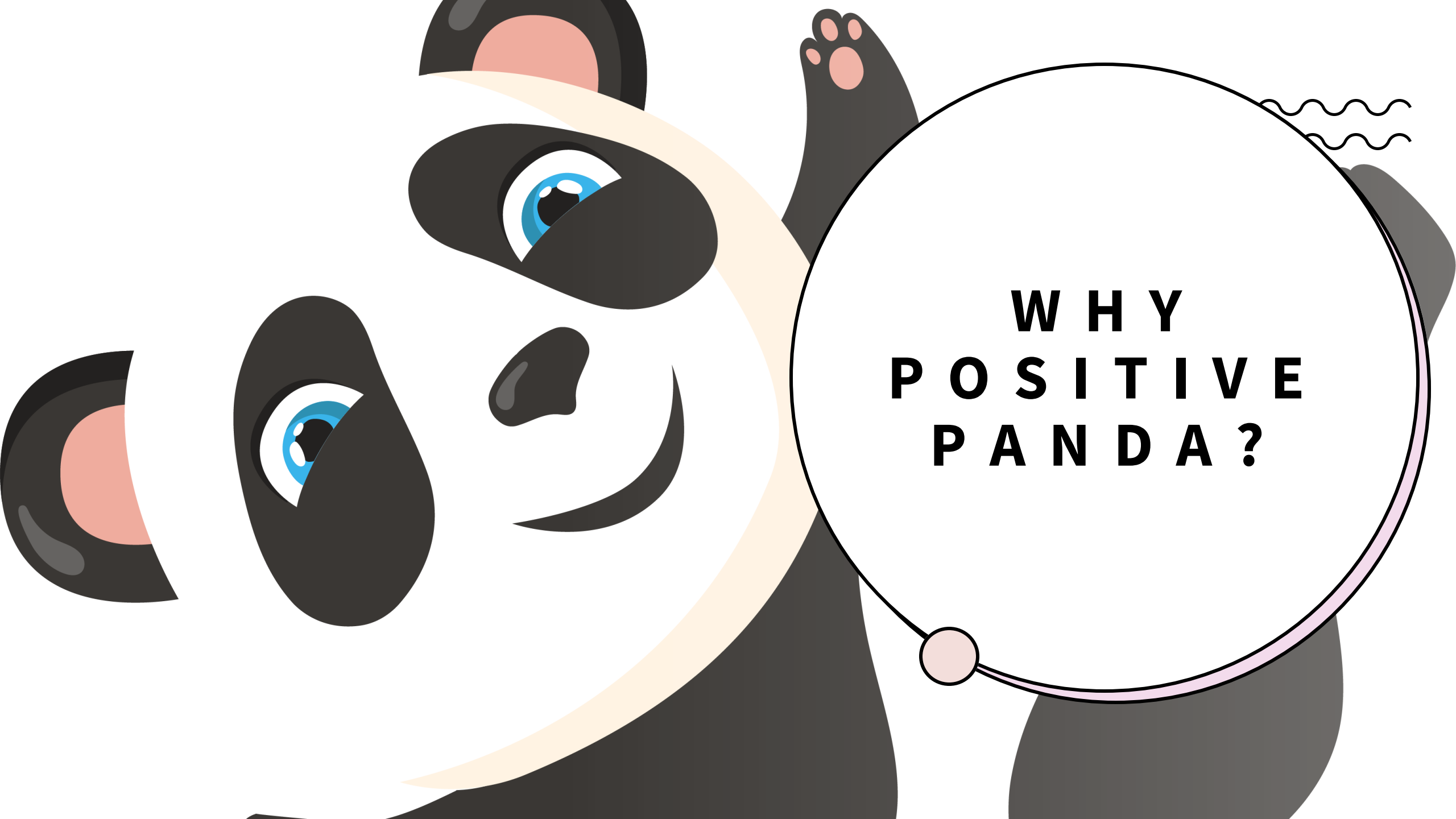




POSITIVE PANDA

A BROWSER EXTENSION
TO HELP YOU REMOVE
NEGATIVITY FROM YOUR
DAILY NEWS AND INDULGE
IN THE POSITIVITY OF THE
WORLD



**W H Y
P O S I T I V E
P A N D A ?**



- Our AI powered solution
“*Positive Panda*” can tell if the news articles on Google News are positive or negative
- It also finds the salient keywords from the news article to display to the users.



- Positive news served daily to your doorstep.
- Users can click our extension icon on the top to view the top positive news from around the world.
- This selection of news is updated daily.
- Users can choose between categories



All the Control with All the Ease



We provide you the ability to proceed with care.

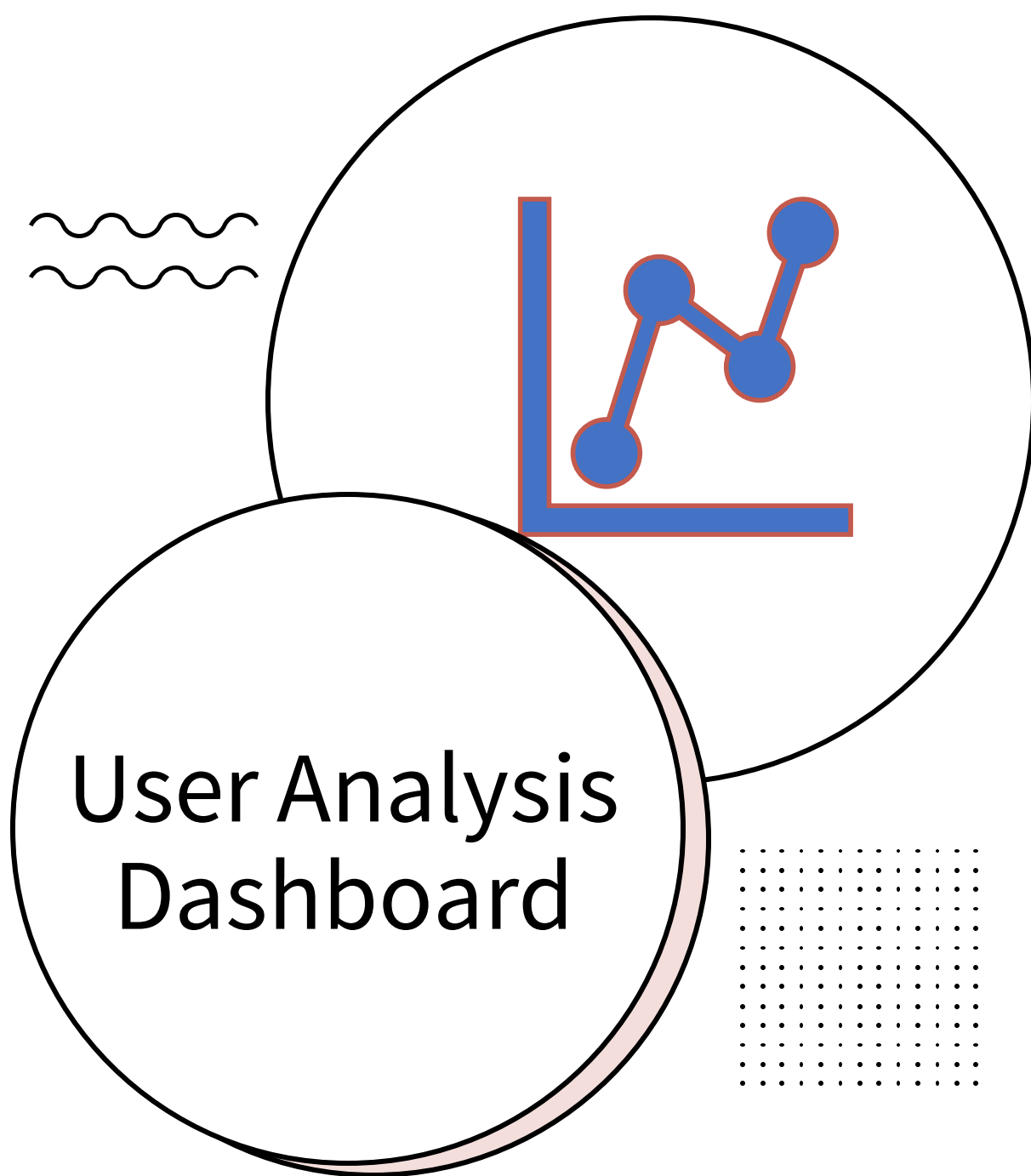


The users are not only provided with the notable keywords but also a rating so that they may assess whether they want to view the news article.



We ensure user privacy is maintained by not sending user data over a server

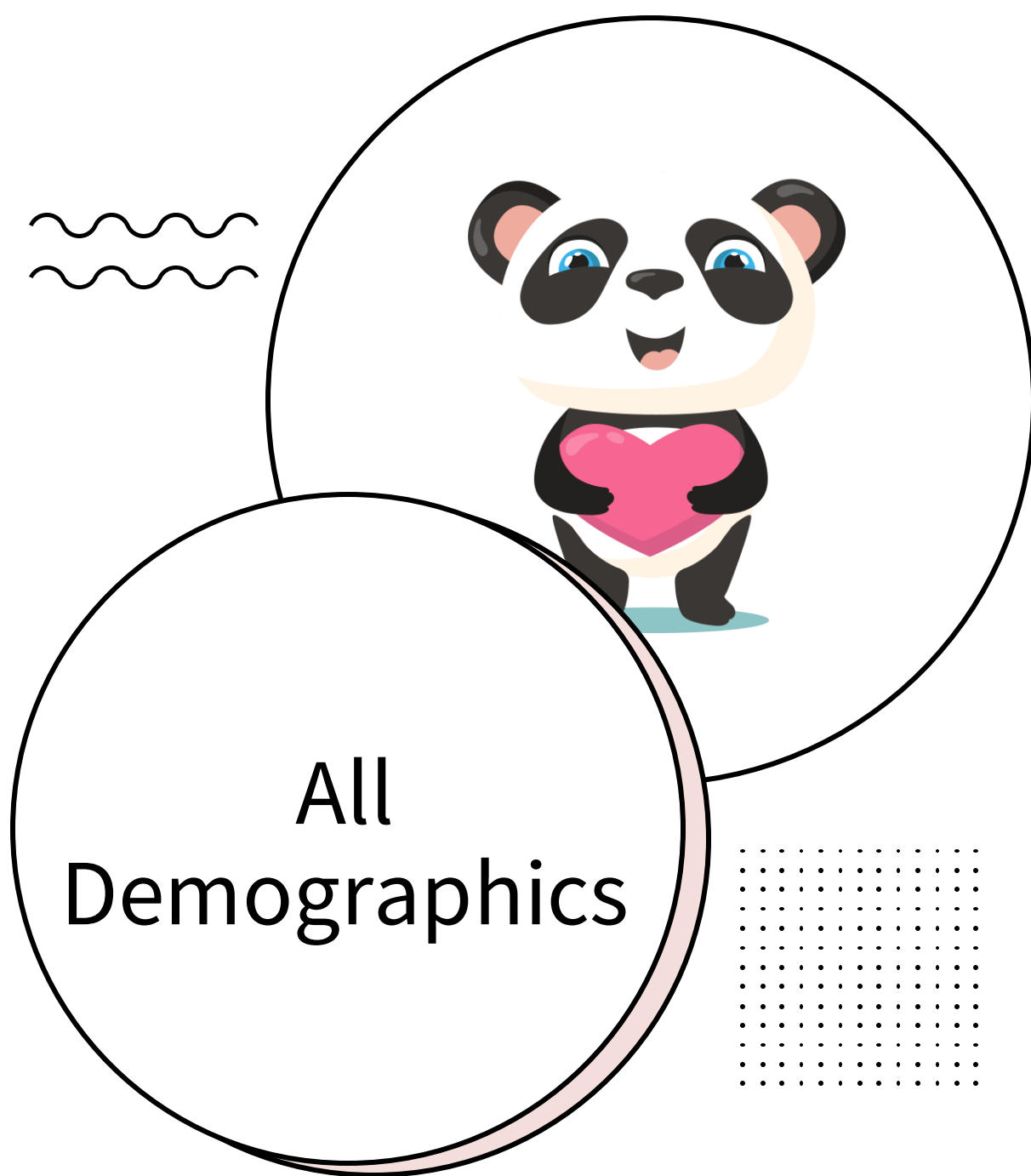




- The user can visit the analysis dashboard in order to get a detailed and personalized analysis of the type of news that they have been consuming.
- The dashboard shows multiple graphs in order to make it easier for the user to understand and evaluate his consumption

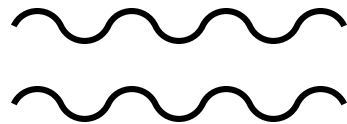
**TARGET
AUDIENCE**

5 6 7 8 9 10 9 8 7



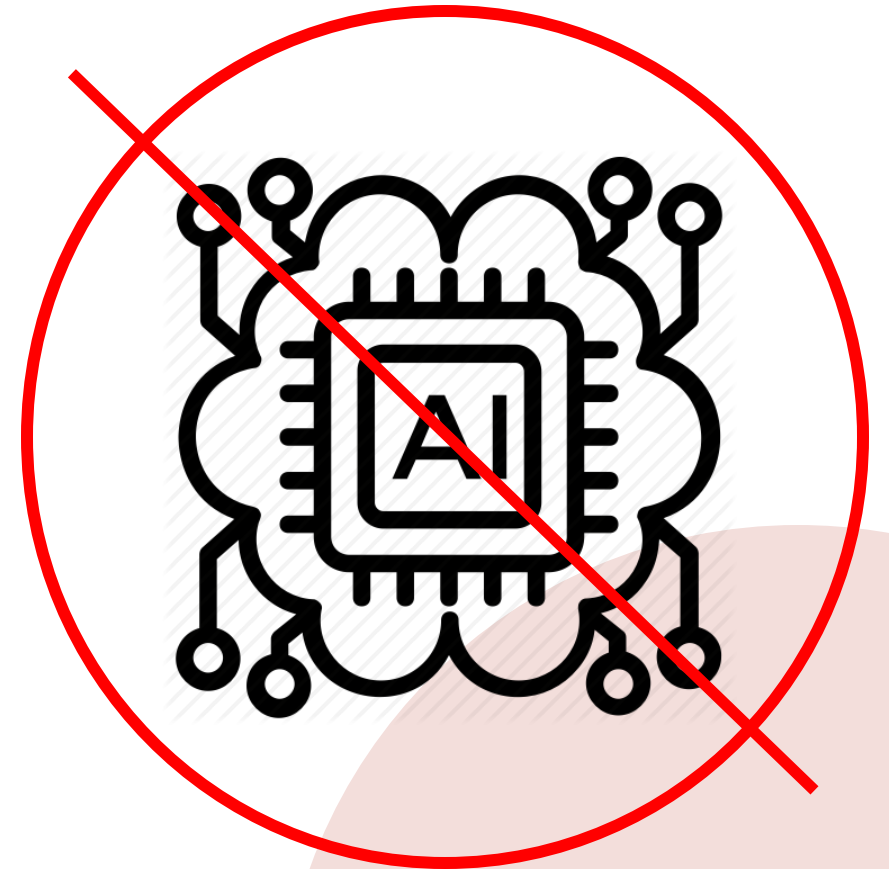
- We aim to target people of all demographics, as our tool allows people to enjoy a seamless and positive experience while browsing the news
- Our product aims to spread love by limiting violent and negative content while also suggesting the positive ones !

MARKET ANALYSIS



1. Soothe

- An extension to blur out articles that have homophobic or trans-phobic terms
- Only works if the article specifically has specific terms that are considered trans-phobic or homophobic
- Does not flag articles if they are violent or negative but do not explicitly contain such words. Our solution can flag these articles as well since it is AI driven



2. Social Street Smart

- More focus on detection of fake news
- Our solution is unique as it aims to completely filter out violent and negative news instead of filtering fake news

FAKE NEWS

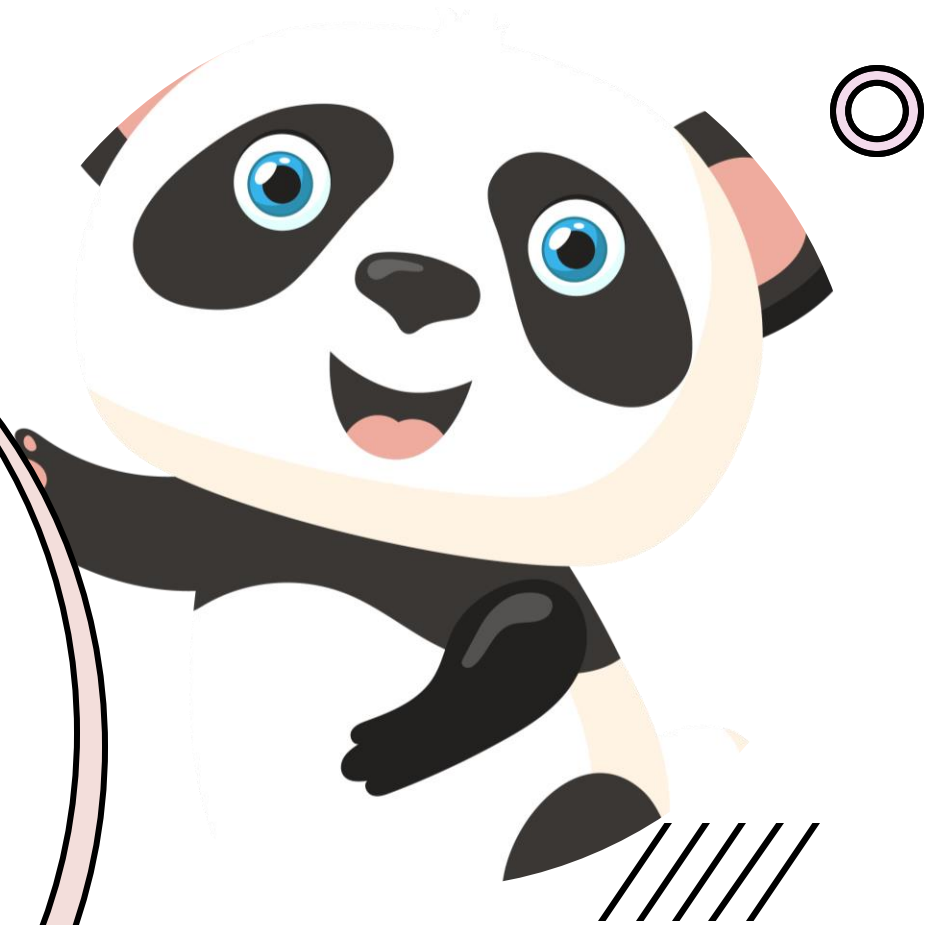


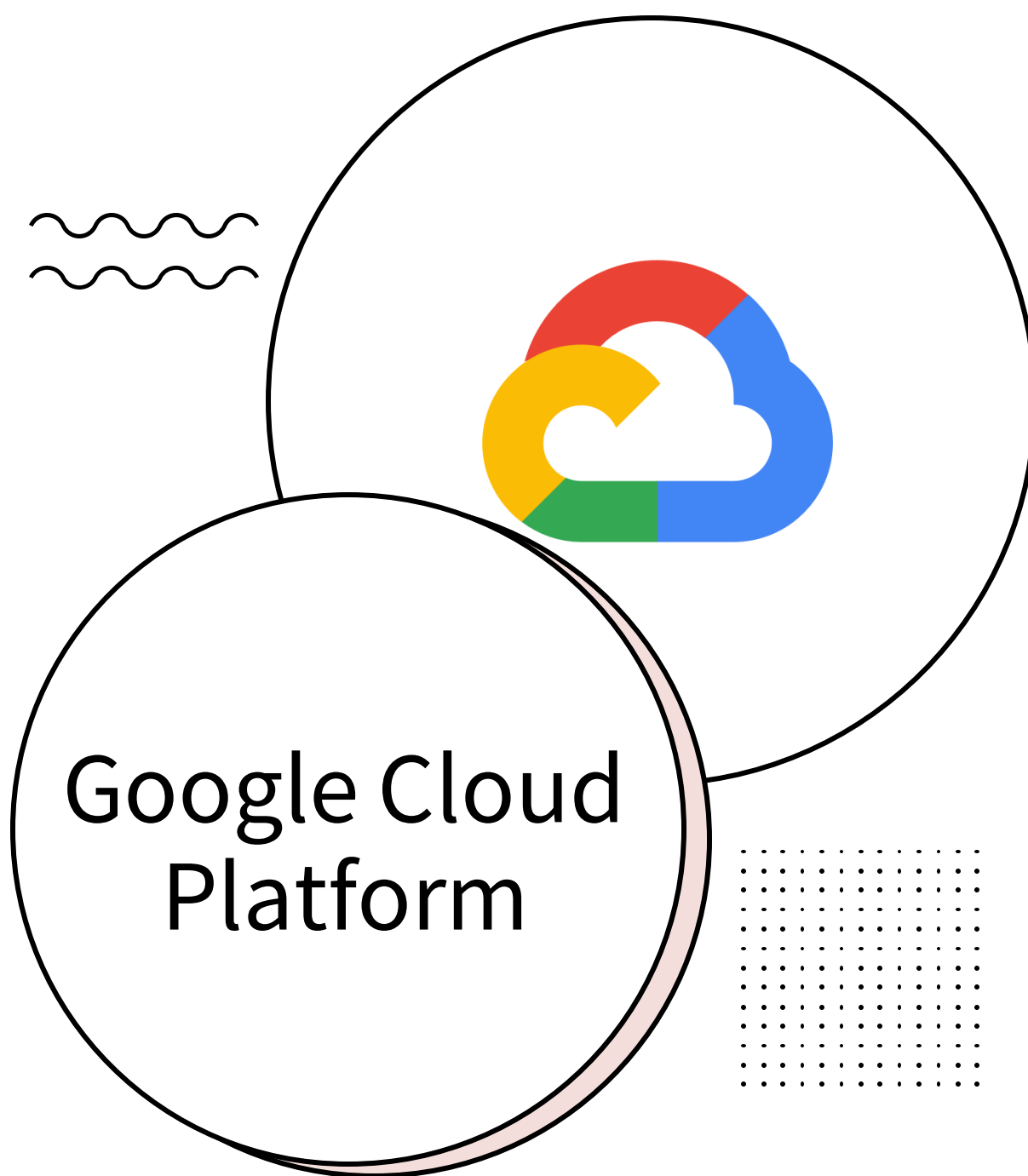


TECHNICAL SLIDES

FROM HERE, WE WILL GO UNDER THE
HOOD TO DESCRIBE THE TECHNICAL
ASPECTS OF OUR SOLUTION

**W H Y G C P
A N D
M O N G O D B ?**





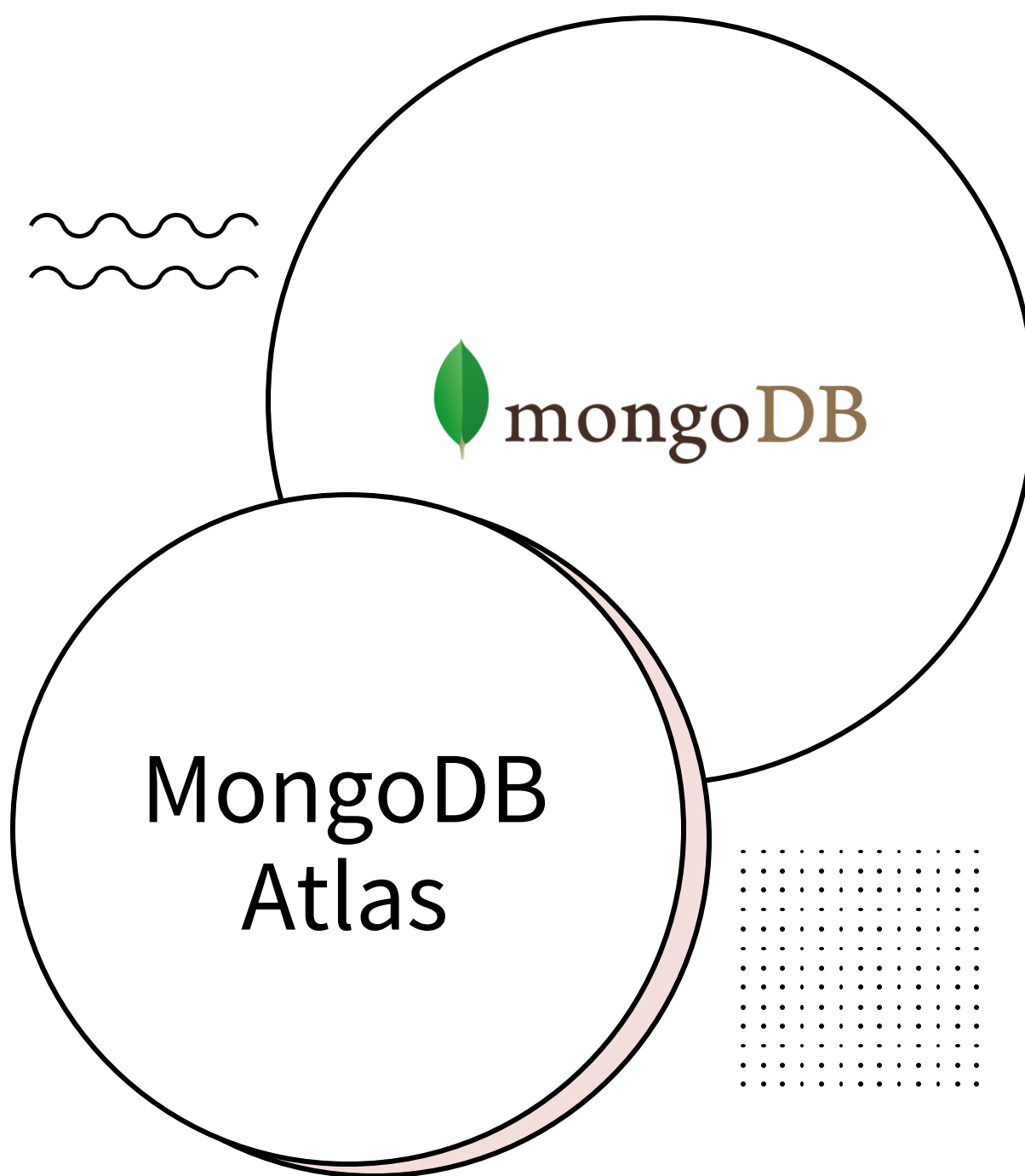
Scale

Using GCP's Kubernetes Engine, GKE we have the ability to independently and automatically scale each module with popularity and demand.



Security

Using GCP's Container Registry, GCR we don't have to worry about image hosting and security.

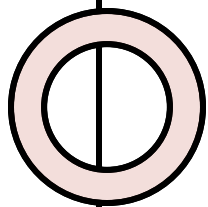


MongoDB scales with our users and popularity because MongoDB's horizontal, scale-out architecture can support huge volumes of both data and traffic.

MongoDB Atlas makes it very easy to have an instance running in all major Cloud Providers, including GCP. It removes the headache of setting up and managing MongoDB in a secure way.



PIPELINE



Flow of the Application



User visits Google News to get their news



The extension sends the news articles to the backend server.



The server compares for pre-computed results for the news article in the MongoDB database. If found, the server returns the results, else the server queues the news article on RabbitMQ and returns a <UNK> result.



The queued articles are sent to the Sentiment Analysis model.



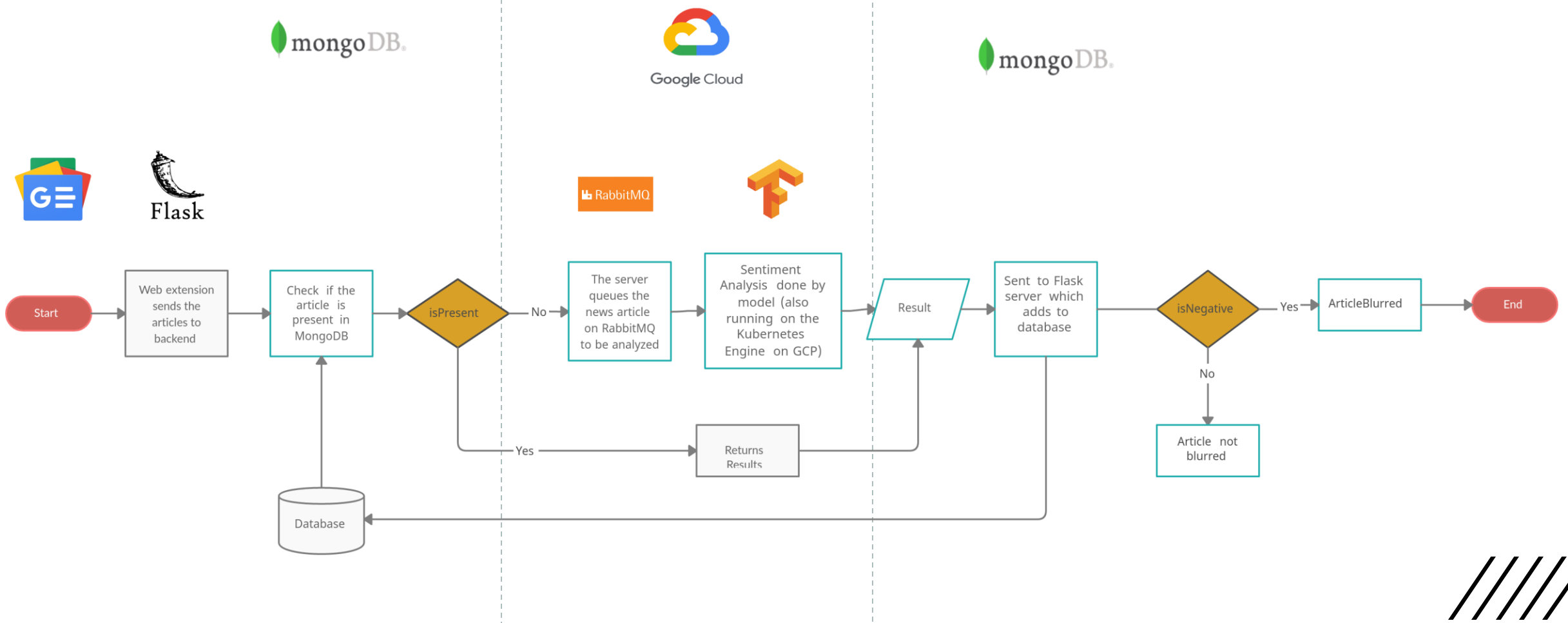
Model's output is added to MongoDB

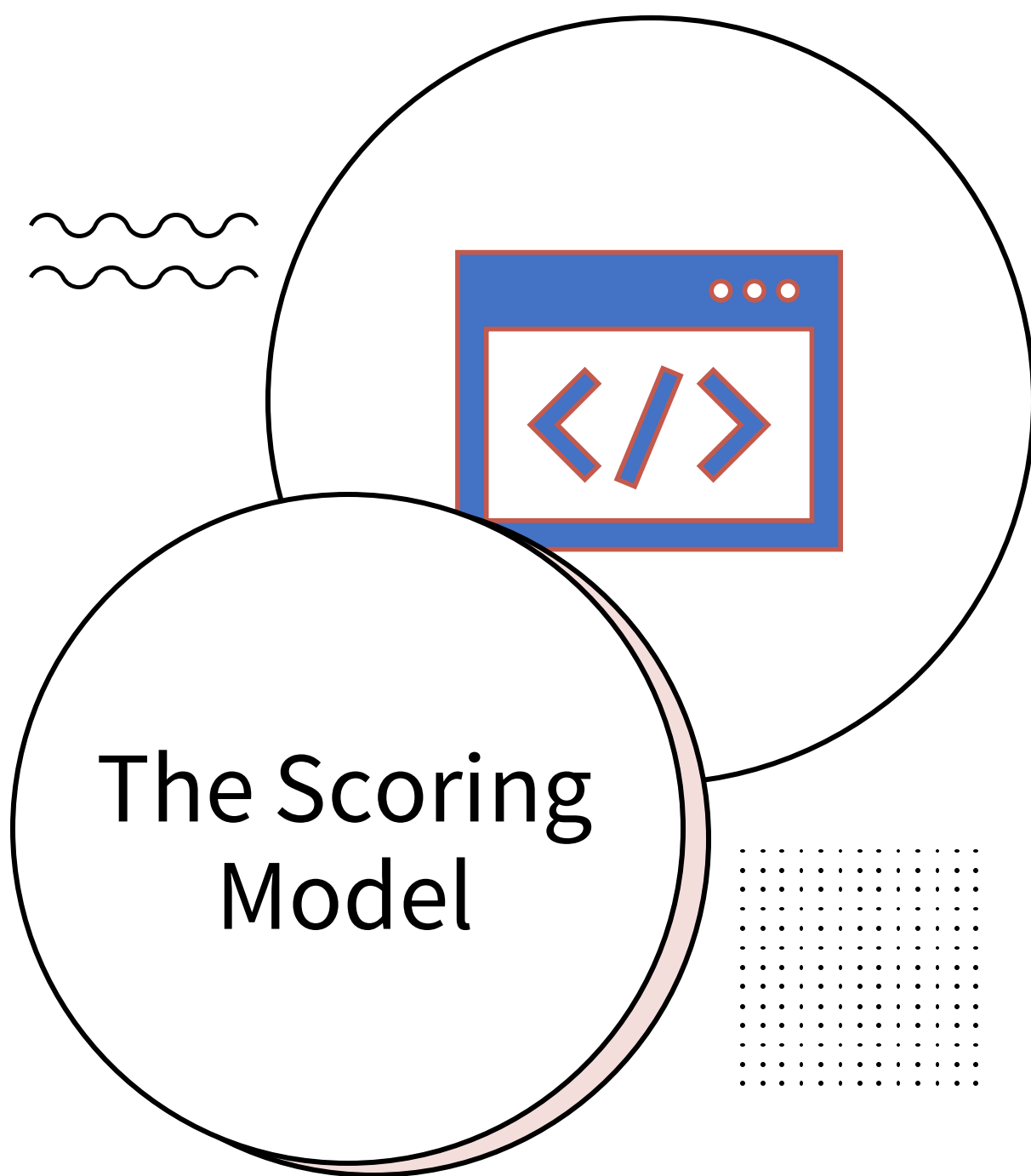


Once the user extension receives the results, it blurs the relevant news articles. If the response includes <UNK>, it blurs and displays a <UNK> tag to the user. It then sends another request to the server after a set interval to update the <UNK> articles.



Flowchart of the Process





The model works by building upon the following libraries:

1. Newspaper3k: This is used for scraping and parsing the content of the articles.
2. Transformers: The sentiment analysis computation is done by fine tuning a BERT based transformer. The pretrained BERT model is finetuned for sentiment analysis by training on a dataset of 5000+ sentences annotated as positive or negative.

**HAPPY
SURFING!**

