

Final Project Documentation: The Human Algorithm

Technological Aspect

Interface

The responsive Instagram interface was made using HTML, styled with CSS. This interface is inspired by Instagram to provide a better experience to participants as they are roleplaying the human algorithms! A bit of javascript was used to change the scroll down menu for Trial 1 to Trial 2.

Data Collection Method

Even though the previous plan was to use node.js instead of Google Forms to collect participants' suggestions, I did not have enough time learning this new technology and a new hosting service that accommodates node.js. Thus Google Forms were the simple means of collecting data for both of those trials!

Implemented Features

Homepage

- ❖ Featuring 4 video documentations of Percy's Instagram usage on a given day for both trials.
- ❖ Show the exact date and time for login, feed interaction and logout.

About page

- ❖ Explaining the experiment, the content as well as the purpose of the project

Suggest Tab

- ❖ Containing clear instructions on how to participate
- ❖ Providing links to the Google Forms
- ❖ Providing concrete examples for participants to avoid confusion

Result Tab

Result Section

- ❖ Displaying the results for each trial and participants' info and results as the following:
 - Points
 - Ranking
 - Code Names
 - Like/Comment/Follow
- ❖ Providing links to the Google Forms

- ❖ Trial comparison between trial 1 and trial 2

Conclusions Section

- ❖ Displaying 7 inferences and conclusions on the overall experiment
- ❖ Containing 2 key points/reflections on changes to minimize the variables

Walls of Suggestions SEction

- ❖ Featuring the top 3 suggested posts of each trial, their score and their keywords.

Contact Tab

- ❖ Displaying info regarding Percy's social medias and other works

Features To Be Implemented

I am satisfied with all of the features implemented and the overall experiment. For future experiments, I have noted the following **key learnings** that will ensure more neutral and unbiased results.

Having an assistant to ensure anonymity

Although I did not want to verify how many responses that I have received for each trial before its deadline, I had to do so in order to make sure there were enough participants. This in turn allowed me to guess which submission corresponds to which participant by the time!

Having the AI suggestions be randomly chosen

The suggestions made by the IG algorithm (Bear 5252), were partly influenced by my girlfriend as she chose a post from the Explore Tab. This falsely includes a human factor to the representation of an AI algorithm. The AI might have been more accurate if she picked the first post on my Explore tab instead of choosing one of her liking. This is of course my fault (and not hers) as I did not take this error into consideration and instruct her properly.

Implementation of Concept

As the experiment was meant to learn more about the patterns

- ❖ **Hypotheses**

My first (secret) hypothesis is that the closer a participant is to me, the better they will score. The second hypothesis is that the AI Algorithm would outperform humans as they have been trained on my personal data and inputs on the platform for years now and therefore would provide far better results.

- ❖ **Result**

Both of these hypotheses were proven right! Human participants lost to the AI twice, 6.1 to 8 and 6.84 to 7.5

Results Comparison

Rank	Algo.ID	Pt.1	Pt.2	Diff	Pt.Ave
1	Horse 2347	10	9.5	-0.5	9.75
2	Parrot 3456	7.75	8.5	+1.25	8.125
3	Bear5252(IG)	8	7.5	-0.5	7.75
4 (TIE)	Viper	7.5	6.5	-1	7
4 (TIE)	Penguin 2245	7	7	0	7
5	Croconosaur 2000	6	7.75	+1.75	6.875
6	Rat 444	6.5	6	-0.5	6.25
7	Pingu 1999	4	5	+1	4.5
8	Ant 42	2	4.5	+2.5	3.25
N.A	Tiger 900	7.25	X	X	N.A
N.A	Wolf 555	3	X	X	N.A

Key Takeaways

❖ IG Algorithm > Humans

The humans lost to the IG algorithm on both trials, but their score seems to be slightly improving after 1 round of feedback (from 6.1 to 6.85). However it is also to be noted that two human participants were absent in the 2nd trial (Wolf555 and Tiger 900). These two participants scored (3 and 7.25) in trial 1.

❖ Recurring Topics

For both trials I was constantly suggested 4 main topics: UI/UX Web Design, Memes, Art, Animals. These 4 topics were indeed prevalent in my IG recordings of both Trial 1 and 2.

❖ Change Strategy when Losing

Ant42, Croconosaur2000, Rat444, Penguin2245, Viper employed another strategy by changing the topic of their suggested post in Trial 2! The average score of these participants increased from 5.8 to 6.35!

❖ GF Wins!

Although Horse2347 (my girlfriend) achieved an average score of 9.75, it is also to be noted that this participant also roleplayed the IG algorithm and thus had insight into my Explore tab. She claimed that my Explore Tab has little to no influence on her suggested posts by saying: "Bro, we've been dating for a year".

❖ Think Out of the Box to Get Top 3!

I realized that the top 3 winners in both trials either cater to my hidden interest that was not shown on the recordings or they catered to my current interests! For instance, my love for clowns was only captured by Horse2347! Perhaps these posts also received points for most originality.

❖ Acquaintance (ant42) - Most Improved Award!

It is also to be noted that the most drastic score change is +2.5 by Ant42, from 2 to 4.5. Ant42 ranking remains the same for both trials nevertheless.

❖ The Closer, The More Competitive

I saw a pattern of participants who are closer to me would be more likely to show their competitiveness to me. Perhaps it was their way of trying to impress me.

Screenshots & Annotations

Fig 1. Homepage & Trial 1

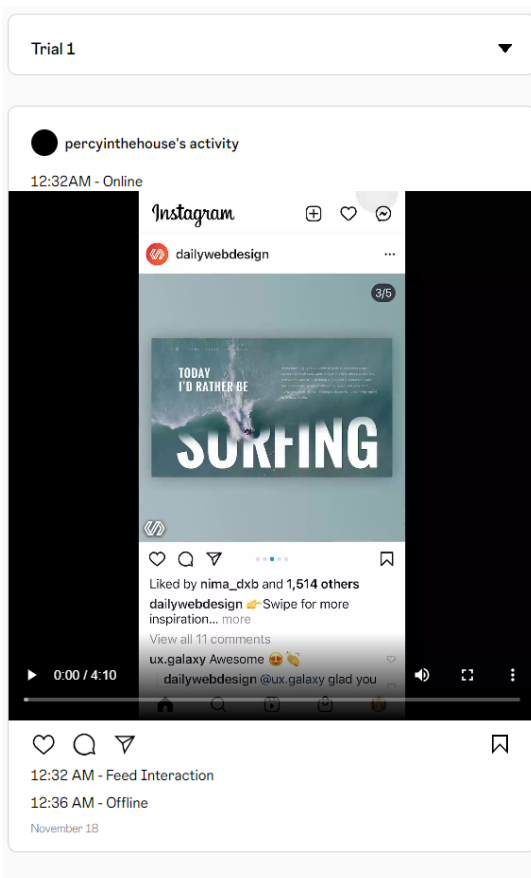


Fig 2. About page

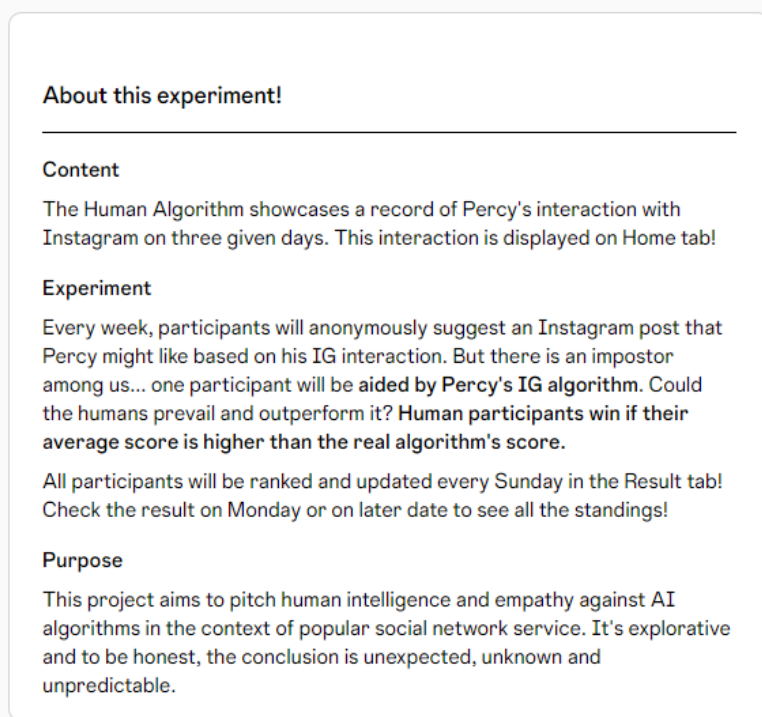


Fig 3. Suggest Page

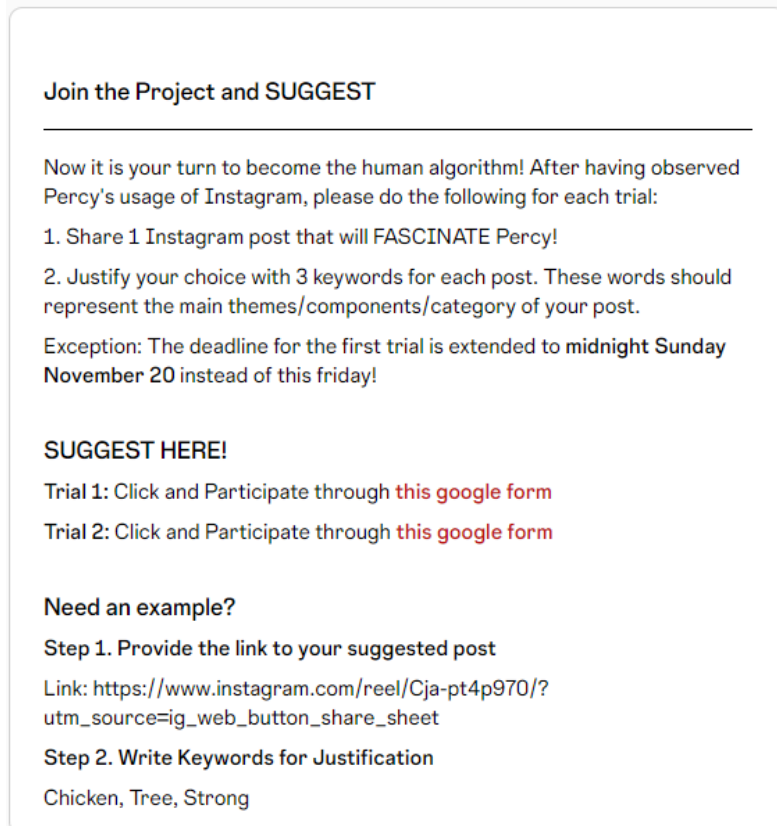


Fig 4. Result Page - Key Takeaways & Conclusions from the Results

Conclusions

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Fig. 5 Google Forms for Participants

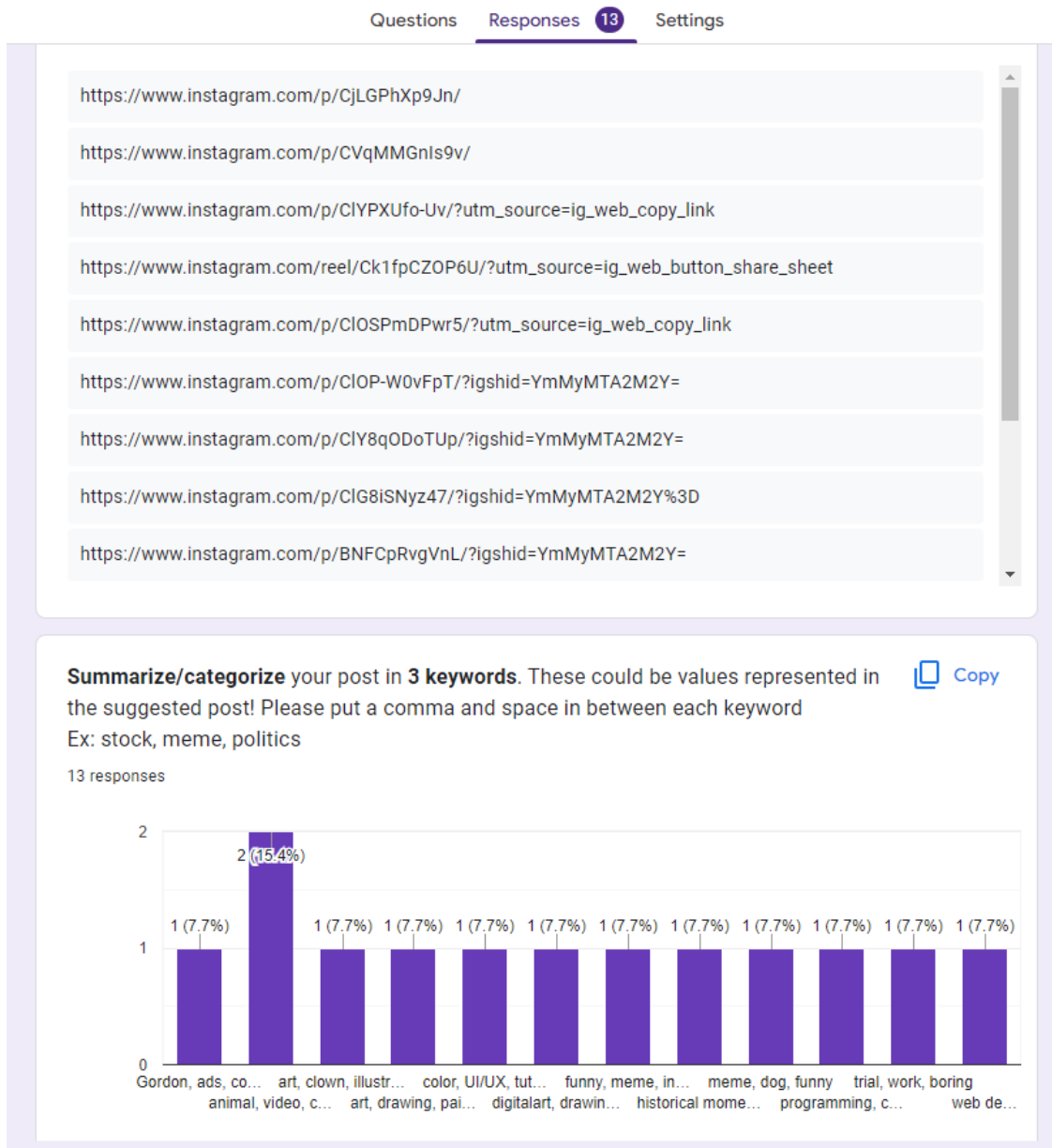


Fig 6. Percy's Explore Tab on Instagram (Bear 5252's resources)

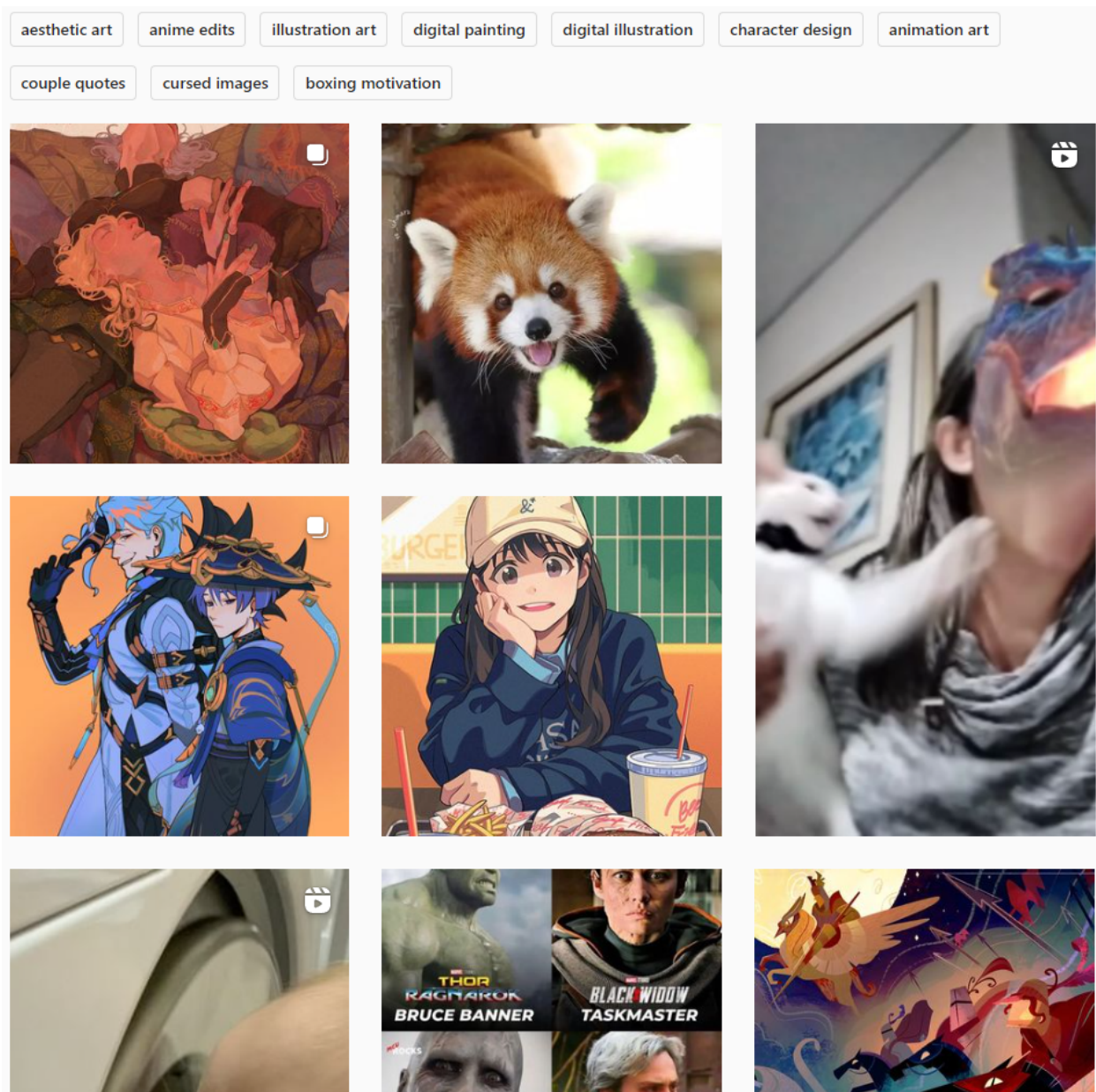


Fig 7. Wall of Suggestions under Home tab

Wall of Suggestions

This wall will be updated once the experiment is completed. Here lays all the suggestions and their respective score and author.

Trial 1

IG Algorith: **8/10**

TOP 3 POSTS

1. **Horse2347**, 10/10, art, clown, illustration



[View more on Instagram](#)

Inspirations

Fig 8. Instagram Interface

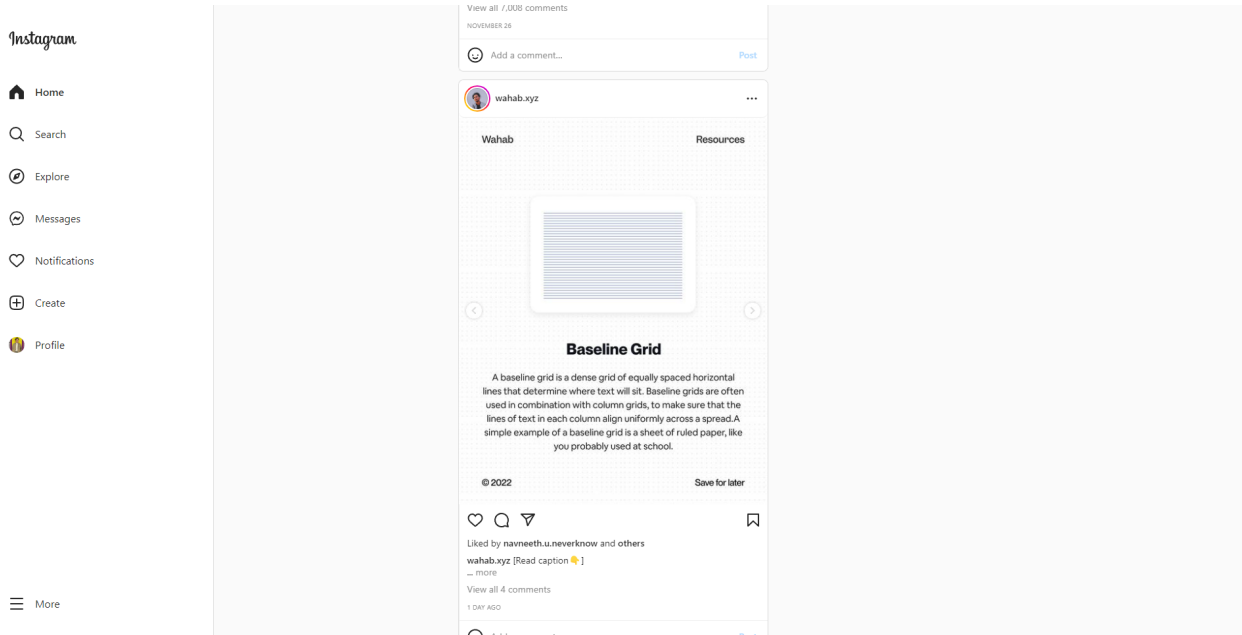
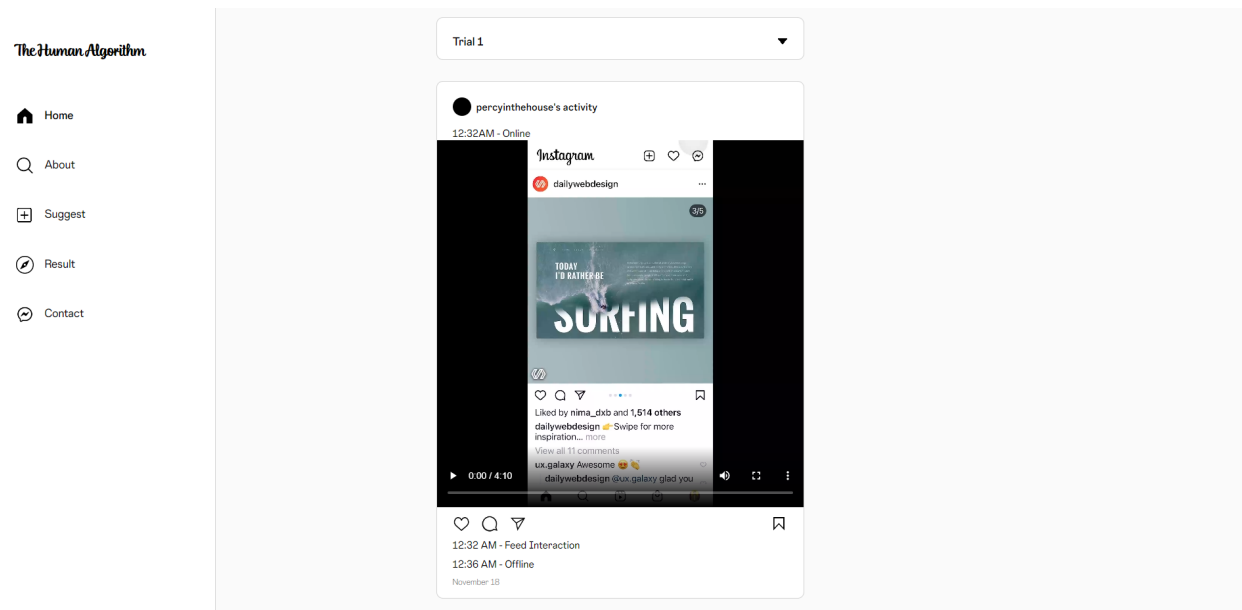


Fig 9. The Human Algorithm Interface



Credits

Fonts

SF-Fro Font:

<https://github.com/sahibjotsaggu/San-Francisco-Pro-Fonts>

Instagram Title Font:

<https://freefontsfamily.com/instagram-font-free-download/>