recent years,

Figure 15. The third screen is the main article page. Here users first needed to filter by an edit filter, representing new tags for issues, like a grammar tag. Some users didn't notice it though, instead trying to just find the section with the tag manually.

The screenshot shows a mobile application interface. At the top, there is a navigation bar with three tabs: "Talk", "History", and "Grammar". The "Grammar" tab is highlighted with a red background and a dropdown arrow icon. To the right of the tabs is a "Back" button. Below the navigation bar, the title "Human-Computer Interaction" is displayed in a large blue circle. Underneath the title is a button labeled "Content [Show]". The main content area starts with a section titled "Current Research [edit]". A sub-section titled "Topics in human-computer interaction include the following:" is shown. Within this section, the word "Grammar" is highlighted with a green box and a green circular heatmap overlay. Below this, there are two more sections: "Knowledge-driven human-computer interaction [edit]" and "Emotions and human-computer interaction [edit]". Both of these sections also have green circular heatmaps over them. The text in these sections discusses the development of emotionally intelligent information systems and the potential of affect-detection channels in human-computer interaction.

Social Computing [edit]

Social computing is basically an interactive and collaborative behavior considered between technology and people. In recent years, there has been an explosion of social science research focusing on interactions as the unit of analysis. As there are a lot of social computing technologies that include blogs, emails, social networking, quick messaging, and various others. Much of this research draws from psychology, social psychology, and sociology. For example, one study found out that people expected a computer with a man's name to cost more than a machine with a woman's name.[21] Other research finds that individuals perceive their interactions with computers more negatively than humans, despite behaving the same way towards these machines.[22]

Figure 16. The fourth screen shows a filter selected. It will only show sections of the article containing the filter. Here, users were asked to "make an edit" by clicking on the text in the section shown.

Human-Computer Interaction

Talk History Grammar v

[Back](#)

[Content \[Show\]](#)

Current Research [\[edit\]](#)

Topics in human-computer interaction include the following:

Knowledge-driven human-computer interaction [Grammar and Spelling \[edit\]](#)

In human and computer interactions, knowledge is used to understand user behaviors. Ontology, as a formal representation of knowledge, can help to resolve the semantic ambiguities between the user's intentions and the system's responses.

Emotions and human-computer interaction [\[edit\]](#)

In the interaction of humans and computers, emotions play a significant role. Emotions can be used to develop emotionally intelligent interfaces that can better understand and respond to user needs. For example, the potential of telling human emotions through computer interaction has been explored in various fields such as affective computing and computer interaction.[25] The influence of emotions on decision making has also been studied, such as using heart rate variability to predict decision making using ECG[26][27].

Information systems can incorporate emotional intelligence to improve user experience and satisfaction.

The heatmap visualization shows user interaction patterns across different edit options. The top section, 'Edit Summary', has a yellow/orange center and a green outer ring. The middle section, 'Edit Tags', has a blue center and a green outer ring. At the bottom, there are two circular buttons: 'Major change:' (yellow) and 'Watch Page:' (blue). Below these buttons are two buttons: 'Preview Changes' (green) and 'Publish Changes' (blue).

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dress this problem through solving

ocess and react to human emotions
ect-detection channels'.[24] The
the effectiveness of human-
studied in fields such as financial
face readers as affect-detection
to detect human emotions and that
ve decision models.

Social Computing [\[edit\]](#)

Social computing is basically an interactive and collaborative behavior considered between technology and people. In recent years, there has been an explosion of social science research focusing on interactions as the unit of analysis. As there are a lot of social computing technologies that include blogs, emails, social networking, quick messaging, and various others. Much of this research draws from psychology, social psychology, and sociology. For example, one study found out that people expected a computer with a man's name to cost more than a machine with a woman's name.[21] Other research finds that individuals perceive their interactions with computers more negatively than humans, despite behaving the same way towards these machines.[22]

Figure 17. This screen shows the edit summary. Editors can select what tags they used in their edit now. Most users wanted to preview changes first but this screen was clear to the users after reading the options.

[Content \[Show\]](#)

Current Research [\[edit\]](#)

Topics in human-computer interaction include the following:

Knowledge-driven human-computer interaction [Grammar and Spelling](#) [\[edit\]](#)

In human and computer interactions behaviors. Ontology, as a formal representation of knowledge, can help address the semantic ambiguities between the two domains.

Emotions and human-computer interaction

In the interaction of humans and computers, emotions play a significant role in developing emotionally intelligent interfaces. The potential of telling human emotions through computer interaction.[25] The influence of emotions on decision making using ECG[26][27] and other physiological channels.[28] In these fields it has been shown that affect-detection channels have the potential to detect human emotions and that information systems can incorporate the data obtained from affect-detection channels to improve decision models.

We saw you used a Grammar and Spelling Tag where X was marked. Would you like to remove the Grammar and Spelling edit tag? Only Remove the tag if you are certain there are no more of this same error in this section.

[Don't Remove Tag](#)[Remove tag](#)

user's understandings towards mutual respect and address this problem through solving

process and react to human emotions through affect-detection channels'.[24] The effectiveness of human-computer interaction has been studied in fields such as financial markets and face readers as affect-detection channels have the potential to detect human emotions and that information systems can incorporate the data obtained from affect-detection channels to improve decision models.

Social Computing [\[edit\]](#)

Social computing is basically an interactive and collaborative behavior considered between technology and people. In recent years, there has been an explosion of social science research focusing on interactions as the unit of analysis. As there are a lot of social computing technologies that include blogs, emails, social networking, quick messaging, and various others. Much of this research draws from psychology, social psychology, and sociology. For example, one study found out that people expected a computer with a man's name to cost more than a machine with a woman's name.[21] Other research finds that individuals perceive their interactions with computers more negatively than humans, despite behaving the same way towards these machines.[22]

Figure 18. This pop up shows when a user adds the same tag to their summary as the one the section was marked with. It asks the user if they want to remove the tag if the issue is cleared now that they made an edit.

Human-Computer Interaction

Talk History Edit Filters ▾

[Back](#)

Search By User

Edit Category ▾

Date ▾

01 May 2021 12:00:00 Alexander E.S. (Talk | Contribs) | 50,000 bytes | -20 Char **Grammar and Spelling**
Research: Added and removed commas

01 May 2021 12:00:00 Alexander E.S. (Talk | Contribs) | 50,000 bytes | -20 Char **Grammar and Spelling**
Research: Added and removed commas

01 May 2021 12:00:00 Alexander E.S. (Talk | Contribs) | 50,000 bytes | -20 Char **Grammar and Spelling**
Research: Added and removed commas

01 May 2021 12:00:00 Alexander E.S. (Talk | Contribs) | 50,000 bytes | -20 Char **Grammar and Spelling**
Research: Added and removed commas

01 May 2021 12:00:00 Alexander E.S. (Talk | Contribs) | 50,000 bytes | -20 Char **Grammar and Spelling**
Research: Added and removed commas

01 May 2021 12:00:00 Alexander E.S. (Talk | Contribs) | 50,000 bytes | -20 Char **Grammar and Spelling**
Research: Added and removed commas

01 May 2021 12:00:00 Alexander E.S. (Talk | Contribs) | 50,000 bytes | -20 Char **Grammar and Spelling**
Research: Added and removed commas

01 May 2021 12:00:00 Alexander E.S. (Talk | Contribs) | 50,000 bytes | -20 Char **Grammar and Spelling**
Research: Added and removed commas

1 2 3 4 5 6 7 >>

Figure 19. The last screen is the article history page. Here the user can see when all the edits were made as well as what type they were and who made them. Users can now filter based on date or editing category/tag.

Feedback

Since I had previously tested the similar task on Wikipedia itself, I compared what the users told me about both.

Pros: Not as cluttered or text-heavy, so the navigation from page to page is easier. Tags made it easier to find a section in need of editing. Tags for each edit on the history page made revisions clearer

Cons: Users liked being able to select letter at the list of pages for an issue. Edit filters was confusing since it was off to the side and the name was also unclear. The design of the prototype was minimal, so it could use something to make it more interesting

Overall, the users like my solution but it could still have some more improvements. I was surprised that some users liked the letter sorting option on Wikipedia. Based on this feedback, I iterated on these designs and added extra features.

Iteration

Editing Portal

Topic



Figure 20. The first change I made was adding a topic filter to the editing portal dashboard. This was so users could have an easier time finding articles for subjects they know about, based on my results from the initial user research. The filter choice would carry over to the other pages, like the issue pages or the list of Wikiprojects available.

Grammar and Spelling

[Back](#)

This category includes all pages marked as needing copy edit by {{Copy edit}} and related templates. Please remember to remove the copy edit tag once you have completed a copy edit of the article.

0-9 ABCDEFGHIJKLMNOPQRSTUVWXYZ

Topic Month/Year

Figure 21. The second revision I made was to the list of articles page. I added the letter selector back in. It also made more sense to have since users probably won't have a specific article they want to edit beforehand, they would probably be exploring first.

Human-Computer Interaction

[Read](#) [Edit](#) [Talk](#) [History](#)

[Back](#)



This article is part of the Technology Wikiproject. For more similar articles and information about the project, click here

Human-computer interaction (HCI) studies the design and use of computer technology, focused on the interfaces between people (users) and computers. Researchers in the field of HCI observe the ways in which humans interact with computers and design technologies that let humans interact with computers in novel ways.

As a field of research, human-computer interaction is situated at the intersection of computer science, behavioural sciences, design, media studies, and several other fields of study. The term was popularized by Stuart K. Card, Allen Newell, and Thomas P. Moran in their seminal 1983 book, *The Psychology of Human-Computer Interaction*, although the authors first used the term in 1980.[1] and the first known use was in 1975.[2] The term connotes that, unlike other tools with only limited uses (such as a wooden mallet, useful for hitting things, but not much else), a computer has many uses and this takes place as an open-ended dialog between the user and the computer. The notion of dialog likens human-computer interaction to human-to-human interaction, an analogy that is crucial to theoretical considerations in the field.[3][4]

[Content \[Show\]](#)

Introduction

Figure 22. The next revisions I made were to the article page. I got rid of the edit buttons next to each subheading, like Introduction. Tags for editing are only shown when the edit tab is selected.

This is to make editing more intentional and less distracting for readers. I also changed the tabs at the top, getting rid of the edit filters and moving over the read tab.

Human-Computer Interaction

Read Edit Talk History Back

Visual Editor | Wiki Markup Tags Menu

Figure 23. The next revision was made for when the edit tab is selected. I added the option to switch between the visual editor and the markup editor. I also added a tags menu, where the user will be able to see tags used on the page and filter for certain ones.

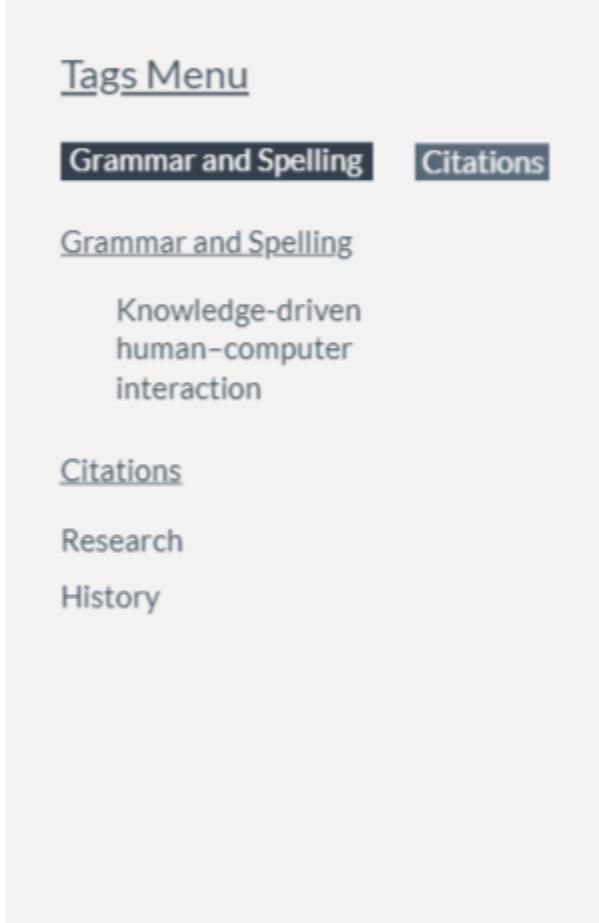


Figure 24. With the new tags menu, users can see all the unique tags on the page, they can select one to only see sections with that tag. By default though, it shows all the sections that have an issue tagged, like for citations or grammar.

interaction (CHI). Desktop applications, internet browsers, handheld computers, ERP, and computer kiosks make use of the prevalent graphical user interfaces (GUI) of today.[5] Voice user interfaces (VUI) are used for speech recognition and synthesizing systems, and the emerging multi-modal and Graphical user interfaces (GUI) allow humans to engage with embodied character agents in a way that cannot be achieved with other interface paradigms. The growth in human-computer interaction field has been in quality of interaction, and in different branching in its history. Instead of designing regular interfaces, the different research branches have had a different focus on the concepts of multimodal rather than command/action based ones, and finally active rather than passive.

The Association for Computing Machinery (ACM) defines human-computer interaction as "the design, evaluation and implementation of interactive computing systems for human use".[6] An important facet of HCI is user satisfaction. Human-computer interaction studies a human and a machine in context. On the machine side, techniques in computer graphics, operating systems, programming languages, and development environments are relevant. On the human side, communication theory, graphic and industrial design disciplines

Tag
CI
Citations
Circulate
Cancel Add
y, intelligent adaptive interfaces
on needed]

cipline that is concerned with the
h the study of major phenomena
iting Satisfaction). "Because
upporting knowledge on both the
and development environments are relevant. On the human side, communication theory, graphic and industrial design disciplines

Figure 25. This new feature allows users to highlight a sentence and add a tag for an issue that applies to it, like for an admin who is marking articles.

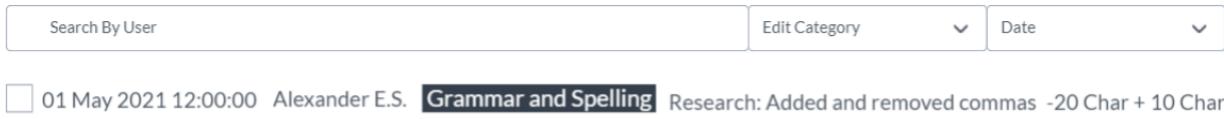
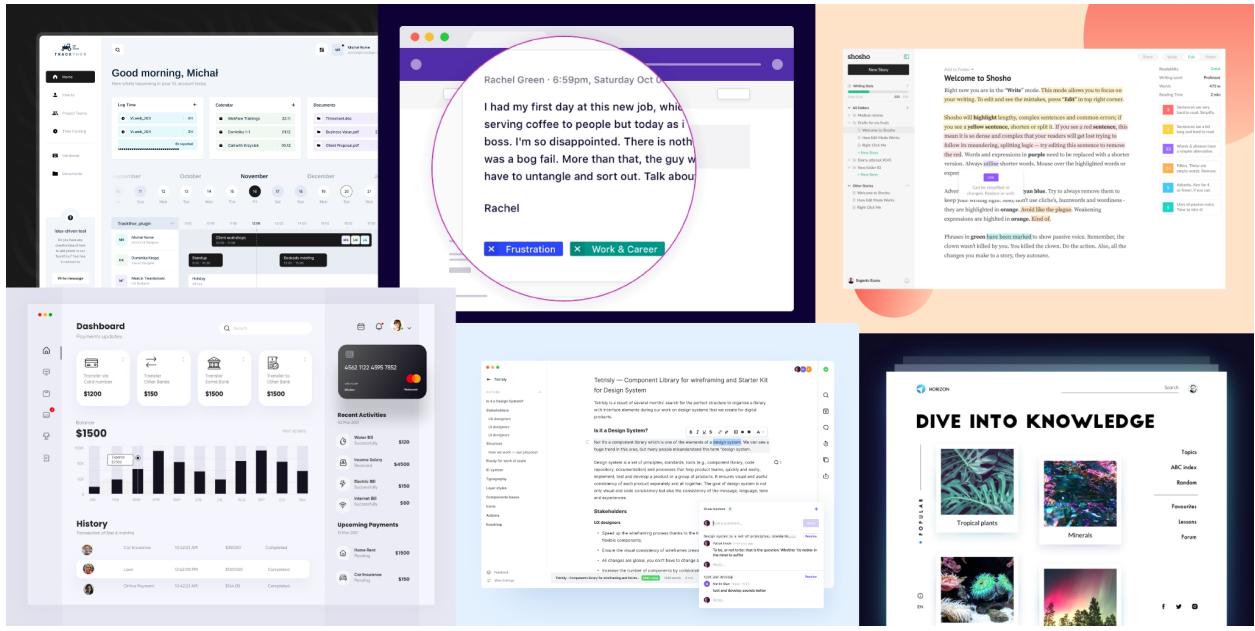


Figure 26. The last revision was made to the history page. Summaries now show characters added and deleted. Bytes were deleted to clean up the summary and because they did not seem necessary. The talk and contribution links for individual users were removed as well. The user can click on a user's name and their talk page and contribution lists will be available at their profile page instead.

After making these revisions I started to prepare a high-fidelity prototype.

High-Fidelity Prototype

Mood board



To start my high-fidelity prototype, I looked for other ideas on things like dashboards, text editors, and encyclopedias. I created a mood board out of some of the ones I liked. All the designs on the mood board were found on Dribbble.

Design Language

Next, I looked for colors and design elements used on Wikipedia so I could recreate them for my prototype.

| | | | Link style | Type | Color | Color |
|----------|-----------------------------------|-----------------------------------|-------------------|---|------------------------------|-------|
| Hue: 150 | background:#F5FFFA border:#CEF2E0 | background:#CEF2E0 border:#A3BFB1 | blue link | link to a Wikipedia page that currently exists | #0645AD = rgb(6,69,173) | █ |
| Hue: 210 | background:#F5FAFF border:#CEE0F2 | background:#CEE0F2 border:#A3B1BF | dark blue link | link to a Wikipedia page that exists and that you have visited | #0B0080 = rgb(11,0,128) | █ |
| Hue: 270 | background:#FAF5FF border:#E0CEF2 | background:#E0CEF2 border:#B1A3BF | red link | link to a page that does not currently exist within Wikipedia | #BA0000 = rgb(186,0,0) | █ |
| Hue: 330 | background:#FFF5FA border:#F2CEE0 | background:#F2CEE0 border:#BFA3B1 | light brown link | link to a Wikipedia page that does not exist, but that you have visited | #A55B58 = rgb(165,88,88) | █ |
| | | | brown link | link to a very short article within Wikipedia, but only if the user has set a preference option to format "stub" links in this way | #772233 = rgb(119,34,51) | █ |
| | | | light blue link 1 | link to a page at another wiki, usually another Wikimedia project or an external link | #3366BB = rgb(51,102,187) | █ |
| | | | light blue link 2 | Note that the light blue color is used whether or not the page actually exists at the target wiki. For example, there is an article about George Washington Carver here on the English Wikipedia, while there is no article of the same name on the Japanese Wikipedia; but they do have an article about the same man under a different title. | | |
| | | | purple link | link to a page on another site that has been visited | #663366 = rgb(102,51,102) | █ |

And additionally on the Community Portal:

| | | |
|----------|-----------------------------------|-----------------------------------|
| Hue: 030 | background:#FFFFA5 border:#F2E0CE | background:#F2E0CE border:#BFB1A3 |
|----------|-----------------------------------|-----------------------------------|

Additional 3-colour palettes using this same generation scheme are at the top of the [talk](#) page. In the Monobook skin, the background colour of Wikipedia pages is #F8FCFF. In the 'Commons' [edit]

The Wikimedia Commons uses this colour scheme on [commons:Main Page](#) and [commons:Help:Contents](#). Differing from the English Wikipedia, Commons does not use an extra, darker shade of grey the above table does.

| | |
|--|--|
| background colour: #d0e5f5 | background colour: #faecc8 |
| background colour: #f1f5fc border colour: #abd5f5 | background colour: #faf6ed border colour: #fad67d |



Final screens

Due to the height of some of the screens, the captions will go above the corresponding picture.

Figure 27. This is the main dashboard for the edit portal, there are the tabs on the left to find groups or pages for different interests. This page is mainly to find specific issues to fix. I also added a star/favorite button at the top. This is for users to favorite and follow the changes made to a page


WIKIPEDIA
 The Free Encyclopedia

[Help](#) [Talk](#)
Not logged in [Talk](#) [Contributions](#) [Create account](#) [Log in](#)

Search Wikipedia 

[Read](#) [Edit](#) [History](#) [!\[\]\(8cb2030f57cf656be949d3868b0ca48b_img.jpg\)](#)

Help:Finding what to edit

From Wikipedia, the free encyclopedia
[< Home](#)

Editing Portal

Edit by category

Edit articles based on corrections needed

Wikiprojects

User groups based on different topics and specializations

Templates

Read through existing templates or create your own for projects or editing

Collaborations

Create or browse existing collaboration pages recruiting editors

Nominated articles

View good examples of edits and articles. Help articles receive an award

Help out

Grammar and spelling
Articles in need of copy editing.

[Learn how](#)

Fix wikilinks
Add links to more articles on wikipedia

[Learn how](#)

Update with new information
Articles about current events or statistics related to populations

[Learn how](#)

Expand short articles
Article stubs in need of more content

[Learn how](#)

Check and add references
Articles with too few or missing references

[Learn how](#)

Fix original research issues
Articles combining multiple references to imply a new conclusion

[Learn how](#)

Improve lead sections
Made the lead section of an article more interesting or accurate

[Learn how](#)

Add an image
For articles in need of a relevant picture

[Learn how](#)

Translate and clean up
Translate new articles or clean existing ones

[Learn how](#)

Figure 28. This page is the list of articles for an issue. I got rid of the banners at the top. I thought it would be best if they only showed up for admins, at least the admin-specific ones. Users can filter by month-year and topic, as well as sort alphabetically.

Not logged in [Talk](#) [Contributions](#) [Create account](#) [Log in](#)



WIKIPEDIA The Free Encyclopedia

Main page
Contents
Current events
Random article
About Wikipedia
Contact us
Donate

Contribute
Help
Learn to edit
Community portal
Recent changes
Upload file

Tools
What links here
Related changes
Special pages
Permanent link
Page information
Wikidata item

Print/export
Download as PDF
Printable version

Issue [Talk](#) [Topic](#) [Month · Year](#)

Category: Copy Editing

This category includes all pages marked as needing copy edit by {{Copy edit}} and related tags/templates. Please remember to remove the copy edit tag once you have completed a copy edit of the article.

[All](#) · [0-9](#) · [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

All articles needing copy edit

The following 200 pages are in this category, out of approximately 466 total. This list may not reflect recent changes ([learn more](#)).

[1](#) [2](#) [3](#) > >>

0-9

- [100 Year Starship](#)
- [2016 Mahamaham](#)
- [2016 United States senate election in Missouri](#)

A

- [List of A Town Where You Live chapters](#)
- [Abacus](#)
- [Abdul-Ghani Al-Karmi](#)
- [Abhimanyu](#)
- [Nadezhda Abramova](#)
- [Activity-based learning in India](#)
- [Baaj Adebole](#)
- [Manabendra Adhikary](#)
- [Afghan cuisine](#)
- [Afrikaner Broederbond](#)
- [Agniphera \(TV series\)](#)
- [Vital Ahačić](#)
- [Mohamed Aichaoui](#)
- [Akoko South-East](#)
- [Alagramam Jain Temple](#)
- [Jefferson Cardim de Alencar Osorio](#)
- [Aljaferia](#)
- [Allahabad Airport](#)
- [Martin Allen \(numismatist\)](#)
- [Husayn Fawzi Almajjar](#)
- [Sampath Amaralutunge](#)
- [Mansoor Amjad](#)
- [Argentine Air Force](#)
- [Argentine Antarctica](#)
- [Bernard Arnault](#)
- [Alberto Arredondo Gutiérrez](#)
- [Articles of Favourable Treatment of the Great Qing Emperor after His Abdication](#)
- [Aurat March](#)
- [Auto Shankar \(web series\)](#)

B

- [Cristian Balgiu](#)
- [Barawa Dil](#)
- [Benjamin Bederson](#)
- [The Beetle \(novel\)](#)
- [Behavior management](#)
- [Belarus–NATO relations](#)

C

- [Chembarathi \(TV series\)](#)
- [Chhota Bheem and the Throne of Bali](#)
- [Child Rights and You](#)
- [China Merchants Group](#)
- [Chiral Lewis acid](#)
- [Chōjin Sentai Jetman](#)
- [Choking](#)
- [Timothy Chooi](#)
- [Churchville-Chili Central School District](#)
- [Cilicia](#)
- [Civil Hospital, Larkana](#)
- [Madison Clark](#)
- [Climate of West Bengal](#)
- [Coffeehouse effect](#)
- [Colombo Stock Exchange](#)
- [Complexity Gaming](#)
- [Compost](#)
- [Congolese National Liberation Front](#)
- [1839 Coringa cyclone](#)
- [Corpo della Nobiltà Italiana](#)
- [Corruption in Mauritius](#)
- [COVID-19 pandemic in Madhya Pradesh](#)
- [COVID-19 pandemic in Sri Lanka](#)
- [Curtis Cregan](#)
- [Crow Indian Reservation](#)
- [Crown Media Holdings](#)
- [Cuisine of Odessa](#)
- [Cultured meat](#)

D

- [Chris D'Elia](#)
- [Dil Dosti Dance](#)
- [Daimajin](#)
- [Princess Daisy](#)
- [Sharon Daniel](#)
- [Danqing](#)
- [Deewana \(TV series\)](#)
- [Tom Devine](#)
- [Dhundhara](#)
- [Disruptive solutions process](#)
- [Dithubarua Cultural Festival](#)
- [Dnipro \(magazine\)](#)
- [Doraemon: Nobita's Secret Gadget Museum](#)
- [Jamie Dornan](#)

G

- [Fasting in Islam](#)
- [Flyweight pattern](#)
- [Fort Bonifacio boundary dispute](#)

G

- [Gasum](#)
- [Gattu](#)
- [General Roman Calendar](#)
- [Ghorpuri](#)
- [Joseph Deighton Gibson Jr.](#)
- [Giffgaff](#)
- [Gladstone Link](#)
- [Gode](#)
- [Alfred L. Goldberg](#)
- [Leonid Golikov](#)
- [Grand Canyon Supergroup](#)
- [Howard Griffiths \(scientist\)](#)
- [Guisin of Baekje](#)
- [Gun law in Pakistan](#)

H

- [List of Haiku!! characters](#)
- [Harold Hamm](#)
- [Han Terra](#)
- [List of Hanebadol episodes](#)
- [Avid Harnack](#)
- [Have Your Cake and Eat It](#)
- [HD 219617](#)
- [Hero – Gayab Mode On](#)
- [Hi-5 \(American TV series\)](#)
- [Nao Hibino](#)
- [History of the Jews in Zurich](#)
- [History of Tibet](#)
- [Hollycombe Steam Collection](#)
- [Honda NX650 Dominator](#)
- [Human–computer interaction](#)
- [Huzurabad \(Assembly constituency\)](#)

I

- [List of oldest banks in India](#)
- [The Indian Stammering Association](#)
- [Internet censorship in Iran](#)
- [Iran Football championship cup](#)
- [Government of Isfahan](#)
- [Ishk Par Zor Nahi](#)

Figure 29. This is the main article page. Editing buttons are not shown on the read tab. This is meant to be more intentional for editors. It is also less distracting for readers. Only the most important Templates will be shown at the top now.



WIKIPEDIA The Free Encyclopedia

Main page
Contents
Current events
Random article
About Wikipedia
Contact us
Donate

Contribute
Help
Learn to edit
Community portal
Recent changes
Upload file

Tools
What links here
Related changes
Special pages
Permanent link
Page information
Wikidata item

Print/export
Download as PDF
Printable version

Human - computer interaction

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As a field of research, human-computer interaction is situated at the intersection of computer science, behavioural sciences, design, media studies, and several other fields of study. The term was popularized by Stuart K. Card, Allan Newell, and Thomas P. Moran in their seminal 1983 book, *The Psychology of Human-Computer Interaction*, although the authors first used the term in 1980.^[1] and the first known use was in 1975.^[2] The term is intended to convey that, unlike other tools with specific and limited uses, computers have many uses and their use often involves an open-ended dialog between the user and the computer. The notion of dialog likens human-computer interaction to human-to-human interaction, an analogy that is crucial to theoretical considerations in the field.^{[3][4]}

Contents [hide]

- 1. Introduction
- 2. Current research
 - a. Social computing
 - b. Knowledge-driven human-computer interaction
 - c. Emotions and human-computer interaction
 - d. Brain-computer interfaces
- 3. Human-computer interface
- 4. Goals for computers
- 5. Design
 - a. Principles
 - b. Methodologies
- 6. Display designs
 - a. Thirteen principles of display design
 - 1. Perceptual principles of display design
 - 2. Mental model principles
 - 3. Principles based on attention
 - 4. Memory principles
- 7. Factors of change
- 8. Scientific conferences
- 9. See also
- 10. Footnotes
- 11. Further reading
- 12. External links

Introduction

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The Association for Computing Machinery (ACM) defines human-computer interaction as "a discipline that is concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them".^[5] An important facet of HCI is user satisfaction (or simply End-User Computing Satisfaction). "Because human-computer interaction studies a human and a machine in communication, it draws from supporting knowledge on both the machine and the human side. On the machine side, techniques in computer graphics, operating systems, programming languages, and development environments are relevant. On the human side, communication theory, graphic and industrial design disciplines, linguistics, social sciences, cognitive psychology, social psychology, and human factors such as computer user satisfaction are relevant. And, of course, engineering and design methods are relevant."^[5] Due to the multidisciplinary nature of HCI, people with different backgrounds contribute to its success.

Poorly designed human-machine interfaces can lead to many unexpected problems. A classic example is the Three Mile Island accident, a nuclear meltdown accident, where investigations concluded that the design of the human-machine interface was at least partly responsible for the disaster.^{[7][8][9]} Similarly, accidents in aviation have resulted from manufacturers' decisions to use non-standard flight instruments or throttle quadrant layouts; even though the new designs were proposed to be superior in basic human-machine interaction, pilots had already ingrained the "standard" layout and thus the conceptually good idea actually had undesirable results.

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Main article: Social computing

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Knowledge-driven human-computer interaction

In human and computer interactions, a semantic gap usually exists between human and computer's understandings towards mutual behaviors. Ontology, as a formal representation of domain-specific knowledge, can be used to address this problem through solving the semantic ambiguities between the two parties.^[23]

Emotions and human-computer interaction

Main article: Affective computing and Emotion recognition

In the interaction of humans and computers, research has studied how computers can detect, process and react to human emotions to develop emotionally intelligent information systems. Researchers have suggested several 'affect-detection channels'.^[24] The potential of telling human emotions in an automated and digital fashion lies in improvements to the effectiveness of human-computer interaction.^[25] The influence of emotions in human-computer interaction has been studied in fields such as financial decision making using ECG^[26]^[27] and organisational knowledge sharing using eye tracking and face readers as affect-detection channels.^[28] In these fields it has been shown that affect-detection channels have the potential to detect human emotions and that information systems can incorporate the data obtained from affect-detection channels to improve decision models.

Brain-computer interfaces

Figure 30. This is the editing view, specifically the visual editor. There is a side bar on the right now, this time for editing for certain tags. There is also a tag filter at the top in case users only want to see one type of tag.

Not logged in | Talk | Contributions | Create account | Log in

Article | Talk | Search Wikipedia | Read | Edit | History | Publish changes... | Visual Editor | Wiki Markup

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Contents [hide]

1. Introduction
2. Current research
 - a. Social computing
 - b. Knowledge-driven human-computer interaction
 - c. Emotions and human-computer interaction
 - d. Brain-computer interfaces
3. Human-computer interface
4. Goals for computers
5. Design
 - a. Principles
 - b. Methodologies
6. Display designs
 - a. Thirteen principles of display design
 - i. Perceptual principles of display design
 1. Perceptual principles
 2. Mental model principles
 3. Principles based on attention
 4. Memory principles
 7. Factors of change
 8. Scientific conferences
 9. See also
 10. Footnotes
 11. Further reading
 12. External links

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Not logged in | Talk | Contributions | Create account | Log in

Article | Talk | Search Wikipedia | Read | Edit | History | Publish changes... | Visual Editor | Wiki Markup

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Contents [hide]

1. Introduction
2. Current research
 - a. Social computing
 - b. Knowledge-driven human-computer interaction
 - c. Emotions and human-computer interaction
 - d. Brain-computer interfaces
3. Human-computer interface
4. Goals for computers
5. Design
 - a. Principles
 - b. Methodologies
6. Display designs
 - a. Thirteen principles of display design
 - i. Perceptual principles of display design
 1. Perceptual principles
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 4. Memory principles
 7. Factors of change
 8. Scientific conferences
 9. See also
 10. Footnotes
 11. Further reading
 12. External links

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Figure 31. When one tag is clicked at the very top, it will only show sections that contain that tag.

The screenshot shows a Wikipedia editing interface. At the top, there's a navigation bar with 'Article' (selected), 'Talk', 'Search Wikipedia', 'Read', 'Edit', 'History', and 'Log in'. Below the search bar are various editing tools like 'Paragraph', 'A', 'Cite', 'Insert', and 'Ω'. To the right of these are buttons for '?', '▲', '≡', '✎', and 'Publish changes...'. A 'Visual Editor | Wiki Markup' link is also present.

The main content area is titled 'Human - computer interaction'. It contains several sections:

- Current research** (highlighted in green) with a 'Grammar and spelling' button.
- Social computing** (Main article: [Social computing](#))
- Knowledge-driven human-computer interaction**
- Emotions and human-computer interaction** (Main article: [Affective computing and Emotion recognition](#))
- Brain-computer interfaces** (Main article: [Brain-computer interface](#))
- Human-Computer Interface**

On the right side, there's a vertical 'Editing Tags' sidebar:

- Grammar and Spelling** (highlighted in green)
- Citation Needed**
- Translation Error**
- Current research** (highlighted in green) with a 'Grammar and spelling' button.
- Human-Computer Interface**
- Grammar and Spelling** (highlighted in green)

Each section in the main content area has a corresponding 'Grammar and Spelling' button in the sidebar. The 'Grammar and Spelling' button for the 'Current research' section is highlighted in green, indicating it is active.

Figure 32. Here the user is highlighting a line to add a tag. They can also highlight a heading to mark the section as having an issue.

Introduction

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Current research Grammar and spelling

Introduction

Current research

Figure 33. A menu pops up for the user to add a tag to the highlighted line when they right-click.

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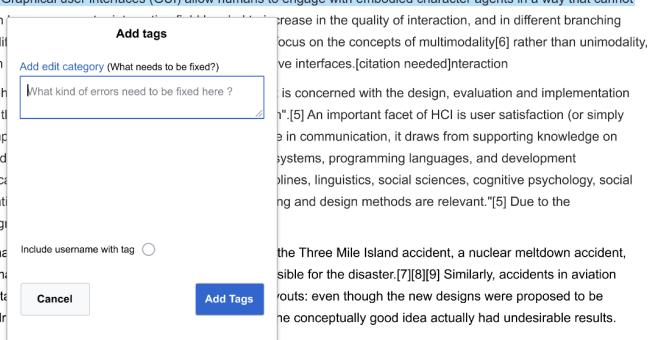
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Current research Grammar and spelling

Introduction

Current research

Figure 34. As the user types, tags will pop up if they match the letters typed so far. The user can select the plus button to add it.



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Poorly designed human-machine interfaces can lead to many problems. For example, the design of the human-computer interface has resulted from manufacturers' decisions to use non-standard interfaces that are not superior in basic human-machine interaction, pilots had air traffic controllers.

Add tags

Add edit category (What needs to be fixed?)

Citation Needed +

Include username with tag

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Current research Grammar and spelling

Introduction

Current research Grammar and spelling

Figure 35. The user has selected a tag. They can also choose to add their name to the tag for others to see. This can help other users contact them if there are any questions or if their issue is resolved.

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Current research Grammar and spelling

Introduction

Current research Grammar and spelling

Figure 36. The user selects the radio button to add their name to the tag.

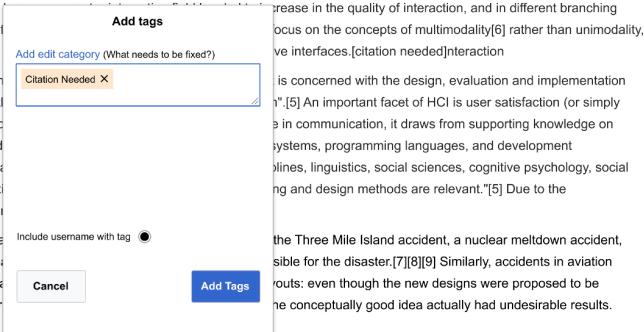
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Current research Grammar and spelling



Introduction

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Figure 37. On the right at the same exact height, you can see the new citation tag added.

Introduction

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The Association for Computing Machinery (ACM) defines human-computer interaction as "a discipline that is concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them".[5] An important facet of HCI is user satisfaction (or simply End-User Computing Satisfaction). "Because human-computer interaction studies a human and a machine in communication, it draws from supporting knowledge on both the machine and the human side. On the machine side, techniques in computer graphics, operating systems, programming languages, and development environments are relevant. On the human side, communication theory, graphic and industrial design disciplines, linguistics, social sciences, cognitive psychology, social psychology, and human factors such as computer user satisfaction are relevant. And, of course, engineering and design methods are relevant." [5] Due to the multidisciplinary nature of HCI, people with different backgrounds contribute to its success.

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Current research Grammar and spelling

Introduction

Citation Needed
Editor #20

Current research
Grammar and spelling

Clicking an Individual Tag

Figure 38. A user can hover or click on a tag on the side to highlight the sentences that were marked. There will be a very light highlight to all sentences marked with a tag, but clicking on the specific text or tag on the side will make it show up more clearly.

Brain-computer interfaces

Main article: [Brain-computer interface](#)

A brain-computer interface (BCI), is a direct communication pathway between an enhanced or wired brain and an external device. BCI differs from neuromodulation in that it allows for bidirectional information flow. BCIs are often directed at researching, mapping, assisting, augmenting, or repairing human cognitive or sensory-motor functions [29]

Human-Computer Interface

The human-computer interface can be described as the point of communication between the human user and the computer. The flow of information between the human and computer is defined as the loop of interaction. The loop of interaction has several aspects to it, including:

- Visual Based: The visual-based human-computer interaction is probably the most widespread area in Human-Computer Interaction (HCI) research.
- Audio Based: The audio-based interaction between a computer and a human is another important area of HCI systems. This area deals with information acquired by different audio signals.
- Task environment: The conditions and goals set upon the user.
- Machine environment: The environment that the computer is connected to, e.g. a laptop in a college student's dorm room.
- Areas of the interface: Non-overlapping areas involve processes of the human and computer not pertaining to their interaction. Meanwhile, the overlapping areas only concern themselves with the processes pertaining to their interaction.
- Input flow: The flow of information that begins in the task environment, when the user has some task that requires using their computer.
- Output: The flow of information that originates in the machine environment.
- Feedback: Loops through the interface that evaluate, moderate, and confirm processes as they pass from the human through the interface to the computer and back.
- Fit: This is the match between the computer design, the user, and the task to optimize the human resources needed to accomplish the task.

Citation Needed
Editor #20

Human-Computer Interface

Grammar and Spelling
AlexanderES37

Figure 39. When the user right clicks a tag, a pop up will appear, asking if the user wants to delete the tag. It mentions to make sure the issue is actually cleared before removing the tag.

Brain-computer interfaces

Main article: [Brain-computer interface](#)

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Editor #20

Human-Computer Interface

Grammar and Spelling
AlexanderES37

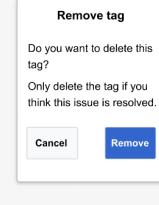


Figure 40. The user has just changed some text on the highlighted sentence.

Brain-computer interfaces

Main article: [Brain-computer interface](#)

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Citation Needed
Editor #20

Human-Computer Interface

Grammar and Spelling
AlexanderES37

Figure 41. Once the user makes an edit, the publish changes button at the top will change to blue.

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Article | Talk | Search Wikipedia | Read | Edit | History | Publish changes..

Visual Editor | Wiki Markup

Human - computer interaction

Human-computer interaction (HCI) means the design and the use of computer technology, focused on the interfaces between people (users) and computers. Researchers in the field of HCI observe the ways in which humans interact with the computers and they design such technologies that let humans interact with computers in novel ways.

As a field of research, human-computer interaction is situated at the intersection of computer science, behavioural sciences, design, media studies, and several other fields of study. The term was popularized by Stuart K. Card, Allen Newell, and Thomas P. Moran in their seminal 1983 book, *The Psychology of Human-Computer Interaction*, although the authors first used the term in 1980[1] and the first known use was in 1975.[2] The term is intended to convey that, unlike other tools with specific and limited uses, computers have many uses and their use often involves an open-ended dialog between the user and the computer. The notion of dialog likens human-computer interaction to human-to-human interaction, an analogy that is crucial to theoretical considerations in the field.[3][4]

Contents [hide]

1. Introduction
2. Current research
 - a. Social computing
 - b. Knowledge-driven human-computer interaction
 - c. Emotions and human-computer interaction
 - d. Brain-computer interfaces
3. Human-computer interface
4. Goals for computers
5. Design
 - a. Principles
 - b. Methodologies
6. Display designs
 - a. Thirteen principles of display design
 - i. Perceptual principles of display design
 1. Perceptual principles
 2. Mental model principles
 3. Principles based on attention
 4. Memory principles
 7. Factors of change
 8. Scientific conferences
 9. See also
 10. Footnotes
 11. Further reading
 12. External links

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Current research Grammar and spelling

Topics in human-computer interaction include the following:

Social computing

Main article: Social computing

Social computing is basically an interactive and collaborative behavior considered between technology and people. In recent years, there has been an explosion of social science research focusing on interactions as the unit of analysis. As there are a lot of social computing technologies that include blogs, emails, social networking, quick messaging, and various others. Much of this research draws from psychology, social psychology, and sociology. For example, one study found out that people expected a computer with a man's name to cost more than a machine with a woman's name.[21] Other research finds that individuals perceive their interactions with computers more negatively than humans, despite behaving the same way towards these machines.[22]

Knowledge-driven human-computer interaction

In human and computer interactions, a semantic gap usually exists between human and computer's understandings towards mutual behaviors. Ontology, as a formal representation of domain-specific knowledge, can be used to address this problem through solving the semantic ambiguities between the two parties.[23]

Emotions and human-computer interaction

Main article: Affective computing and Emotion recognition

In the interaction of humans and computers, research has studied how computers can detect, process and react to human emotions to develop emotionally intelligent information systems. Researchers have suggested several 'affect-detection channels'.[24] The potential of telling human emotions in an automated and digital fashion lies in improvements to the effectiveness of human-computer interaction.[25] The influence of emotions in human-computer interaction has been studied in fields such as financial decision making using ECG[26][27] and organisational knowledge sharing using eye tracking and face readers as affect-detection channels.[28] In these fields it has been shown that affect-detection channels have the potential to detect human emotions and that information systems can incorporate the data obtained

Editing Tags

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Citation Needed

Translation Error

Introduction

Citation Needed

Editor #20

Current research

Grammar and Spelling

AlexanderES37

Translation Error

Diseñador70

Figure 42. When the user clicks publish changes, an edit summary will appear. If they made an edit to a section marked with a tag, it will autofill the tag field and it will ask if the user wants to remove the issue/tag after publishing their changes.

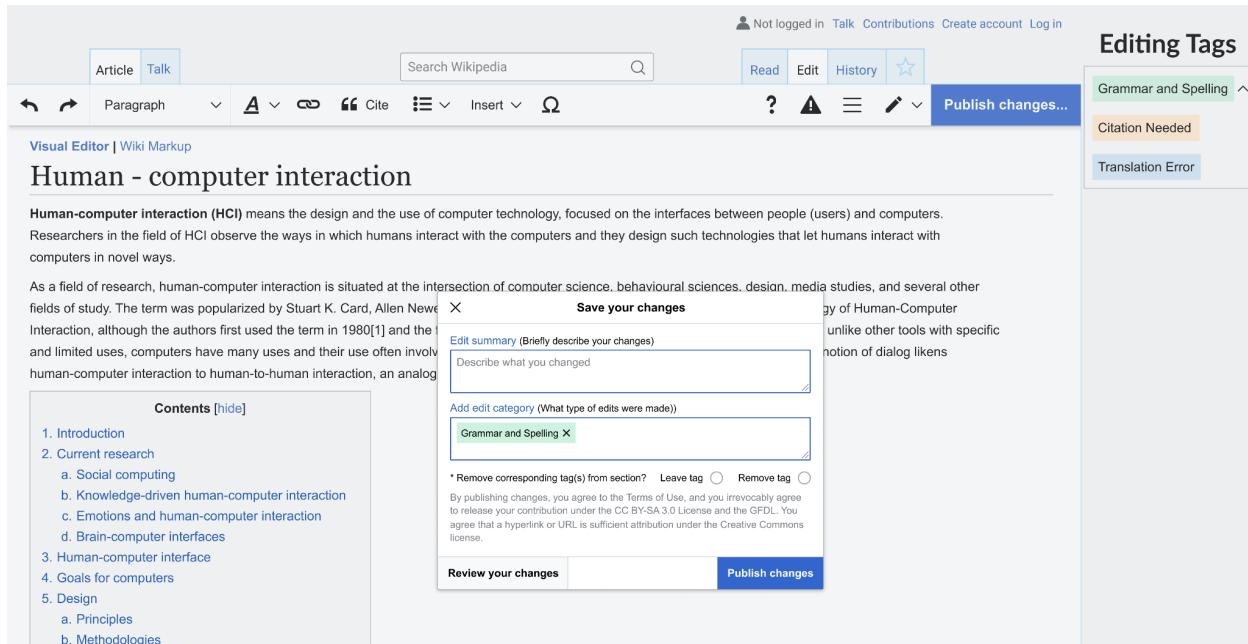


Figure 43. The user has written in the edit summary field and wants to remove the corresponding tag.

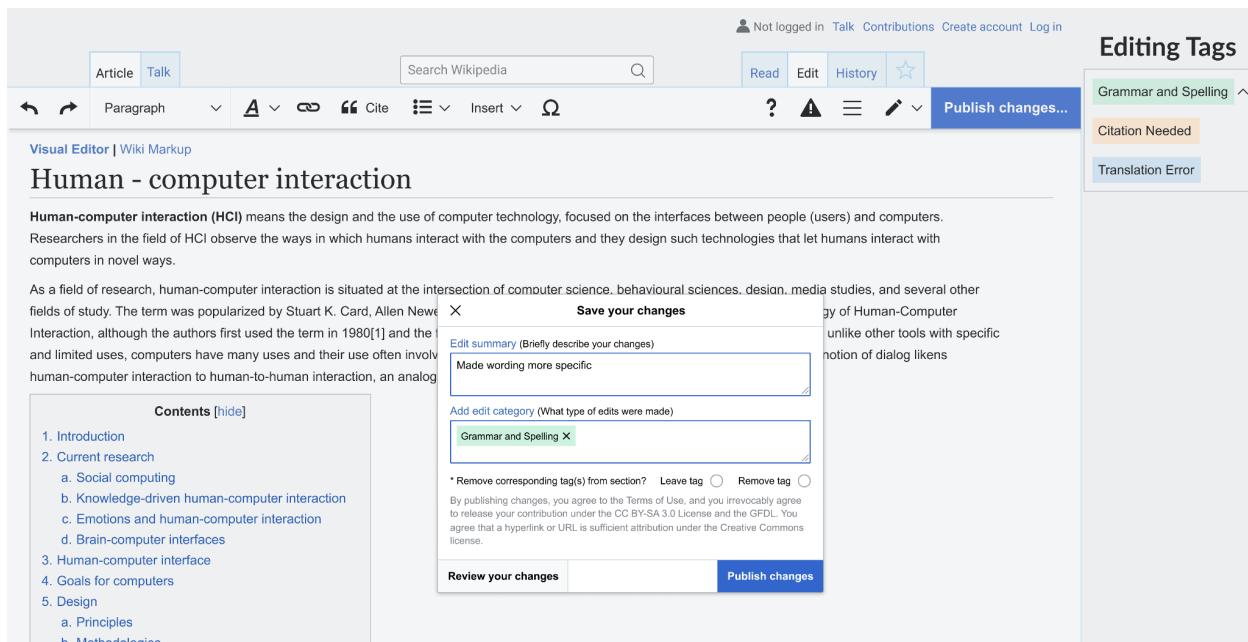


Figure 44. The user has completed the edit and the tag is now removed from the corresponding sentence.

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Article | Talk | Search Wikipedia | Read | Edit | History | Publish changes...

Visual Editor | Wiki Markup

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Grammar and Spelling

Citation Needed

Translation Error

Introduction

Citation Needed

Editor #20

Current research

Grammar and Spelling

AlexanderES37

Translation Error

Diseñador70

This is what the edit summary will look like if a lot of edits are made or if the edits are made to an untagged section or sentence. Users add the tags on their own and the option to remove a tag is not available.

X **Save your changes**

Edit summary (Briefly describe your changes)
Describe what you changed

Add edit category (What type of edits were made)
Add tags for the types of edits made

By publishing changes, you agree to the Terms of Use, and you irrevocably agree to release your contribution under the CC BY-SA 3.0 License and the GFDL. You agree that a hyperlink or URL is sufficient attribution under the Creative Commons license.

Review your changes **Publish changes**

X **Save your changes**

Edit summary (Briefly describe your changes)
Describe what you changed

Add edit category (What type of edits were made)
Gramm|
Grammar and Spelling +

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Review your changes **Publish changes**

I have been working on an Article History screen so I will try to add those screens in the near future.

Design Rationale

The Editing portal/dashboard helps centralize all editing and collaboration features. The designs I made were more for the visual editor rather than the manual/markup language. For that editor though, it would stay largely the same, except more tags would be available and they can be written in more places, rather than just for marking the entire section or article. Tags would still be written like {grammar and spelling}.

I originally didn't want to have any user discussion features, but I decided to include the user's name on the tags, but only if they also want to include their name. This would hopefully help users ask or respond to any clarifying questions about the issues since it is currently not clear who left a template. Having separate tags as opposed to one big template/tag at the top makes the progress more tangible and will work to prevent articles from being left unfixed for years. As long as people see an article has been receiving clear edits, they may feel more enticed to make their own edits as well. The reason articles have templates and aren't just fixed, is because all articles receive a review,

sometimes by an admin. They don't have the time to fix them all themselves as there are not many of them. Sometimes an article under a Wikiproject might have more luck if it has active editors. I may implement an actual edit progress bar for the article.

Another thing I may consider is adding comments to the tags, but I would like to see how more experienced users feel about this compared to using talk pages, as is the standard right now. I was also thinking about having each tag create a section on the article talk page and then once it's deleted, remove the section from the talk page. This would automate the process and resolve issues quickly on articles, or between users who may not agree on an issue tag or edit.

Reflection

This was my redesigning for desktop so I was not prepared for how much more time-consuming it would be compared to a mobile device, especially recreating an entire page. It made me appreciate Wikipedia's current design more. Through this project, I got a lot more experience using both Figma and Marvel App. Recreating all the existing components especially helped. I would like to see how participants from the research project would feel about the designs. I tried to take their responses into account along with the newer users I tested the low-fidelity prototype with to create a solution to help users of varying experience. This was a fun project overall and I'm glad I was able to use a previous research project for a design project!