



Introducing

Smart Reading



Powered by



Chrome Extension



OpenAI's GPT-4

www.smartreadingai.xyz

Progress

Since submitting our deck last month, we've achieved...

2x

doubled

WAITLIST
SIGN-UPS



BUILT
BRAND-NEW
MVP

The Problem

Analyzing an article is an incredibly manual process.

It can take from minutes to hours to find the right information.

For example:



Finding
definitions



Sourcing
statistics



Creating a
summary



Fact-checking
articles



Talking
through ideas

> 3 mins

> 5 mins

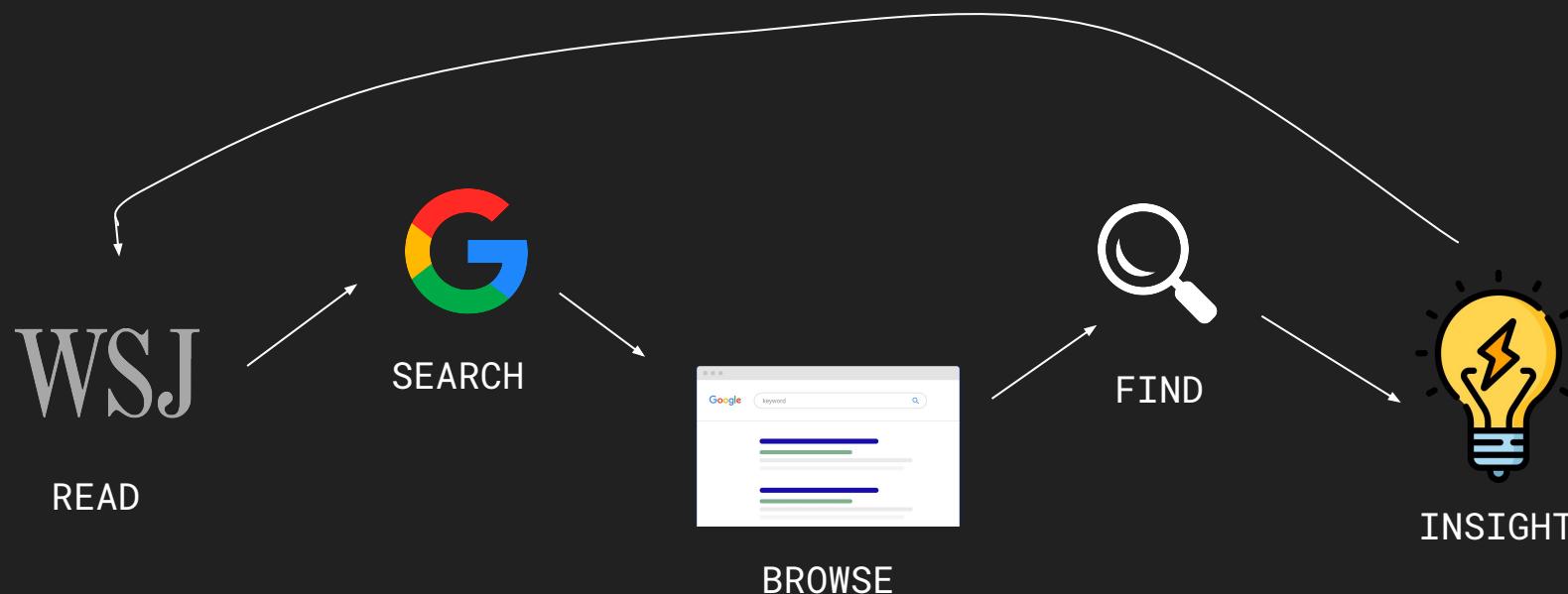
> 10 mins

> 30 mins

> 45 mins

The Problem

In fact, it takes 5+ steps to even search something up.



The Solution

Our AI-powered tool allows readers to find the information they need with the click of a button.

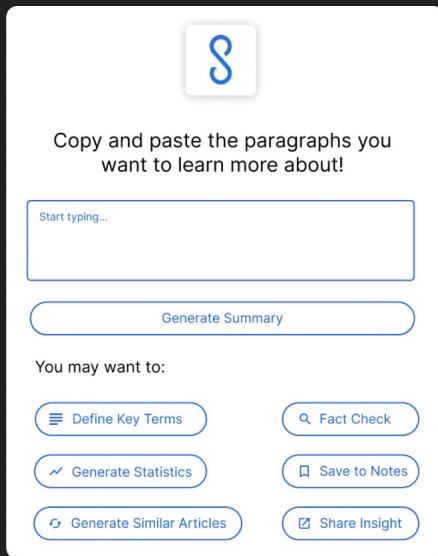


[0 steps needed]

What we have so far

Smart Reader:

*Pop-up tool
using Chrome
Extension*



Article:

TechCrunch

Google is rushing to take part in the sudden fervor for conversat

ChatGPT. Bard, the company's new AI experiment, aims to "com intelligence, and creativity of our large language models." Not sh

The model, or service, or AI chatbot, however you wish to descr

He pointedly notes Google's recentering around AI some years b

Transformer) was created by the company's researchers in 2017

"It's a really exciting time to be working on these technologies as that truly help people," Pichai writes. It's hard not to wonder why decisively by OpenAI, the latter of which is now synonymous with

The short explanation is that tech moves fast and big companies and tried to figure out how to fit AI into its existing business str let people figure out their own applications.

Bard shows Google taking a page from that playbook, releasing model uses Google's own LaMDA (Language Model for Dialogue draw on information from the web. How exactly it does that is no more or less current.

Google's AI revenue is projected to reach \$203B by 2025, reflecting a CAGR rate of 19% from 2020.

WSJ Jan 6, 2023  

Which Google products are driving AI revenue?

 Google Search brings in \$98B in annual revenue, followed by Google Cloud, Maps, Workspace and Assistant.

Ask another question

LaMDA is a type of large learning model developed by Google, trained on text data to produce human-like responses.

G Feb 8, 2023 Define Key Terms 

Ask a question

red

Smart Reader:



Article:

Google is rushing to take part in the sudden fervor for conversational AI, driven by ChatGPT. Bard, the company's new AI experiment, aims to "combine the breadth of our intelligence, and creativity of our large language models." Not short on ambition.

The model, or service, or AI chatbot, however you wish to describe it, was announced in December. He pointedly notes Google's recentering around AI some years back, as we saw with BERT (Bidirectional Encoder Representations from Transformers) which (Transformer) was created by the company's researchers [in 2017](#).

"It's a really exciting time to be working on these technologies as we translate them into tools that truly help people," Pichai writes. It's hard not to wonder while reading that sentence whether Google has been inspired by the success of ChatGPT, which was released decisively by OpenAI, the latter of which is now synonymous with the technology.

Bard shows Google taking a page from that playbook, releasing a "lightweight" AI system that uses Google's own LaMDA (Language Model for Dialogue Applications) to draw on information from the web. How exactly it does that is not clear from the company's press release, which is more or less current.

Bard "help[s] explain new discoveries from NASA's James Webb Space Telescope, for example, or tell you what the best strikers in football right now, and then get drills to build your skills."

Meet the Team



William Chan, WFU 23'

Major: CS, Finance
Roles: Front-end,
Finance, Operations



Dexter Wu, Tufts 23'

Major: CS
Focus: Deep Learning
Roles: Back-end,
Algorithm Design,
Mathematical Proof



Nathaniel W., WFU 22'

Major: Business
Minor: Chinese
Roles: Product,
Sales, Marketing,
UI/UX Design



Evan Zelt, WFU 25'

Major: CS
Roles: Full-Stack,
Front-end



Thomas Peterson, WFU 25'

Major: CS
Minor: Communications
Roles: Product Design,
User Research,
Marketing

Prof. William Turkett,
Department Chair & Mentor

Why It's Unique



Convenient

Our tool is a Chrome Extension that can be pulled up anytime you read an article.

This article appears to be accurate. Discord has indeed announced the launch of new AI experiences to a number of servers, including OpenAI ChatGPT technology for extended conversations with Clyde bot.

Discord's [blog post](#) on 3/9/2023 about their AI technology and features of the Clyde bot shows that the article's information is consistent with the details provided by Discord executives.

Fast & Simple

Our tool will output insights within a few seconds, allowing for a great user experience.

Google's R&D expenses were \$27.6bn in 2022, roughly \$3bn higher than Meta.

WSJ Jan 6, 2023 ✓ ⓘ

How much of this R&D amounted to revenue?

Google stated that R&D spending in 2022 amounted to 21.3% of revenue.

And what about for Meta?

Meta reported that R&D spending made up 21.1% of its sales.

Ask a question

Expansive

Interact with insights by asking it questions and dive deeper into the topics you're interested in.

Target Customers



#1 Students

Students can use this extension to boost their understanding of online content in an academic, helpful and non-intrusive manner.



#2 Individual Users

Users can install this extension for their own interest or research purposes, and customize our tool for their own needs.



#3 Enterprises

Companies can pre-install this extension on their employee's work browsers. Our tool will be tailored to their specific business needs.

Business Model

We let readers try our tool for free. After 10 free articles, they can choose between:

Try for Free - no credit card required!

B A S I C

\$5

- Unlimited Refreshes
- 600 Characters/Generation
- 6 Powerful Features
 - Define, Summarize, Fact Check
- Save to Notes
- Share Insights

P R O

\$15

- **Everything in Basic**
- Unlimited Character Count
- Ask Custom Questions
 - Chatbot (ChatGPT) integration
- View Previous History
- Customize Results
 - Creativity, Complexity, Tone

Creating value for Wake Forest and the broader community

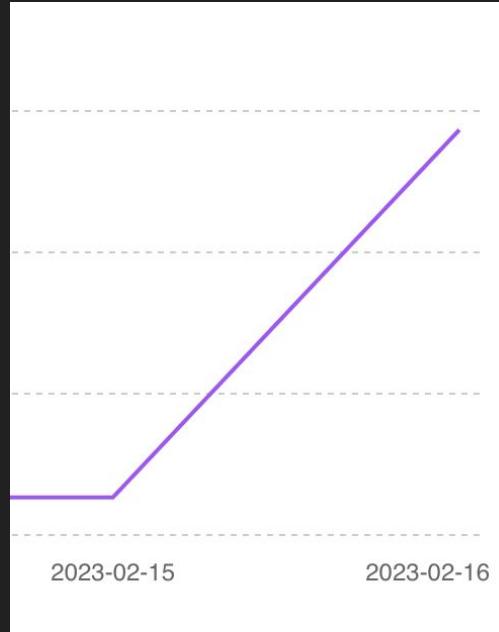
1. **Boosting comprehension.** Our tool enhances students' comprehension of complex topics, research papers and articles.
2. **Streamline study.** Our tool can easily be integrated with existing note-taking and organization workflows through our 'bookmark' feature and 3rd party integrations with Docs, Word, Excel etc.
3. **Bridge the information gap.** Our tool can contribute to an overall improvement in literacy, enabling better research, education, and collaboration.

DEMO

Traction So Far

We launched our Waitlist yesterday, on Thursday, Feb 16.

We've already had **50+ new users in < 12 hours** sign up on our Waitlist since publishing.



Unlock the Power of Reading.

A powerful Chrome Extension that shares predictive insights as you read along your favorite articles.

[Get Early Access →](#)

Insight

Article

Google's AI revenue is projected to reach \$203B by 2025, reflecting a CAGR rate of 19% from 2020.
WSJ Jan 6, 2023

Which Google products are driving AI revenue?
Google Search brings in \$98B in annual revenue, followed by Google Cloud, Maps, Workspace and Assistant.
Ask a question

Bard's opening presentation led to a \$100bn jump in Google's market share on Feb 8.
FT Feb 8, 2023

Bard shows Google taking a page from that playbook, releasing a new model that uses Google's own LMDM (Language Model for Dialogue Applications) to draw on information from the web. How exactly it does that is not clear, but it's likely to let people figure out their own applications.

TechCrunch

Google is rushing to take part in the sudden fervor for conversational AI. Bard, the company's new AI experiment, aims to "combine intelligence, and creativity of our large language models." Not short on ambition.

The model, or service, or AI chatbot, however you wish to describe it, was created by the company's researchers in 2017.

"It's a really exciting time to be working on these technologies as we're finally starting to see them truly help people," Pichai writes. It's hard not to wonder while reading this, though, if Google's recent focus on Bard is just a marketing ploy to distract from its lack of innovation in other areas.

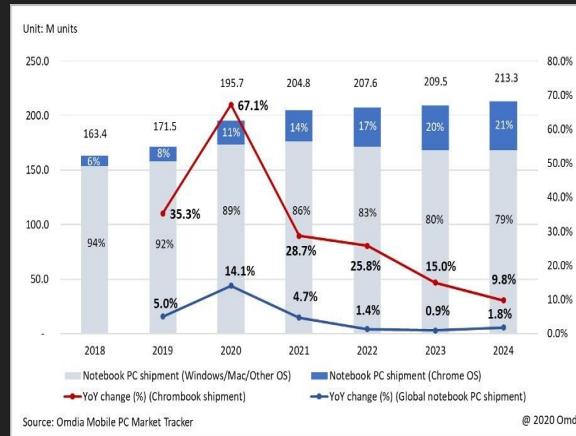
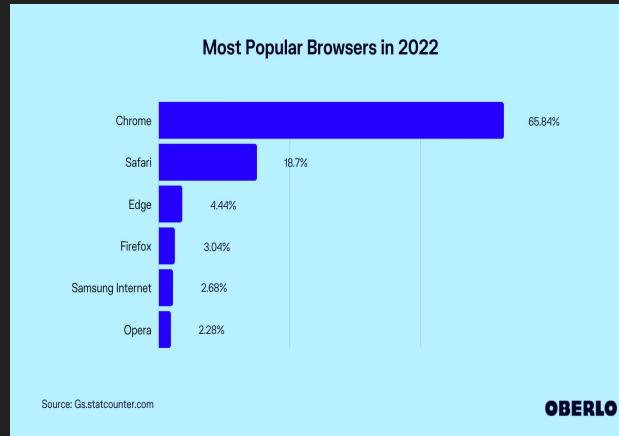
The short explanation is that tech moves fast and big companies move even faster, and Google is no exception. The company has been trying to figure out how to fit AI into its existing business strategy for years now, and it's clear that Bard is the latest attempt to do so.

Google's Bard AI model is designed to answer questions and provide information on a wide range of topics. It can also generate text based on prompts, such as writing stories or poems. The model is trained on a massive amount of data, including books, news articles, and other online content.

Bard is currently available as a beta version for Google's search engine. It's not yet available to everyone, but it's expected to become more widely available in the future.

smartreadingai.xyz

Market Size



Why did we choose Google Chrome?

- Chrome is still the most widely used browser
- Despite a global slowdown in PC shipments, the projected growth rate of Chromebooks is still set to outpace all other types of PCs
- According to *Newswire*, the e-learning market is expected to grow from \$274.1B in 2022 to \$465.5B by 2028, at a CAGR of 9.2% from 2022 to 2028
- With growing adoption of tools such as Chromebook and Google Workspace amid the K12 sector, Chrome is positioned to benefit from this industry tailwind (see speaker notes below)

Growth Plan



1 - 1,000 users (Students)

Focus extensively on distributing this product to students. Spread by word-of-mouth and advertising to various student clubs on campus through cooperation with the office of student engagements in North Carolina area.

1,000 - 10,000 users (Individuals)

Begin social media campaign and advertising efforts on platforms such as Twitter, Instagram and Discord to expand reach. Partner with influencers and brand ambassadors to increase awareness and drive more users.

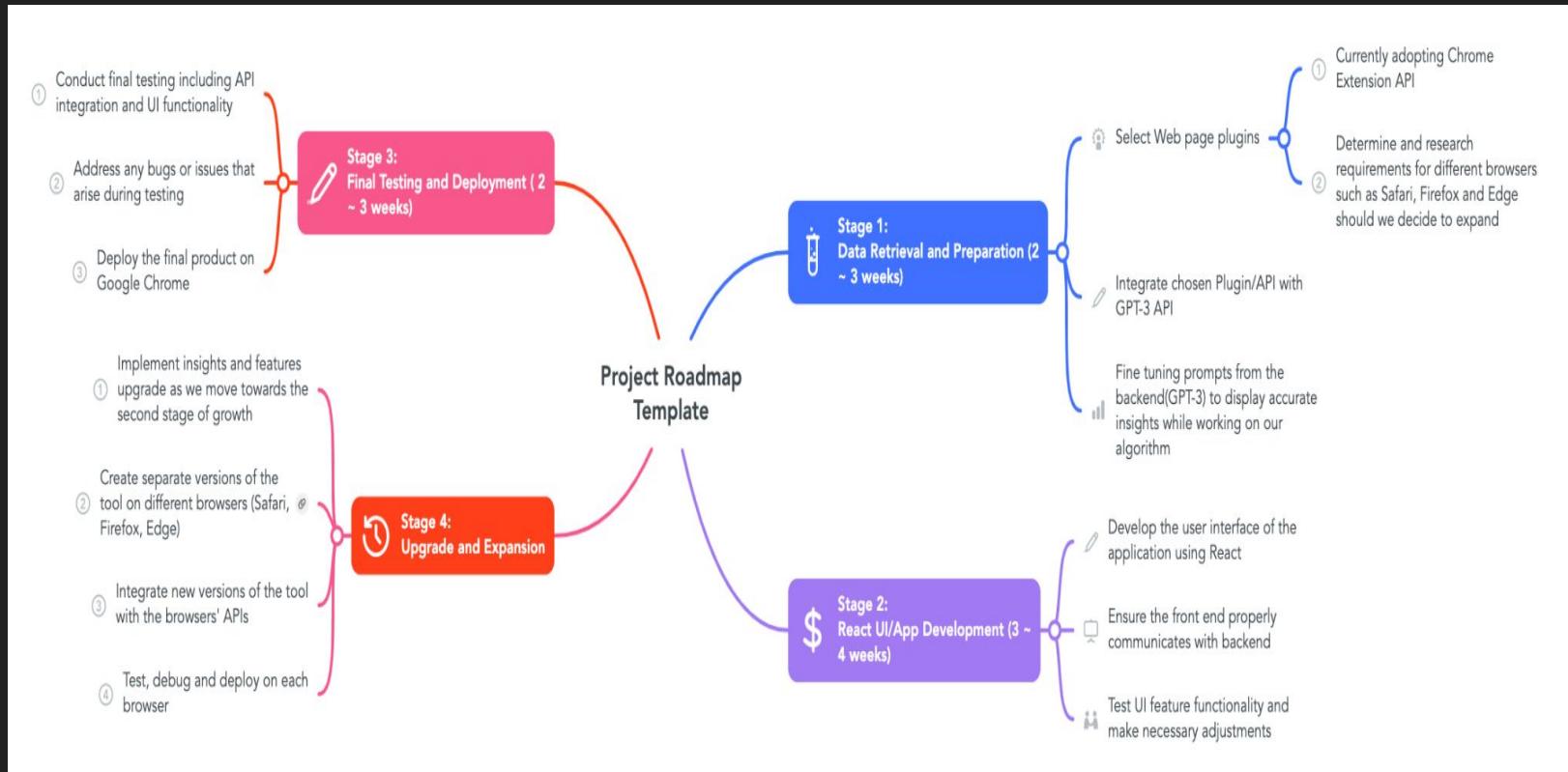
10,000 - 100,000 users (Companies)

Begin pitching to companies and tailor product to enterprise needs by offering flexible pricing model and customized features. Partner with other products that provides complementary services to our smart reading tool.

Engineering Framework

- **Phase 1: Data Retrieval and Preparation (1-2 weeks)**
 - Select web page plugins (currently adopting chrome extension API) for retrieving HTML elements from websites (pattern match)
 - Integrate the chosen plugin/API with GPT-3 API while fine tuning prompts from the backend to display insights
- **Phase 2: React UI/App Development (3-4 weeks)**
 - Develop the user interface of the application using React
 - Ensure the front end properly communicates with backend
 - Test UI feature functionality and make necessary adjustments
- **Phase 3: Final Testing and Deployment (1-2 week)**
 - Conduct final testing, including API integration and UI functionaility
 - Address any bugs or issues that arise during testing
 - Deploy the final product on Google Chrome

Engineering Framework (Visualization)

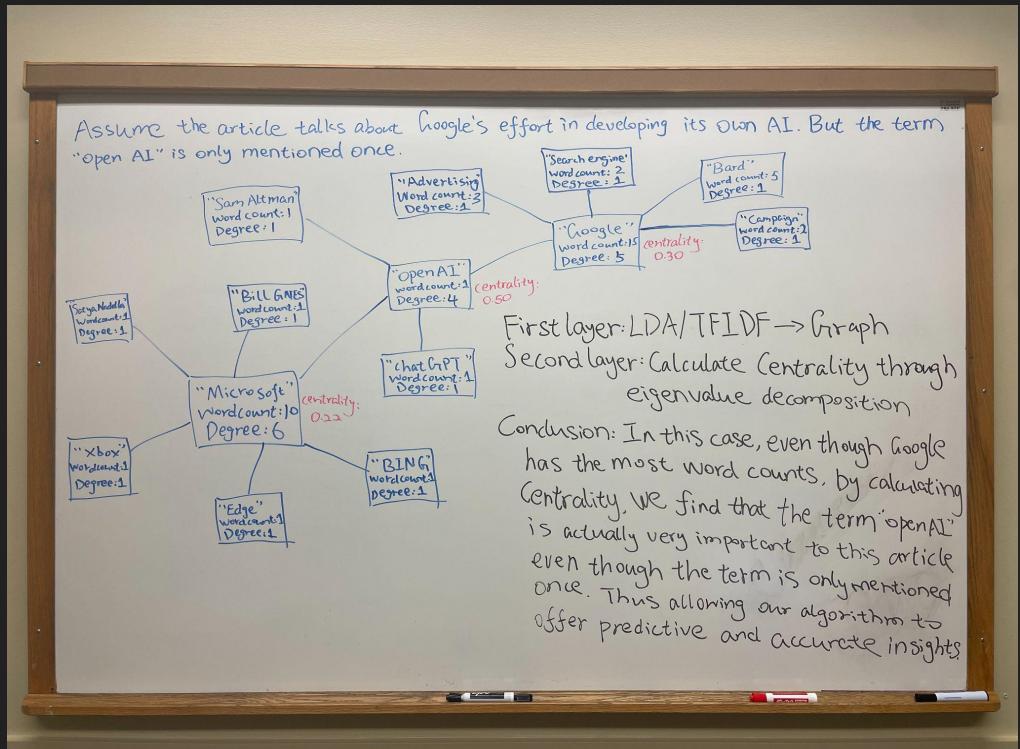


Our Algorithm in Progress

During the testing stage, if the insights shown is inaccurate, then we would implement our own algorithm to make it better. **Note: the edges below are established between words in the same sentence.**

Abstract:

- Preprocess webpage content in text files. Using LDA keyword abstraction on the input corpus.
- Based on the (word, count) pairs from the LDA algorithm, constructing an unweighted undirected simple graph G in the adjacency matrix representation.
- In this $G(V, E)$, each V is the word that carries the count information from the key/value pairs from LDA, and each E is established under the assumption that all the words are in the same text files. Let n_i denotes the word count of word i . We then define a word vertex as "important" but "omitted" if and only if this word has relatively low n throughout the text corpus and is connected with some other words with high occurrences. For instance, the word "openAI" could be important if and only if $V_{openAI-words} \in E$ for words with high occurrences.
- Let A be the adjacency matrix G with each $A[i, j]$ equals to $\sum_{k \in N(k)} n_k$, where $N(k)$ are the neighbors of node k . Therefore, we calculate each vertex's centrality through the decomposition of A : $A \cdot c = \lambda \cdot c$ where c is the eigenvector corresponding to the largest eigenvalue of A , with each entry of c_i being the centrality of the i th word.
- Up till this point, we have successfully differentiated the "omitted and important" words through other high-occurrence words using the graph centrality. We then input these words through GPT-3 Word API to fetch the essential information regarding their meaning or references and lastly output words information as JSON files and present them directly onto the users' current web pages.



Approach 2

- manually read through enough sample of articles to generalize and define what key terms our human brain think it's important for average articles (financial/scientific)
- and then pass these samples (articles/key terms) into a dataset that we aggregate on our own, which we would use to build our own neural network
- then we can combine this neural network with GPT's API to output insights which are based on the key terms that our neural network identifies
- this would significantly reduce the latency and improve execution speed instead of just being a thin layer wrapped around chatGPT (using its API to do everything such as finding keyterm, generate insights etc)

BERT-Based Summarization Model Architecture

- Candidate datasets for fine-tuning BERT:
 - IMF Data: <https://www.imf.org/en/Data>
 - Qaundl: <https://data.nasdaq.com/>

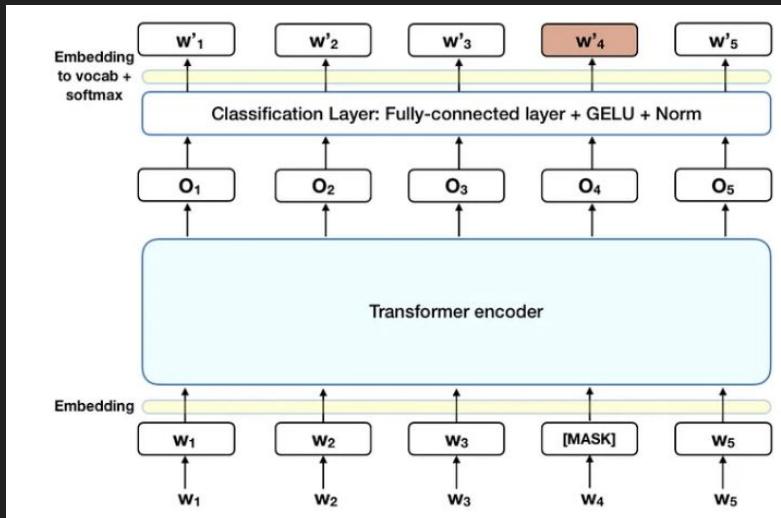


Fig.2. Workflow of Masked LM in BERT

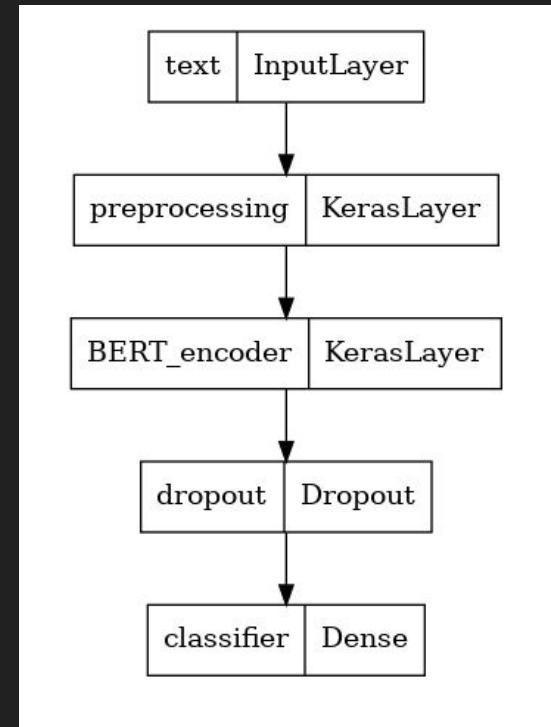


Fig.1. General BERT-based NN model

Support for other Browsers

- Given that Chrome is the most widely used web browser globally (66% market share), followed by Safari, Firefox and Edge, we have decided to focus our current development efforts on Chrome to deliver the best possible user experience and maximize the reach of our smart reading tool.
- However, we are committed to providing a seamless experience across different web browsers and platforms. That's why we have a clear plan to expand to other platforms by following the steps below:
 - Determine and research the requirements for each browser
 - Create separate versions of the tool using the appropriate format/structure
 - Integrate the tool with the browser's APIs
 - Test, debug and deploy on each browser



Demo (what we have so far)



Introducing

Smart Reading



Powered by

 Chrome Extension

 OpenAI's GPT-3

Click this link for access to our video:

<https://drive.google.com/file/d/1xCi5-zshCnbUkmX4X3XtcMF6qVvRDkPs/view?usp=sharing>

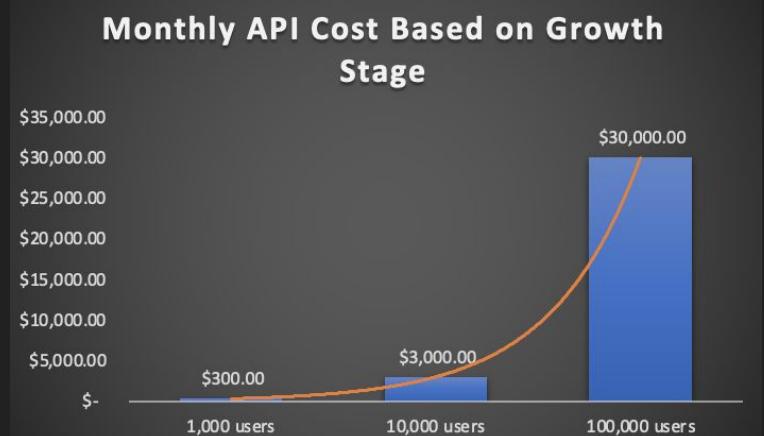
For testing purpose, we have limited the number of output terms to be exactly three. Next step for the MVP is front-end and UI improvements.

Where will the funds go?

- We estimate that we'll need **\$2500 to cover the costs** of using OpenAI's API to get the project up-and-running in the first few months of our project.
- We also anticipate **front-end development costs** for future UI design and third-party API integrations.
- During the 2nd & 3rd stage, **our monthly costs will be offset** by paying users and our cost-cutting scaling efforts.
- To achieve our long-term goals, it's **crucial to secure funding** for the first stage of our project.

Assumption:

Each article generates 3 insights and each insight requires a prompt of ~25 words. We assume that the average user reads 5 articles per day, and we use a rate of \$0.02 per 750 words for the Davinci model. This estimate does not include future upgrades to the API in the second and third stage.



Ethical Questions

1. **Safeguards for students.** We envision implementing safeguards into our tool so that students are discouraged from plagiarising information or abusing the honor code.
2. **Accurate sources.** We want to ensure our tool provides accurate and unbiased information. Users can submit feedback on the sources they find helpful or unhelpful to improve our insight output.
3. **Fake news.** In future iterations, we would like to implement a 'Fact Checker' feature where users can use our tool to cross-check information from articles to ensure the content is accurate and impartial.



Join **50+ others** on our
Waitlist to get early access!

smartreadingai.xyz

or scan



Thank you!

Questions?



How it works

F R O N T - E N D

B A C K - E N D

F R O N T - E N D



User clicks on
an article

Our tool extracts
and analyzes the
article's text

Insights are
generated through
GPT based on our
custom prompt

Insights are
repackaged into
pop-ups on the screen
along the article

[In < 2 seconds]

Extra

 Fact Check

This article appears to be accurate. Discord has indeed announced the launch of new AI experiences to a number of servers, including OpenAI ChatGPT technology for extended conversations with Clyde bot.

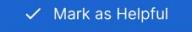
Discord's [blog post](#) on 3/9/2023 about their AI technology and features of the Clyde bot shows that the article's information is consistent with the details provided by Discord executives.

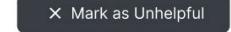
 Ask a question

 *Why is Discord choosing to use OpenAI's tech instead of Google's?*

Discord's decision to use OpenAI's GPT is due to higher scalability, lower costs and their pre-existing partnership.

Google's Bard AI model does not offer the same functionality as it is only in its beta phase and remains largely untested.

 ✓ Mark as Helpful

 ✗ Mark as Unhelpful