



# Cleanity

The Social Harmony

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# Communication inside Community

Internet community showed us its strength by being the information network when the proclamation of martial law was announced [1].

**국민 73.6% 계엄령 선포 SNS 통해 처음 알아  
빠른 계엄 해제에 SNS 역할 컸다 96% '그렇다'**

73.6% of the people first learned through social media that martial law was declared.

96% answered that SNS played a large role in the rapid end of martial law.

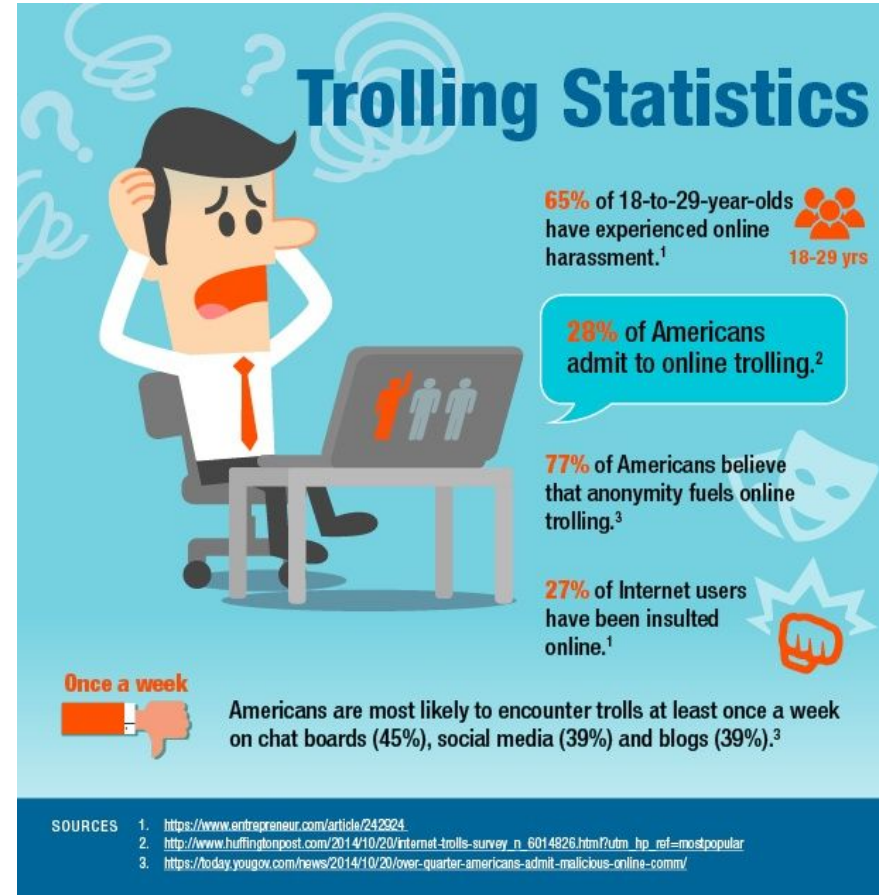
This quick delivery of information and presentation of opinions is the reason for the existence of the community, but problems sometimes arise.

[1] <https://www.hankyung.com/article/202412068632g>

# Trolls, Everywhere

Trolling is a major problem that occurs online that cause several problems in maintaining proper communication.

[1]<https://www.marketwatch.com/story/online-trolls-are-ruining-social-media-marketing-2016-07-13>



# Problems on Existing Solutions with Current ChatBots

1. Detecting banned words → Scunthorpe problem [1]
2. Complex rules depending on different community ex) community that handles [ KBO vs Hanhwa Eagles]
3. Trolling is hard to block fundamentally

Username [\(help me choose\)](#)

ScunthorpeM181

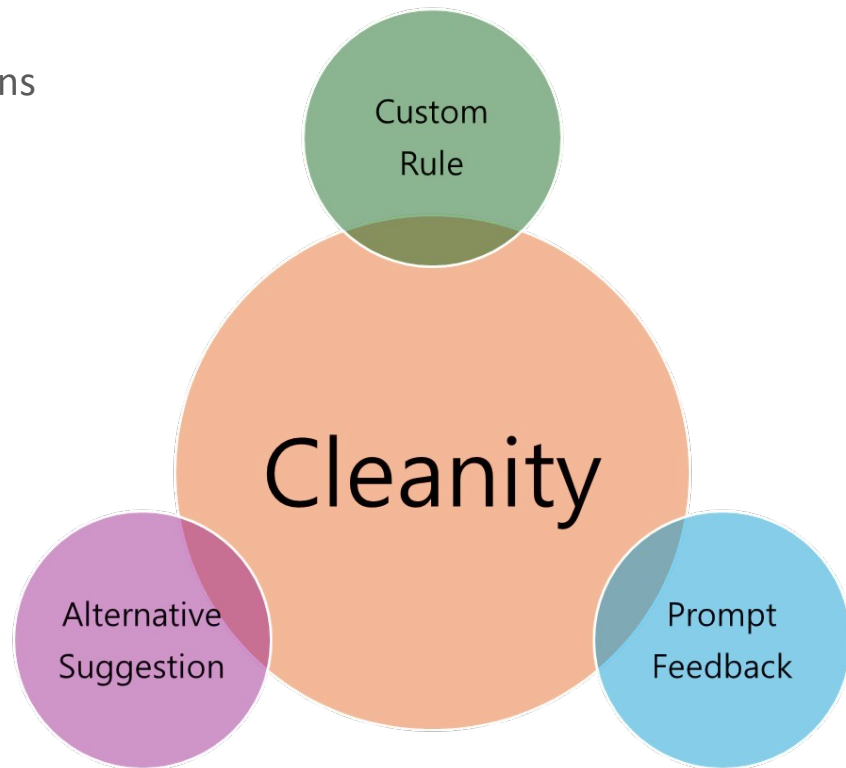
The user name "ScunthorpeM181" **has been blacklisted** from creation. Wikipedia **username policy** does not allow names that are misleading, promotional, offensive or disruptive. Please select another username that

→ Due to these complexities in managing the community, widely used methods were to manually scan the writings one by one and delete/block them.

[1] [https://en.wikipedia.org/wiki/Scunthorpe\\_problem#/media/File:Scunthorpe\\_problem\\_\(cropped\).png](https://en.wikipedia.org/wiki/Scunthorpe_problem#/media/File:Scunthorpe_problem_(cropped).png)


# Suggestion

- **Custom Rule**
  - Adjustable rules to diverse and specific situations
- **Alternative Suggestion**
  - Replace contents to recommended ver.
- **Prompt Feedback**
  - Flexible regulation and suggestion



# Custom Rules

Moderator can set the rule by entering the content of the rule and an example of breaking the rule, according to the community they belong.

Rule 1  

Example

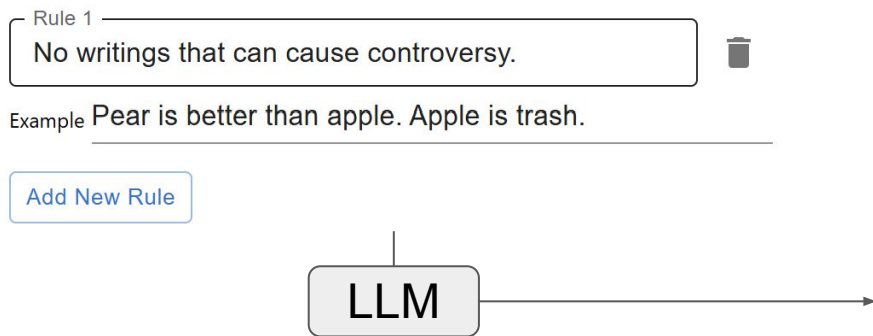
Add New Rule



The rule and example are included as shots in the LLM together to help the rule work as intended by the modulator.

# Custom Rules

Moderator can set the rule by entering the content of the rule and an example of breaking the rule, according to the community they belong.



## Playground

Write any posts or comments you want to test and check your custom rule can detect it!

Claude is way better than GPT. I can't understand who uses GPT instead of Claude.



controversial comparison between AI models



There's also a Playground where you can make sure that the rules you set are set up well.

# Custom Rules

However, after testing several times, we find out...

- annoying to make/update rules every time
- rules can be set too naively sometimes

## Rules

Please write your own rules for your community! You can describe your rule with natural language and also add example for violation case

@@: So what we shouldn't do?

 Refine Rule

Rule 1

No writing that looks bad to others



Example Nobody likes you.

Add New Rule






# Custom Rules


So we made extra features!


## 1. Rule Preset

You can set the rules and examples by one click!

### Presets

 Vegan cooking community

 Movie chat room

 Game chat room

Rule 1

Do not post photos/recipes of dishes containing meat



Example I grilled a beef steak for dinner tonight and it was so delicious

Rule 2

Do not disparage the vegan lifestyle



Example I think vegan food is not good for the environment at all

Rule 3

Respect the various forms of veganism.



Example You're vegan but you eat fish and eggs? I don't understand

Add New Rule

# Custom Rules

So we made extra features!

## 2. Rule Refine

Rules and examples are included as shots in the LLM, and LLM refines it to better rule/example that's more suitable for discrimination.

### Rules

Please write your own rules for your community! You can describe your rule with natural language and also add example for violation case

Rule 1  
No writing that looks bad to others

Example Nobody likes you.

Add New Rule

Refine Rule

LLM

### Rules

Please write your own rules for your community! You can describe your rule with natural language and also add example for violation case

Rule 1  
Do not post content that is disrespectful, insulting, or

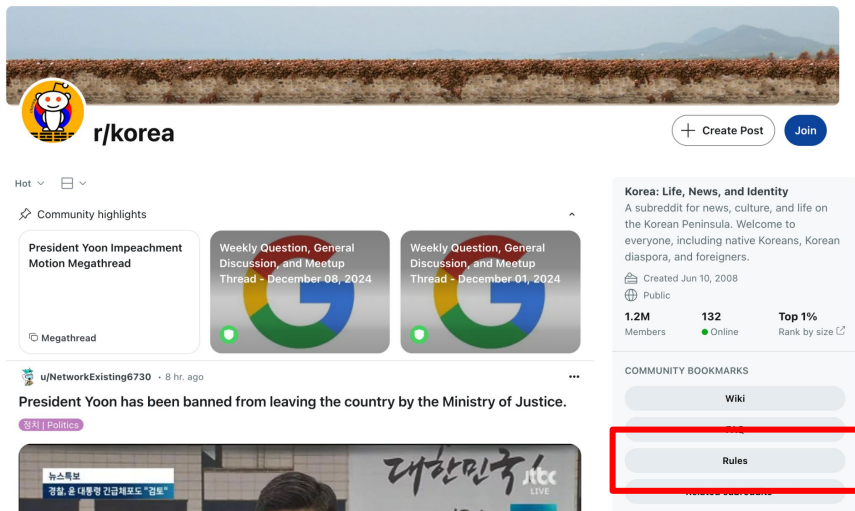
Example You're such a loser, everyone in this community hates y

Add New Rule

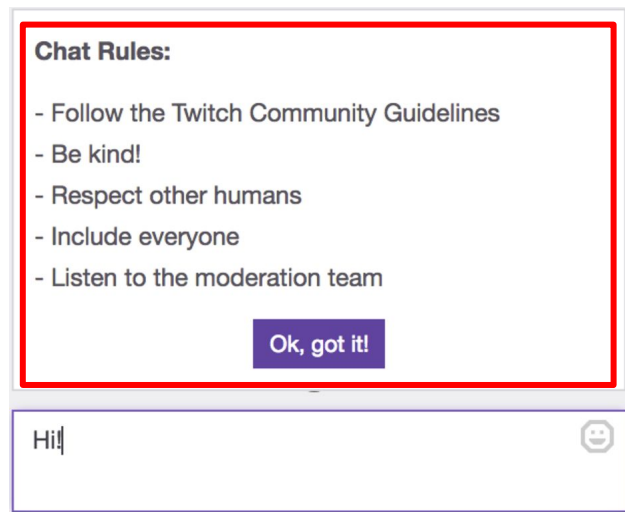
Refine Rule

# Rule Awareness of Users

Even there are rules for communities, but usually, **users are not very aware of the rules**



Each reddit community can make their own community **rules**



In twitch chat, **chat rules box** is popped up when user click the chat-box first time

# Why Rule Awareness Important?

When not aware of rules;

- Users who are unintentionally abusing frequently come out
  - **Workload of Moderators increase!**
- Mods - Users or User - User fight frequently
- Some users might not agree with the rules that they didn't know!



Make users aware of rules;

- Unintentional abusers decrease
- Users can **collaboratively improve and build the rules together**

=> Awareness can help the community to align well between users and improve the rules

# How to make users aware of rules

1) Force users to read the rules

=> ***Almost impossible!***

Lots of communities are trying to make users read the rules but users just click the 'I checked' button and never read.



Reading the  
rules of a  
sub before  
posting

Just posting  
and waiting to  
see if it gets  
taken down or  
not.

# How to make users aware of rules

## 1) Force users to read the rules

=> ***Almost impossible!***

Lots of communities are trying to make users read the rules but users just click the 'check' button and never read.

## 2) Naturally give feedback based on the rules when users do some action

Let users do what they want, and **give proper intervention if they break the rules**

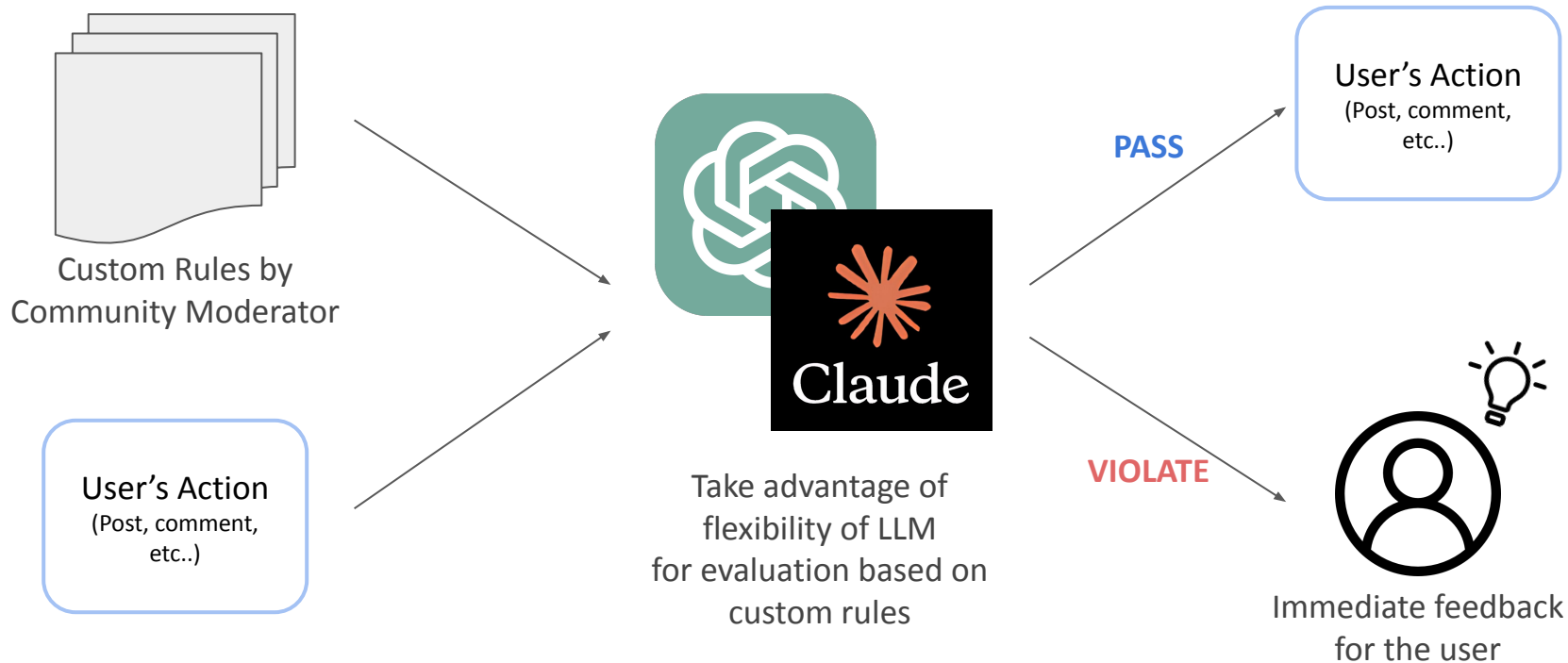


Reading the  
rules of a  
sub before  
posting

Just posting  
and waiting to  
see if it gets  
taken down or  
not.

Interruption in this phase

# Evaluate and Feedback Pipeline



# Our System View


Our demo targets providing *immediate / convenient / informative* feedback

- Immediate: Respond quickly before inappropriate content affects others
- Convenient: **Decrease the load of moderators** who should surveillance community all day
- Informative: Feedback can **make users aware of the rules well**


## Rules

Please write your own rules for your community! You can describe your rule with natural language and also add example for violation case

[✎ Refine Rule](#)

Rule 1  
movie, you must mention a specific regrettable part. 

Example Captain Marvel, which just came out, was total garbage

Rule 2  
No spoilers for important parts of the movie 

Example My favorite scene is when Iron Man takes Thanos's glo

Rule 3  
Respect the other person's taste 

Example You like that movie? You have no taste for movies.

[Add New Rule](#)

## Playground

Write any posts or comments you want to test and check your custom rule can detect it!

The critic is totally trash!

## Playground

Write any posts or comments you want to test and check your custom rule can detect it!

The critic is totally trash!

disrespectful expression towards others' opinions

**Immediate feedback  
after LLM evaluation**



## So Far...

We provided immediate/convenient/informative feedback to our users.

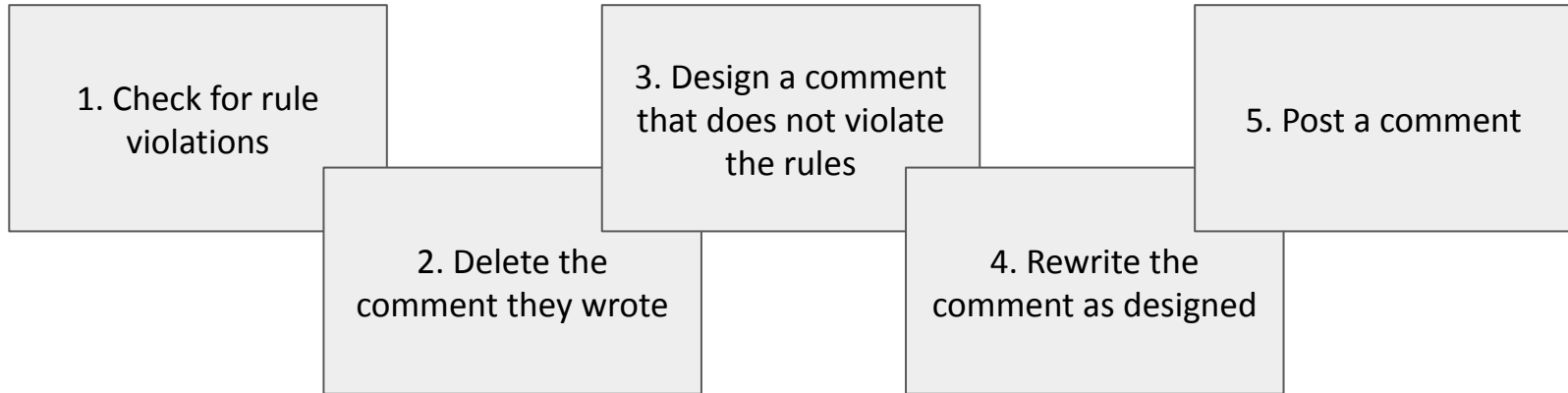
- But is this enough?
- Will users really behave appropriately just by receiving feedback?

We need **Additional features** to help users to leave proper comments

- **Censor/Limit** users to prevent inappropriate comments (X)
- **Encourage** users to write proper comments (O)

But, how to encourage them?

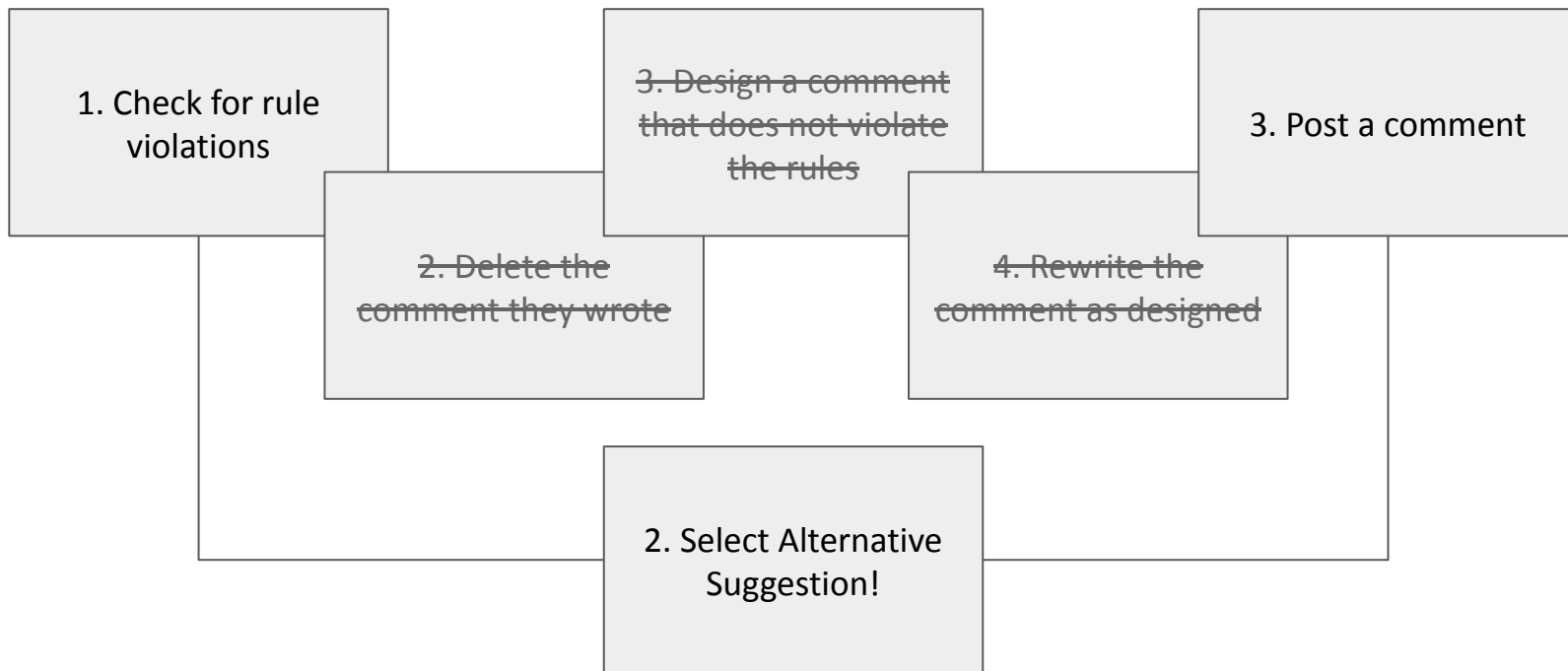
# Process of Editing Original Comment



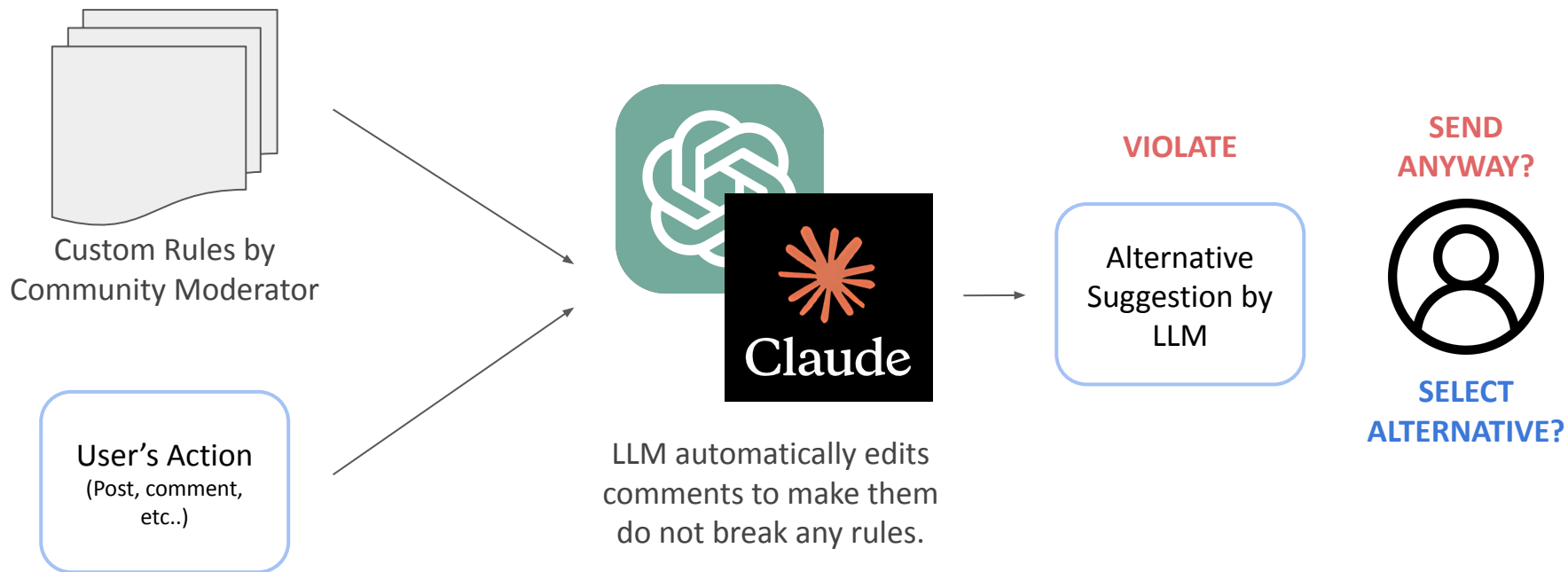
We found that the process of users editing their comments correctly was more cumbersome than expected.

- Have to delete what they have wrote.
- Have to write something different from their natural original thoughts.
- Have to rewrite everything.

# What If We Make it Easier?



# Alternative Suggestion Process



# Alternative Suggestion Example



Vegan cooking community

Rule 3

Respect the various forms of veganism.



Example You're vegan but you eat fish and eggs? I don't underst

Any egg sandwich recipe for fake vegans who eat fish or eggs?

Send

Any egg sandwich recipe for fake vegans who eat fish or eggs?

Warning: shows judgment against certain plant-based diet variations (pescatarians)

Alternative: Does anyone have a good egg sandwich recipe to share?

Send Anyway

Select Alternative

Cancel

# Alternative Suggestion Example

Does anyone have a good egg sandwich recipe to share?

Since we're focusing on plant-based options, I can suggest some delicious egg alternatives for sandwiches! Have you tried tofu scramble sandwiches? They're really satisfying. Would you be interested in learning about some plant-based sandwich recipes?

# Conclusion

We developed Cleanity to regulate inappropriate commenting behavior that varies across communities.

- Allow administrators to freely set custom rules
  - Assisted by Rule preset, Rule refine
- Feedback
  - Immediate, Convenient, Informative
- Suggest Alternative
  - Simplify the process of writing proper comments

With our system, we expect users to...

- To be better at learning the rules.
- To be more aware of inappropriate behavior.
- To be more likely to correct their behavior.