Times Newer Roman: A Crowdsourced Font as a Social Media

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Abstract

An online argument is quite possibly one of the worst mediums for meaningful discussion, and software developers must consider the reasons for bad online discourse when building internet applications. Social media platforms such as Facebook, Twitter, and TikTok have been developed for decades; yet they still suffer from poor quality of discussion. The reasons for bad online discourse are still being studied, and solutions to these problems have not been fully implemented. I have developed a new social media website, Times Newer Roman, that will attempt to act as a case study to help social media architects understand the factors that influence human interaction. The project will also educate users of social media design, showcasing how much impact display feed algorithms, anonymity, and voting systems have on online discourse. After a couple of months, the website achieved moderate popularity with thousands of views and hundreds of contributions to the social media project. During the project's runtime, various aspects of human behavior were shown to be directly influenced by certain social media features. Anonymity and front-page algorithms were among the most influential aspects. The project is in the process of having its results publicized, in order to reach hundreds of software developers.

1. Introduction

Godwin's Law is a popular internet aphorism that states the longer an online discussion goes on, the greater the probability that a comparison to Adolf Hitler will be made. Online spaces are often described as polarizing and toxic. No matter the topic or demographic of an online space, social media discussions have always been cited as lacking nuance and purpose. The lack of quality begs the question whether all forms of internet discourse are doomed to fail because of something innate in human behavior, or is it the way social media systems are designed that stimulates bad discussion?

The Times Newer Roman project attempts to implement the most common features of social media applications and analyze the quality of the content hosted on the website. The concept of the website is to create an entirely crowdsourced font. The website can be viewed at https://crowseeds.com/font/. Users would submit drawings of letters to help contribute to a crowdsourced font. Drawings serve to emulate social media posts and comments. Users then can respond to these drawings by voting, choosing to like or dislike. While users cannot directly comment on each other's posts as they do on most social media, people on the website will often submit drawings that address other users' submissions. Many cite anonymity and the perceived lack of consequences as the main cause of bad internet behavior. Posts on the Times Newer Roman website are kept anonymous, but users can write in an optional artist name, to see how anonymity affects the content on the website.

In addition to mimicking aspects of social media, there are multiple different versions of the application that target different demographics and have minor changes in sorting algorithms, anonymity, and voting. The changes will provide more insight into the effects social media features have on online discourse.

2. Related Works

Social media platforms are well aware of the effect the design of their website has on the conversations they host. In a *Washington Post*

article, Merrill and Oremus (2021) wrote about multiple researchers working for Facebook. They noted that the platform prioritized showing posts with the most angry face reactions on the user's feed. These posts were prioritized by the algorithm as people were more likely to click on them. This caused a negative feedback loop as toxic posts caused the most engagement and ended up on people's feeds, causing the user to be agitated from the post and contribute more controversial content.

Facebook only changed its algorithms when they had caused physical harm and outrage from the public. For instance, only after the January 6th Capitol Riots did Facebook change its post weighting algorithm. Educating only social media developers is not enough as many are complicit in bad online discussion. Times Newer Roman attempts to appeal to the average social media user with its silly topic and easy to understand concept in hopes of starting a conversation among denizens of social networks and gaining the attention of the companies behind these services. As shown by Facebook, corporations aren't willing to change their services unless attention is brought to the problems caused by their platform.

Case's 2016 browser game *We Become What We Behold* attempted to capture the polarization of American society caused by the news cycle. In the game, the player acts as a news station and takes pictures of people in the game, which would then be displayed to those same fictional people causing them to react. The player can then keep taking pictures of their reactions and displaying it on the news, causing a negative feedback loop where the in-game characters react more violently when strong reactions are displayed on the news. The game's satirization of the American news cycle reached millions of players and had multiple news outlets write about the project. The game is much more accessible and provoking than a news article. Boykin (2016) wrote that "*We Become What We Behold* sits with me in ways many others haven't." An interactive website like Times Newer Roman could bring attention to social media design the same way Case brought attention to the 24/7 news cycle.

3. Project Design

The project can be divided into two sections: the client side and the server side. The client handles all the user input such as the drawing application built into the website where the user would draw their letter. The server handles all the data storage and is responsible for giving the user data such as letting them know how many votes a drawing has received.

3.1 Client Architecture

The client side of Times Newer Roman was coded in C# and built using Unity, a game engine. The reason for using Unity as opposed to building a website via Javascript and HTML is due to many factors. Building it via Unity compiles the code down into a black box; any visitors would have a harder time viewing the code and would be less likely to hack into the system compared to a Javascript solution. Another factor is compatibility. Projects made via Unity are able to work on mobile devices and all browsers. I am also more familiar with Unity than Javascript or any other website creation program. Last, Unity is very streamlined and handles aspects such as audio and server connections, something that would be more cumbersome if written without an engine.

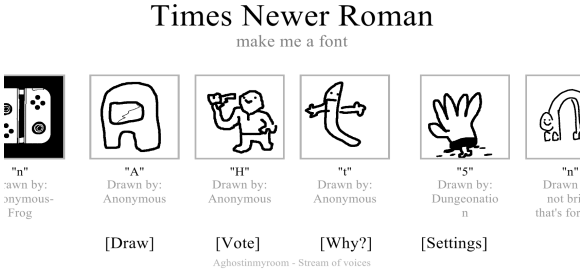

Figure 1: Times Newer Roman Home Page.

Once the game loads, the user is brought to a main menu screen where curated examples are shown moving across the screen, as shown in figure 1. This is to set expectations and explain the concept of the project. Some versions of Times Newer Roman do not have examples however to see what effect expectations would have on created content. Four buttons are shown at the bottom of the menu. The "Why" button brings up a detailed explanation of the project. The "Settings" button brings up audio and visual

settings such as a fullscreen button, muting the background music, and a dark mode.

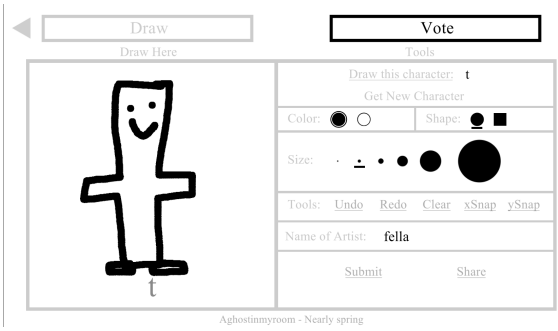

Figure 2: Drawing Page

The draw button brings the user to a drawing application. The player is given a randomly assigned character to draw, though the player may change the character as seen in figure 2. Since the program was built in a game engine, a drawing application was easy to implement. When the player clicks within the canvas, the mouse position is tracked and edits the texture of the drawing, placing a black dot or square at the mouse's location. The player can erase, change the brush type and size, and use undo and redo features. They can also change the name of the artist name associated with the image, though on some versions the name cannot be changed to force anonymity.

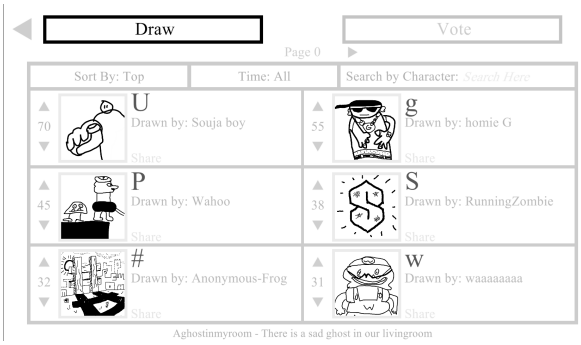

Figure 3: Voting Page

The vote button brings the user to the voting page. The sorting algorithm that displays which images are shown first is different in every version. In the above figure, the drawings are sorted by most liked of all time. Some versions have it sorted by most liked during the week and others sort by most recent. This is to determine the effect social media feeds have on the drawings being created. Next to the image is the character the drawing is based on and the artist's name. By each image there is a share button, which copies the drawing and associated information to the user's clipboard. There are also vote buttons where the user can like or dislike the image, updating the score of the image which is also shown to the left of the drawing. This screen, like the drawing page, is built using Unity's UI framework.

3.2 Server Architecture

The database responsible for keeping track of image data and vote counts is run on Amazon Web Services, a cloud computing service. The database is a MySQL database utilizing phpMyAdmin, an administration tool. The below figure shows what the database looks like.

	id	drawn_character	author	votes	date_created	website
Edit Copy Delete	472	L	lil.lion	0	2022-10-21 17:30:53	Crow Seeds
Edit Copy Delete	471	p	Anonymous	-1	2022-10-21 15:24:50	Newgrounds
Edit Copy Delete	470	f	Anonymous	-1	2022-10-21 13:23:42	Newgrounds
Edit Copy Delete	469	R	Prepper	2	2022-10-21 05:17:39	Newgrounds
Edit Copy Delete	468	'	Anonymous	2	2022-10-21 05:13:45	Newgrounds
Edit Copy Delete	467	I	Anonymous	-2	2022-10-21 05:10:19	Newgrounds
Edit Copy Delete	466	S	Anonymous	-1	2022-10-19 01:47:54	Newgrounds
Edit Copy Delete	465	}	Muck	0	2022-10-17 03:03:21	Newgrounds
Edit Copy Delete	464	4	Anonymous	0	2022-10-17 01:53:33	Itchio
Edit Copy Delete	463	e	Anonymous	1	2022-10-16 23:48:15	Newgrounds
Edit Copy Delete	462	L	q	4	2022-10-16 19:54:18	Newgrounds

Figure 4: phpMyAdmin database

Each image has an ID that auto-increments so each one is unique. The database stores what character the drawing is supposed to represent, the author's name, the date created, and what website the program is hosted on to distinguish between the different versions of the software. When sending a user's drawing to the database, the client uses Unity's web request API and calls a PHP file on my website that handles the data storage, as shown in figure 5. It attaches all the relevant data to a form object and sends it to my server code hosted on Amazon Web Services. A similar process is done for the votes.

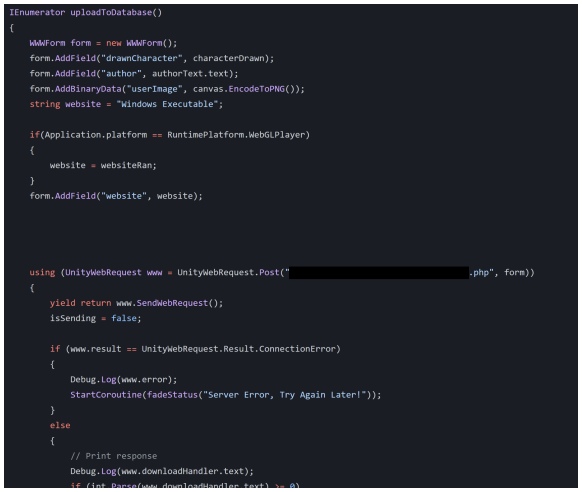

Figure 5: Code responsible for interacting with the server

The website is hosted on many websites, including my website crowseeds.com/FONT, Newgrounds, itch.io, and other platforms that host free browser games, with different variations in display feeds, anonymity, and inclusion of a dislike button.

4. Results and Anticipated Findings

A detailed systematic analysis of the drawings created by users has not been conducted yet as the project is still on-going. After a month and a half of being online, Times Newer Roman has accumulated 472 drawings from 208 unique artists with around 1,200 total votes on drawings. There are some conclusions made from a glance.

Anonymous drawings tended to receive the low scores. This is most likely due to the nature of the images made from anonymous users. This includes drawings with phallic imagery, drawings with hate speech, and drawings unrelated to the prompt. Figure 6 shows some examples.

Drawings from users who submitted multiple drawings tend to have a higher score than other users. Names such as “Anonymous-Frog”, “jefvel”, and “mrman225” appear frequently when sorting drawings by score.

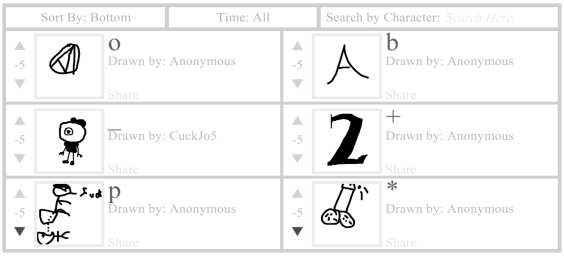

Figure 6: Downvoted posts

The scores of images from websites without a dislike button and websites with a dislike button do not have a noticeable difference. Websites where the images were sorted by top of the week had the highest rated creations, though this may be attributed to demographic differences.

Initially I did not do much to promote the project and let the popularity of the project naturally grow. People did share the project on their own with moderate success. A tweet is shown in figure 7.

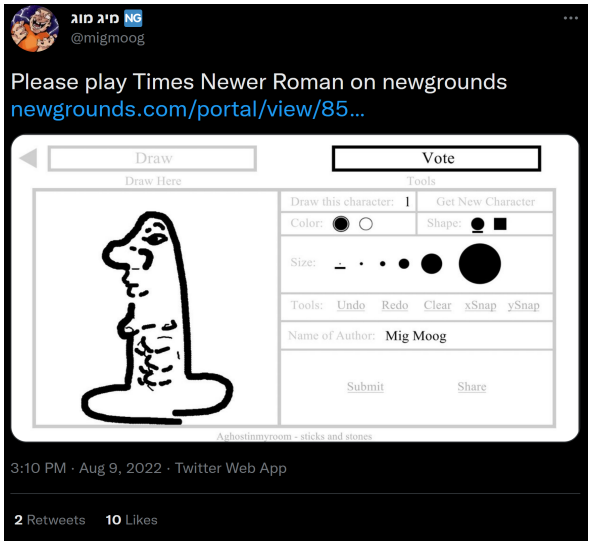

Figure 7: Twitter user @migmoog posting about Times Newer Roman

Time has to pass to have the project reach more people and acquire enough data to publicize findings. I am currently working on spreading the project to more groups of people and other websites.

5. Conclusion

Times Newer Roman has reached over a 1,000 individuals as of December 5th. In the

four months it ran, it educated people on the effect of social media design and algorithms on the content and people on the site. Platforms such as Facebook and Twitter design feeds, voting systems, and content moderation policies for a purpose. They want the user to spend as much time as possible. To achieve this, they often sacrifice content quality in order to put more controversial posts to attract attention. Times Newer Roman brings attention to this practice by satirizing the current social media landscape. It also shows the creative potential of a community, with some of the highest-rated drawings being incredibly well done.

6. Future Work

The project will continue to run for at least a year. While the current dataset of images is plentiful, with over 400 drawings, users are still drawing letters. The report on the content of the website will be released sometime in 2023. Times Newer Roman will also be posted on more websites to reach a wider audience. The software will also be updated with a survey to ask users about their experience with the social media parody.

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