P6: User Study Evaluation (Part A)

<u>TA: Christine Munar</u> Mehdi Kazi - #26452129 Rochelle Shen - #26710871 Jessica Chen - #26279605 Alexander Kamgar - #25841666

P6: Evaluation

To-Do List

- 1. Core user task (1 paragraph)
- 2. Study measures (1-2 pages)
- 3. Informed consent form (1 page)
- 4. All raw data collected from at least 2 rounds of pilot testing in class on Wednesday, Nov. 8 (just the data, no analysis expected)
- 5. Reflection on what worked well in the pilot and what needs to be improved.
- 6. Team assessment survey

• Core User Task

The core user task of our prototype "Words with Friends" is the ability to select a politically diverse range of news articles for users in a group chat to read, react to, and discuss, as well as supporting aggregation of data on how users reacted to specific articles. The first part of the core user task focuses on the function of our chatbot - we want it to be able to send links to articles that users can press on to open a pop-over or new tab. In this screen, we want users to be able to highlight different sentences or phrases and react to them (angry, sad, love, wow, thumbs up, thumbs down). We want the chatbot to be able to know that all users have finished reading their articles and display statistics on how users reacted. In our conception, this statistic will prompt other members of the chat to ask questions on why users reacted a certain way and discuss the news topic from there to gain a deeper understanding of how someone from a different political perspective feels.

- **Define measures** (survey and interview questions, errors, completion time) to evaluate the working prototypes.
 - 1. Our first step would be to perform a basic informational survey on the interviewee, which will gather information on political leaning, background, education, occupation, etc that will allow us to better contextualize the interviewee's experience with using our prototype/product. We will make sure to emphasize that this information will be kept private and is purely for our own prototype evaluation purposes.
 - 2. We will then start asking interview questions to the user (some of them may be tweaked based on data collected in the survey). The interviews are not limited to these and
 - a. Do you think that being able to react to sentences and phrases in an article (ans sharing those reactions would friends) would motivate you to finish the article and try to understand the issue it is talking about? Why or why not?
 - b. How do you feel about seeing the "statistics" information in our app (shows friends reactions to different articles on the same political issue) after all of the people have finished reading in your group?
 - c. If you saw Words with Friends as one of the features you can integrate into your group chat (through Messenger, Facebook, etc), how likely would it be for you to click on it and try (scale of 1 -10). Would you be intrigued or dissuaded by its mission of encourage political discussion from different POVs?
 - d. Would it be intriguing to see the "statistics" information (such as comments & reactions) for all users who have read and reacted to a specific article? Would you find it distracting? Or would you want it to be more private and solely focused on your friend group?
 - e. How do you feel about each member of your group receiving a different perspective of the same article? In particular, elaborate on the effectiveness of this method towards helping you become exposed to more diverse perspectives.
 - 3. Next we will have the user try our working prototype demo. We will share an article for the user to click on in our group chat and the user will click on it then be prompted to react to different parts of the article and can see how his/her friends reacted to it after everyone has finished reading. For the viewing statistics part, we will ask the users to tell us the specific reactions they were interested in discussing with other members of the group chat (potential points of discussion user is willing to initiate).
 - a. To evaluate the user's use of these demo, will will define the following measures:
 - i. Reacting to the article:
 - 1. Time elapsed for finishing reacting to an article
 - 2. Number of phrases highlighted/reacted to
 - 3. Reactions users clicked on and the frequency of each reaction
 - 4. Hesitation/deletion of certain reactions
 - ii. Viewing statistics of friends' reactions:
 - 1. Number of reactions the user clicked on and time spent reading each one
 - 2. Time elapsed in exploring user reactions
 - 3. Number of reactions user is willing to initiate to discuss in chat

News With Friends Research Project Participation Consent Form

INTRODUCTION

Thank you for volunteering to participate in the News WIth Friends user experience research. The experience will consist of one research session to see your engagement with reading and reacting to various news articles. There is no obligation for you to participate in any specific activity and you may feel free to opt out on any you do not want to do. Please read the information below carefully, which gives a description of the user research experience and our project. If you agree to the information below, please sign in the space below to indicate that you understand and agree to the information on the consent form.

TITLE OF RESEARCH PROJECT

News With Friends

PROCEDURES

This research project will occur either over video chat or in-person, lasting up to 30 minutes and will be audio recorded.

PERSONAL INFORMATION

For this user experience research, we may need to collect information such as but not inclusive of age, sex, city, occupation, education, and ethnicity. The personal information collection will be used solely for research studies. Your personal identity will be kept private such as your name, so your feedback during the experience will remain anonymous.

RESEARCH DATA & FEEDBACK

You will be giving permission to the News With Friends team to record, document, and collect information related to your participation in the experience. News With Friends owns all the data and feedback given associated with our research experience. All feedback is voluntary and News With Friends is free to use and disclose this data if needed.

CONFIDENTIALITY

Any information released to you and information you provide to News With Friends will be considered confidential. The following terms apply: (i) you may not video or photo any part of the research experience, (ii) you may not share any information to any third party.

AUTHORITY TO PARTICIPATE

You represent that you have full legal authority to sign this form and are of legal age (18+). You assume FULL RISK of any INJURIES, DAMAGES, LOSSES you may sustain as a result of your participation in this research experience. You agree to RELEASE AND HOLD News With Friends FREE from ALL claims you may have regarding your participation. News With Friends will not be liable for any damages related. Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.

 Participant's Signature
 Date (mm/dd/yy)

 First Name
 Last Name

 Address
 Zipcode

Raw Data Collected from Rounds of Pilot Testing

User 1:

User didn't realize he had to highlight text in order to react to it and just thought it was "I reacted to this article positively / negatively".

We had to explain how to highlight and explain a lot of the process of how to use the application.

He noted how we need more intro text in the beginning for explanation, instead of just simply presenting the article which left him clueless on what specific functionality there was.

He felt like it was fun, and enjoyed the summary table of analytics at the end after doing his own reactions to see what his friends felt.

Some other suggestions he gave include: having a view of other articles, indicating the different viewpoints of website article given (left, right, center), having some type of diagnostics per person available afterward.

He said he would potentially talk about it afterwards with his friends, but wasn't so certain about it.

He also did not want to go back and read the article's that his friends were given because that seemed like duplicate work.

He thought it would also be good to see the comments by each person and not just reaction based, so filtering by reader instead of filtering by emoji.

User 2:

On the first page, user was already asking questions about the source of the article and general information about the concept.

User did not highlight page and was just confused - not realizing that he was supposed to highlight to have reactions.

User suggested having a back arrow afterward to go back to the article when at the summary reactions page.

The angry and love reaction highlighted colors were too closely similar and thought they should be more distinct.

It seemed like the colors of the highlight did not intuitively match up with the emoji reactions.

User thought that if there were only a small amount of statistics / reactions, it almost seemed like there was nothing to check at first.

User did not really like the small statistics grid and thought it just looked bad.

User felt that it was just really dependent on others being able to fully read the article and react properly to it.

They liked the concept of not having a bias beforehand and just simply reading it first. One suggestion was having a summary of the article with reactions attached to it, having a per page diagnostic side by side.

Christine:

She thought the implementation of the product was good.

Noted for us to give a reminder on what the topic was about in the statistics area, and make it more apparent.

Suggested showing the logo of the source of article instead of simply stating it.

P6: User Study Evaluation (Part B)

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Revised core task and study plan

TEAM INSTRUCTIONS:

- **1.** Take **<u>photos</u>** during the interview
 - a. Interviewees using the prototype
- 2. <u>Audio</u> record the interview (make sure to ask beforehand)
 - a. For data analysis purposes and recall their thought process
- 3. Make sure participants <u>SIGN</u> the consent form
- 4. Interview them with Study Plan below
- 5. Make sure they fill out the SURVEY

CORE TASK:

The core user task of our prototype "News with Friends" is to allow users to read news without being pre-biased and becoming more engaged by being able to react to the article and have online news discussions with their friends afterward. All users in the group are given articles are varied political leanings, which helps break the echo chamber by allowing them. The first core part of the app focuses on the chatbot feature, where the bot sends the group a 'top news article' for the day. Each individual in the group receives the same topic from a different viewpoint. The second core part of the app focuses on the interactive web article portion. Users are able to highlight portions of the article and react to them (picking either angry, sad, love, wow, thumbs up, thumbs down). Statistics of the reactions are displayed to the user after everyone in the group has finished reading and reacting. In our conception, this statistic will prompt other members of the chat to ask questions on why users reacted a certain way and discuss the news topic from there to gain a deeper understanding of how someone from a different political perspective feels.

This study plan and interview session will help our group properly carry out our core task by understanding what works well for users and what doesn't. Some things we are interested in learning is how users feel without being shown the article source beforehand as well as if the reactions provide an engaging method to understand politically diverse opinions.

STUDY PLAN USER STUDY QUESTIONS:

Warm up introduction

- 1. What is your name?
- 2. What is your occupation? Please elaborate (if student state major, etc)
- 3. What is your age?
- 4. What is the current way you recieve news?
- 5. What news sources do you read / watch? Are there any news sources you stay away from?
- 6. What political perspective do you lean towards? (e.g. left, right)

"Sounds great, now let's move on to some more detailed questions about how you receive news."

<u>Focus</u>

- 1. How easy / difficult is it for you to find reliable news articles?
- 2. What's the last news article you read?
- 3. Is there a certain time you prefer to read / watch news?
- 4. Do you make an effort to read news from your opposing political perspective?
- 5. What is your opinion about understanding the stance of opposing political perspectives?

"Thanks for sharing, that was very helpful! Now we're going to move on to more of our product specific questions!"

Deep Focus

- 1. What methods, if any, do you use to discuss news with your friends?
- 2. What do you think about engaging in news discussions with your friends online?

** now going to the actual web app **

"We will be showing you our prototype of the News With Friends app. This app combines a chat bot with a web based component. The chat bot will send the top news article of the day to you and your friends in the group chat. However, there is a catch that each person gets an article from a different news source. Each person will be able to read and react to the article. Today we're going to be focusing on the web app portion."

3. "Let's assume that your two other friends already finished reading and reacting to their article. This is the article you are given for today. Please walk me through how you would read and react to the article."

4. Once on the React Reactions page (after they reacted) "Please elaborate on what you think about this statistics chart."

5. "Based off what you see, are you curious about how what your friends reacted to?"

6. After user clicks on 'More Stats' or any of the reactions: "Take a minute to interact with the app. Elaborate on what you see and how it makes you feel."

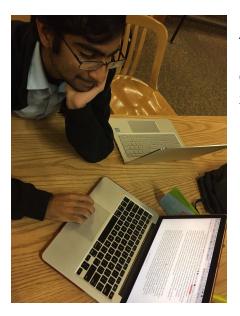
LAST STEP!

"That was very insightful. Everything you shared with us will be super helpful for our project. The last thing is just this quick survey:"

SUMMARY OF CHANGES BASED ON PILOT TESTING:

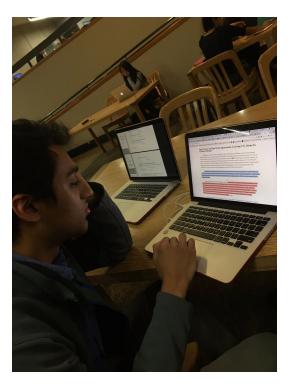
- React color
 - Change: Make colors lighter so it is easier to read against black text
 - Motivation: Many interviewees expressed difficulty reading the text in our previous prototype so we wanted to change the colors so that it's easier on the eyes (more aesthetically pleasing) and does not interfere with users' abilities to read the article - so we just made the colors lighter.
- Navigation buttons
 - Change: Add back buttons on our statistics (and detailed statistics) pages so that we can go back and change our reactions and just navigate to and between pages more readily.
 - Motivation: Some interviewees expressed the desire to see the small statistics page and the article they were reading but couldn't find a way to do that (since it was not implemented).
- Article UI
 - Change: Making the UI of the article being displayed on our web app more easy to read and attractive to users to stay on.
 - Motivation: Many interviewees expressed that the default-looking, minimal user interface made the article hard to finish (no visuals, default text) so we wanted to change the UI so that it maintains streamlined and uncluttered but also more modern and more consistent with typical user experiences of reading news articles (with images and format that increases readability).
- Instruction on how to use app
 - Change: make it clearer what users are supposed to do upon opening the web app.
 - Motivation: many users did not know what they were supposed to do and had to be told by us to highlight the sentences and phrases of the article so we wanted to make it self-explanatory with as little instruction as possible how to use the web app.
- More meaningful statistics (by person instead of react)
 - Change: Have the option to display statistics by 'friend' as well as 'emoji'
 - Motivation: Users wanted the option to be able to view what a specific friend felt and not necessarily just by the specific reaction. This provided more flexibility for their analysis of statistics.

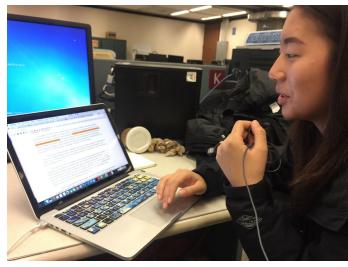
Photos & Diversity of participants



Ashwinee Panda 18 years old Computer Science San Jose, CA

Kanaad Parvate 20 years old Electrical Engineering and Computer Science Dublin, OH





Jocelyn Wang 18 years old Engineering Math & Statistics Freshman



Anissa Nishioka 20 years old Cognitive Science Junior



Iris Hou 19 years old Business / Econ Sophomore



James Zamora 21 years old Cognitive Science Senior

Original consent form

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Date (mm/dd/yy)

First Name

Last Name

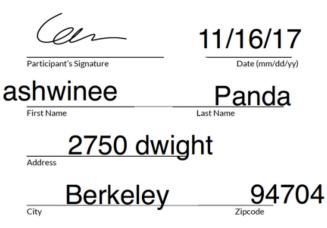
Address

City

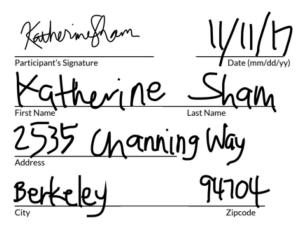
Zipcode

Signed consent form

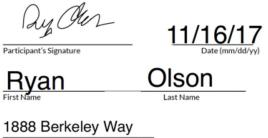
Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.



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Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.



Address

Berkeley	94703	
City	Zipcode	

Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.

Iris Hou	11/16/17
Participant's Signature	Date (mm/dd/yy)
Iris	Hou
First Name	Last Name
2401 Warring St.	
, ad obs	
Berkeley, CA	92656
City	Zipcode

Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.

Participant's Signature

Kanaad First Name

<u>Parvate</u>

270)8	col	leg	ea	ave	
Address			0			
_			-	-	-	

Berkeley,	CA	94705
City		Zipcode

Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.

rofma Participant's Signature

Anissa First Name

Nishioka Last Name

2601 Channing Way Address

Berkeley City

Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.

VA	
Participant's Signature	

Kevin First Name

Jiang Last Name

11/14/17

Date (mm/dd/yy)

13131 Chambord Way Address

San Diego 92130 City Zipcode

Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.

James Zamora	<u>11/16/17</u>
Participant's Signature	Date (mm/dd/yy)
James	Zamora
First Name	Last Name
2722 Durant Ave. Address	
Berkeley, CA	92656
City	Zipcode

Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.

 Jule AD
 11:12:17

 Participant's Signature
 Date (mm/dd/yy)

 SHIRLEY
 WU

 First Name
 Last Name

3345 17th street, UNIT1 Address Lan Francisco Zipcode

Please confirm your agreement by signing the form below. We thank you for your choice to participate and making a contribution to News With Friends.

Participant's C ant's Signature

11/16/17 Date (mm/dd/yy)

Jocelyn First Name

Wang Last Name

616 Emerson St. Fremont, CA 94539 Address

City

Zipcode

11/12/17

Last Name

Date (mm/dd/yy)

Maf Klege Participant's Signature

Max Kolegue First Name

3345 17th Street APT 1

Address

City

Zipcode

Raw Data - interview notes

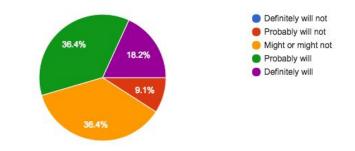
Link to drive:

https://drive.google.com/drive/folders/1rvyyM-IF8p2Bv2kRgmonDAYqVtQ Zo5KQ?usp=sharing

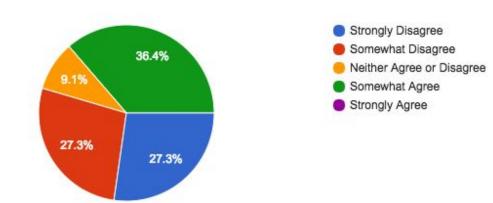
Raw Data - data tables

Based off your experience, would you use News With Friends in your daily routine?

11 responses

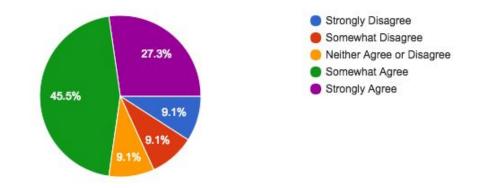


Was reacting to the article with the 6 different emojis tedious?



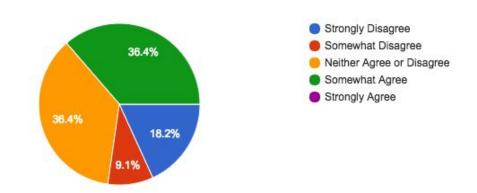
Was seeing your friends' reactions to their given article helpful for you understanding the various political perspectives?

11 responses



After reading your friends' reactions, do you think you got a good summary of their articles?

11 responses



Raw Data - free form responses

How did you feel about not knowing the news source of the article you read beforehand?

11 responses

Would prefer to know the news source so I could gauge whether or not it's reputable beforehand

Ehhhhh, had no opinion until I realized that I had an opinion. Preferred BBC over Huffington Post as a source.

I feel like it's necessary to know before you read

It felt exciting! I really like trying to guess where the article is from.

I liked it; helped me to be unbiased. I would have somewhat liked to have seen it because I can calibrate my belief in the content based on the source.

It's interesting

Feel more apprehensive about the article

did not feel anything because I did not think about it

It was an interesting experience, and I appreciated that it eliminated my own personal bias

It was ok, I knew it was more liberal.

I like it, although sometimes if you dont know the source the title could be confusing (for instance, sarcasm or hints are less obvious if the source isn't known; it's not an issue tho)

What are your final thoughts? Any tips or suggestions appreciated!

7 responses

would like to know by the end of the exercise whether my article was right/left/neutral, and the same for my friends articles as well. My friends may not react to things that give me clues about which way an article leans, and it's not a bad idea to be informed about which news sources may bias a certain way. Perhaps putting a red/blue/purple indicator next to the article title or simply the label "left" "right" etc. would be helpful. Additionally, when asking the user to "react" to something, it would be a good idea to explicitly say "React to things/facts that (1) evoke a strong emotion instead of reacting for the sake of reacting, (2) you would want your friends to know from the article, or (3) important to concisely summarizing the topic." Overall, I think this platform is a really fun way to engage in sharing and discussing news and I would definitely use it with my friends. :)

Mobile-first...

I don't think I got a very good summary of the other articles, but I got to see their opinions, which I found valuable.

Add short summaries for the articles my friends read; otherwise I rely too much on their diligent highlighting to get an understanding of their articles.

In terms of the trial interview stuff would've been nice to have diff set of reactions from a different perspective bc difficult to gauge if this would help me better understand people w opposing beliefs when the reactions were similar to mine

Answers in interview

I like the reactions but don't think it would help understand news, since when I consume news I want to know cold hard facts not people's opinions of them

Raw Data - link to audio recordings of interviews

Link to drive:

https://drive.google.com/drive/folders/1eR4FvWg1ISxY_Q8yQOmKaXxZZ 11666jh?usp=sharing