Words, Numbers, Images

Session 2



Etiquette

- Cameras on show your face
- Mute yourself when not talking

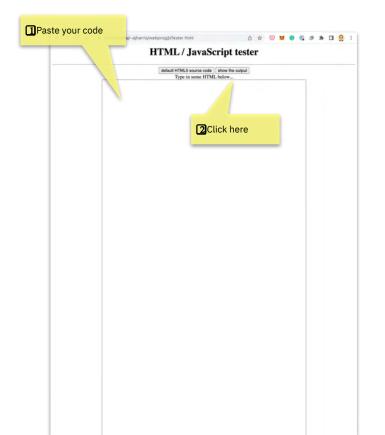
Orop your questions in the chat + "raise" your hand during questions time

Don't give up: Something isn't clear? Get in touch.

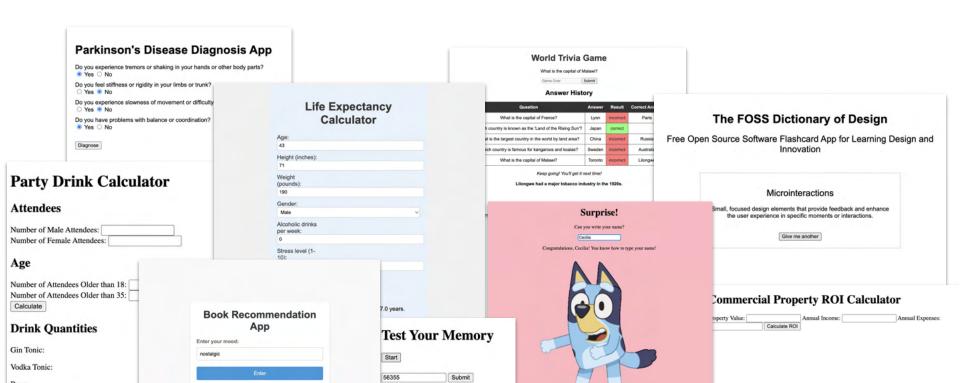


Home Work: Build a Simple App

- 1. Generate code with ChatGPT. You can begin by asking it something like: "Generate an html snippet for an app that does...."
- 2. ChatGPT might give you two (or more) pieces of code for different files. If it does, ask it to provide a single snippet of code.
- 3. To test your code, go the HTML / JavaScript Tester.
- 4. Click on "Show your output" at the top of the screen. See and test your result in the lower right corner.
- 5. Does it work? Want to make it even better? Go back to ChatGPT and instruct it on any changes you'd like.
- 6. Repeat until you're happy with your app.
- 7. Once you're done, post your code on the <u>Slack</u> <u>#show-your-work</u> channel.

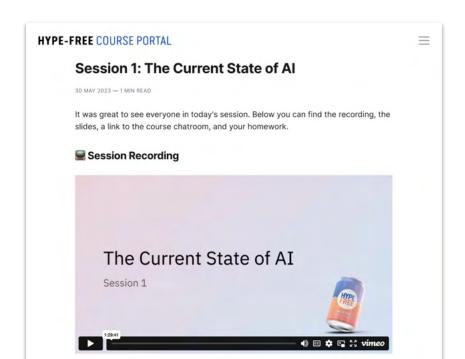


Nice work!



Course Portal

Log in with your email at https://in.hypefree.com



What we'll do?

Session 1: Fundamentals and orientation

🛠 Session 2: Working with words, numbers, and images

Session 3: Reinforcement & Support

Session 4: Broader implications for industries and careers

K Session 5: Advanced skills, specialized tools, and automations

Session 6: Reinforcement & Support

Understanding Tokens

- Token: A unit of text that the model reads and generates.
- Can be as short as one character, or as long as one word. For example, in the sentence "ChatGPT is great!", there are four tokens: "ChatGPT", "is", "great", and "!".
- Tokens are also the units by which the model learns during training: it learns to predict the next token in a sequence given the previous tokens.
- GPT 3.5 token limit: 2048; GPT-4: 8192 (or 32,768)

Tokenizer

The GPT family of models process text using **tokens**, which are common sequences of characters found in text. The models understand the statistical relationships between these tokens, and excel at producing the next token in a sequence of tokens.

You can use the tool below to understand how a piece of text would be tokenized by the API, and the total count of tokens in that piece of text.

GPT-3 Codex

Prior to the NBA draft, Tatum reluctantly showed up to work out with the Boston Celtics. He showcased some of his skills but didn't necessarily shoot the lights out. But during this short visit, he managed to showcase something else as well. As Coach Brad Stevens described it, "He would miss two in a row, and it wouldn't dissuade him from hitting the next one.

Clear Show example

Tokens Characters 78 362

Prior to the NBA draft. Tatum reluctantly showed up to work out with the Boston Celtics. He showcased some of his skills but didn't necessarily shoot the lights out. But during this short visit, he managed to showcase something else as well. As Coach Brad Stevens described it, "He would miss two in a row, and it wouldn't dissuade him from hitting the next one.

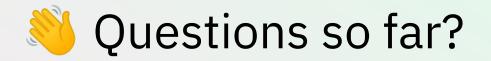
TEXT TOKEN IDS

A helpful rule of thumb is that one token generally corresponds to ~4 characters of text for common English text. This translates to roughly ½ of a word (so 100 tokens ~= 75 words).

If you need a programmatic interface for tokenizing text, check out our tiktoken package for Python. For JavaScript, the gpt-3-encoder package for node js works for most GPT-3 models.

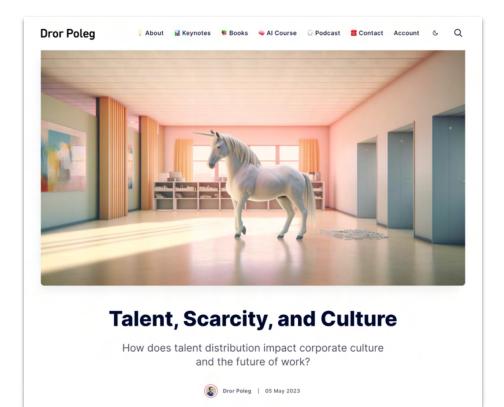
Understanding prompts

Prompt: A text-based instruction or input given to a language model. It serves as a starting point or guidance for the model to generate a response or continuation based on the provided prompt. The prompt can be a question, statement, or incomplete sentence that helps to frame the desired output from the model.



Working with Words

Analyzing Text



Reviewing a Contract

EMPLOYMENT CONTRACT

This Employment Contract (this "Contract") is made effective as of March 01, 2022, by and between Hype- Free Media (DBA of Eloquent.li

LLC) of _____ and _____ of _____, New York, _____.

A. Hype-Free Media (DBA of Eloquent.li LLC) is engaged in the business of online education and media production. ______ will primarily perform the job duties at the following location: ..., _____, _____.

B. Hype-Free Media (DBA of Eloquent.li LLC) desires to have the services of ______.

C. ______ is an at will employee of Hype-Free Media (DBA of Eloquent.li LLC). Either party is able to terminate the employment agreement at any time.

Therefore, the parties agree as follows:

1. EMPLOYMENT. Hype-Free Media (DBA of Eloquent.li LLC) shall employ ______as a(n) Program Manager. ______shall provide to Hype-Free Media (DBA of Eloquent.li LLC) duties as needed. ______accepts and agrees to such employment, and agrees to be subject to the general supervision, advice and direction of Hype-Free Media (DBA of Eloquent.li LLC) and Hype-Free Media (DBA of Eloquent

2. BEST EFFORTS OF EMPLOYEE. ______ agrees to perform faithfully, industriously, and to the best of

______'s ability, experience, and talents, all of the duties that may be required by the express and implicit terms of this Contract, to the reasonable satisfaction of Hype-Free Media (DBA of Eloquent.li_LLC). Such duties shall be provided at such place(s) as the needs, business, or opportunities of Hype-Free Media (DBA of Eloquent.li_LLC) may require from time to time.

Blood Test Just for fun! Not medical advice!

	Clinica	al Laboratory F	Report		
Patient Name DOE, JOHN		Drawn 20/10		Received 20/10	Date of Report 12/22/10
Sex Age M 31	Client Name / MEDICAL CI YOUR DOCT	ENTER TOR, M.D.		I.D. Numbe 78987654	
Ordering Physician SMITH 123094567	123 MAIN ST ANYTOWN		23	Specimen Number 918273	Time Drawn 11:00
Patient I.D./Soc. Sec No	umber				
TEST	AME	RESULT	UNI	TS RE	FERENCE RANGE
CHEM-SCREEN PANEL GLUCOSE SODIUM POTASSIUM CHLORIDE CARBON DIOXIDE (BICA BUN (BLOOD UREA NITE CREATININE BUN/CREATININE RATIO URIC ACID PHOSPHATE CALCIUM MAGNESIUM CHOLESTEROL HDL CHOLESTEROL CHOL/HDL RATIO	ROGEN)	87 140 4.6 106 28 9 10.0 6.0 3.5 9.6 2.09 258 41 6.3	mg/dL mg/dL	н	65 - 125 136 - 144 3.6 - 5.1 99 - 109 21 - 31 8 - 24 0.7 - 1.3 3.0 - 8.1 2.3 - 4.5 8.8 - 10.3 1.50 - 2.50 120 - 199 35 - 59 3.6 - 6.4
LDL CHOL., CALCULATE TRIGLYCERIDES PROTEIN, TOTAL	D	179 231 8.3	mg/dL mg/dL g/dL	H	75 - 129 40 - 200 6.5 - 8.3
ALBUMIN GLOBULIN, CALCULATE A/G RATIO BILIRUBIN, TOTAL	D	4.5 3.8 1.2 0.51	g/dL g/dL	н	4.0 - 5.0 2.1 - 3.6 1.1 - 2.0 0.20 - 1.50
BILIRUBIN, TOTAL BILIRUBIN, DIRECT			mg/dL mg/dL		0.20 - 1.50

Browsing the Web

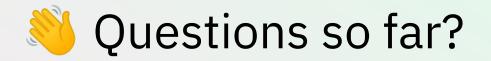
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ral	As a Plus user, enjoy early access to experimental new features, which may change during development.	Our most capable model, great for tasks that require creativity and
a features a controls	Browse with Bing	advanced reasoning.
	Try a version of ChatGPT that knows when and how to browse the internet to answer questions about recent topics and events.	Available exclusively to Plus users
	Plugins	◆* Default
	Try a version of ChatGPT that knows when and how to use third-party plugins that you enable.	Browse with b Bing Beta
		* Plugins Beta

ChatGPT Plugins

ugin store			
Popular New All Installed	Q Search plugins		
Golden	HTTP Webhooks	WebPilot	Sakenowa
Get current factual data on companies from the Golden knowledge graph.	Allows you to write, deploy, and manage HTTP Webhooks in JavaScript, right from the chat.	Browse & QA Webpage/PDF/Data. Generate articles, from one or more URLs.	Find Sake and get detailed information in various ways.
TimeMachine	Paxi Al Install 🗘	Speechki Install 📀	edX Install 🗘
Enhances Al with real-time awareness, providing current time in various formats and timezones.	Let AI tools speed up your tasks! Make it easy to find the right tool for the task.	The easiest way to convert texts to ready-to-use audio — download link, audio player page, or embed!	Find courses and content from leading universities to expand your knowledge at any level.

Using BabyAGI "agents"

💥 собновув					
Home			Create your age	nt	
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		Or	get started with a ter	mplate	
	Search	Search	Default	Default	Default
	Industry News	Market Research	Business plan	Language Tutor	Fitness Coach



Group Activity – 7 minutes:

Introduce yourself and then use ChatGPT together to... convince me to buy this pen.

Use whatever you know about me, feel free to make assumptions, ask ChatGPT for help.



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Use whatever you know about me, feel free to make assumptions, ask ChatGPT for help.



Working with Numbers

Financial Analysis

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	A	В	С	D	E	F	G
1	Year	Gross Rental Inc	Operating Exper	Net Operating Income	Debt Service	Cash Flow	
2	2023	30000	8000	22000	5000	17000	
3	2024	31500	8400	23100	5000	18100	
4	2025	33075	8820	24255	5000	19255	
5	2026	34729	9261	25468	5000	20468	
6	2027	36465	9714	26751	5000	21751	
7	2028	38289	10189	28100	5000	23100	
8	2029	40203	10698	29505	5000	24505	
9	2030	42213	11238	30975	5000	25975	
10	2031	44324	11799	32525	5000	27525	
11	2032	46540	12389	34151	5000	29151	
12	2033	48867	13009	35858	5000	30858	
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Looking at Tesla's Financials

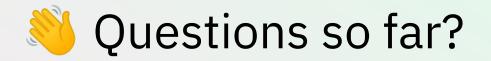


Market Research

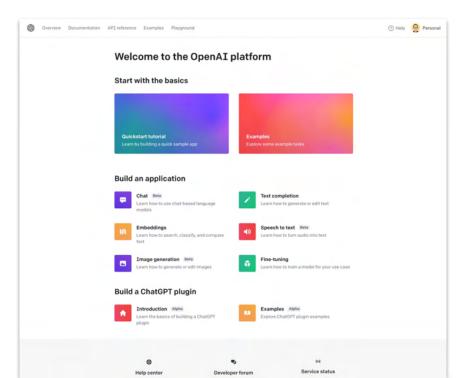
Coding in Excel / G Sheets

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1	Signed Up	Attended	Didn't Attent		
2	Harper Thompson	Caleb Walker			
3	Ethan Sullivan	Zoe Anderson			
4	Lily Martinez	Mason Ramirez			
5	Caleb Walker	Ava Morgan			
6	Zoe Anderson	Owen Hughes			
7	Mason Ramirez	Sophia Patel			
8	Ava Morgan				
9	Owen Hughes				
10	Sophia Patel				
11	Benjamin Lee				
12	Olivia Sanchez				
13	Samuel Wright				
14	Emily Turner				
15	Logan Mitchell				
16	Mia Johnson				
17					
18					
19					

Getting basic tax ideas (not tax advice!)



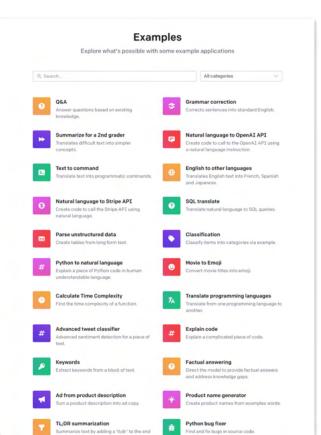
Using the OpenAI API



What is an API?

API (Application Programming Interface): An API is a set of rules that allows different software applications to communicate with each other. It's like a menu in a restaurant: you (the software) make a request (place an order), and the kitchen (the system you're requesting information from) uses the instructions provided (the menu) to fulfill your request. APIs enable the different pieces of software you use every day to function together seamlessly.

What can it do? (a lot)

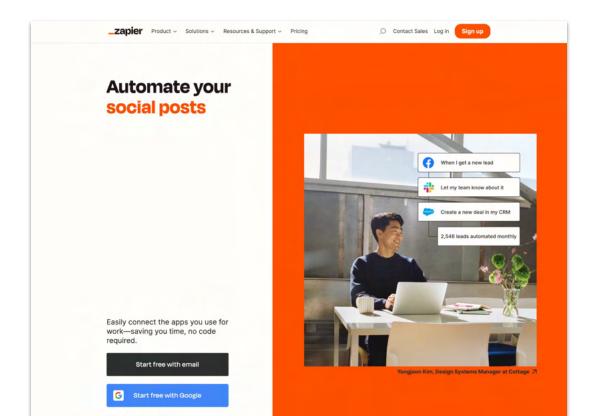


Try it with the API playground

\$			(?) Help	
Playground	Load a preset	 ✓ Save 	View code	Share
Write a tagline for an ice crea	m shop.			\$

Please review and experiment!

Homework: Create a Zapier Account



Create a Pixar Character

(and learn from a Tweet!)

...

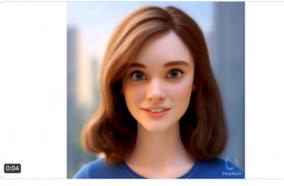
£



I found the perfect long weekend project: turn yourself into a Pixar character.

It takes <15 minutes and three tools (@midjourney, @elevenlabs, @HeyGen_Official), all of which you can use in-browser.

And it's a real crowd pleaser with friends / family!





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Thank you!

