PolyFact

Simple toolkit
to build AI apps

PolyFact is a library of functions and packages working with a managed backend. We are trying to build Supabase for AI apps. Everything is open-source!

```
> npm install polyfact
```

Documentation

Awesome Polyfact Discord Blog Twitter RSS

Aug 3, 2023

```
[lancelot@Zez-PC ~/polyfact]
$ yarn ts-node examples/
counter.ts            memory.ts             splitter-benchmark.ts  updateMemory.ts
createMemory.ts       repl.ts               test-split.txt
getMemories.ts        simple_answer.ts      transcribe.ts

[lancelot@Zez-PC ~/polyfact]
$ yarn ts-node examples/repl.ts
yarn run v1.22.19
$ /home/lancelot/polyfact/node_modules/.bin/ts-node examples/repl.ts
> Hey, write me a super long story
Once upon a time, in a far-off land called Etherea, there existed a mythical kingdom known as Aradyn. This
 kingdom was known for its enchanting landscapes, magical creatures, and extraordinary adventures. The peo
ple of Aradyn led peaceful lives, embracing the harmony between humans and nature.

In the heart of Aradyn stood Castle Avalora, home to the wise and just King Alaric and his beloved Queen S
eraphina. They ruled their kingdom with love, wisdom, and compassion, ensuring that every citizen was care
d for and protected.

However, within the depths of the neighboring Dark Forest
```

v0.23 streams update for the API and SDK

Lancelot has implemented an exciting new feature to the API and SDK - the streams. Thanks to this enhancement, you no longer need to wait for the LLM's response to be complete. Instead, you can receive the response in smaller, more manageable chunks. This update is available in the SDK version 0.1.25!

Learn more on GitHub0

Aug 1, 2023

v0.22 dockerfile-ai-generator package

A simple tool that can generate Dockerfiles for your repository effortlessly, utilizing LLMs. It is currently only optimized for simple repositories and needs more work to cater to a wider range of projects in the future.

GitHub

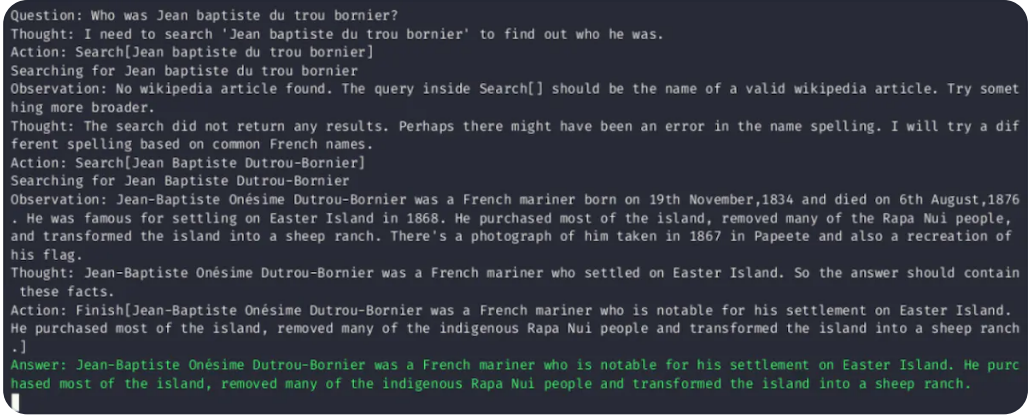
Aug 1, 2023

v0.21 question-asker package

This tool serves as an AI teacher focused on physics education, presenting you with questions to answer. It facilitates learning through practice, helping you improve your understanding of various physics concepts through interaction.

GitHub

Aug 1, 2023



v0.20 simple-ai-agent package

This simple agent has the ability to conduct searches on Wikipedia and perform basic calculations, making it a handy tool for quick information retrieval and mathematical tasks.

GitHub

Jul 28, 2023

v0.19 code-vectorize package

Code Vectorizer is a tool written in Typescript that helps you vectorize your code. This tool uses several dependencies, including "polyfact" for creating and updating memories and "progress" to keep track of the vectorization process.

GitHub

Jul 27, 2023

```
import { transcribe } from "polyfact";
import { createReadStream } from "fs";

const transcription = await transcribe(createReadStream("bee-movie.mp3"));

console.log(transcription);
```

v0.18 SDK: Audio Transcription Function

Simple function to transcribe any audio into a text through a readable stream. It uses the Whisper API, but you don't need to consider it. With one function, you can get your transcript.

Check out our docs to learn more about it.

Jul 27, 2023

v0.17 Creating chats: new SDK abstraction

There is now a super simple way to create Chats with PolyFact. You can create a new chat instance; out of the box, it will keep a chat history and use it to answer in context.

Check out our docs to learn more about it.

Jul 26, 2023

v0.16 AI logging package (console.ai)

Kevin made a cool package to use AI to make your node.js errors more readable. It takes two lines of code to set up. Then, you can start using `**console.ai(error)**` in your try/catch instead of console.error. You will get errors that are much nicer to read with recommended solutions. GitHub.

Jul 24, 2023

v0.15 Library Awesome List

There is now a GitHub repo called awesome-polyfact, the inventory of all the packages built on top of the Polyfact SDK. You can make a PR with what you are building.

Jul 24, 2023

```
→  [...nextauth] git:(main) npx ai-tests route.ts
import { handler, session, jwt } from "./your-module-name";

describe("handler", () => {
  it("should return an object", () => {
    const result = handler({ session: null, token: null, user: null });
    expect(typeof result).toBe("object");
  });
});

describe("session", () => {
  it("should return an object", async () => {
    const result = await session({ session: null, token: null, user: null });
    expect(typeof result).toBe("object");
  });
```

v0.14 Package to Write Unit Test Boilerplate

`npx ai-tests <target_file>`

Lancelot made a package to generate a boilerplate for your unit tests. It's a cool simple example of how to use the PolyFact SDK to make quick dev tool packages that save you time. GitHub.

Jul 24, 2023

```
import { createMemory, updateMemory, getAllMemories, generate } from "polyfact";

(async () => {
    const memory = await createMemory();
    console.log("Created memory:", memory); // Outputs: { id: '...' }

    const result = await updateMemory(memory.id, "<input-data>");
    console.log("Updated memory:", result); // Outputs: { success: true }

    const memories = await getAllMemories();
    console.log("All memories:", memories); // Outputs: { ids: ['...', '...', ...] }

    const response = await generate("<prompt>", memory.id);
    console.log("Generated response:", response); // Outputs: '...'
})();
```

v0.13 Embeddings Memory Out of the Box

We made it super easy to add memory to your calls. You can create an embedding memory in one simple function call, then pass your memory_id in your generation call, and the call will automatically be made with the right context. You don't need to create an account with a vector store, worry about setting up the embedding calls, etc. Just call the memory function.

Read the docs here

Jul 24, 2023

v0.12 Support for Cohere

One of our goals with the API is to let you switch easily between providers, all the while just needing one API key. To go towards that, we added support to Cohere. It breaks the typed generation sometimes, but it feels much faster in some cases!

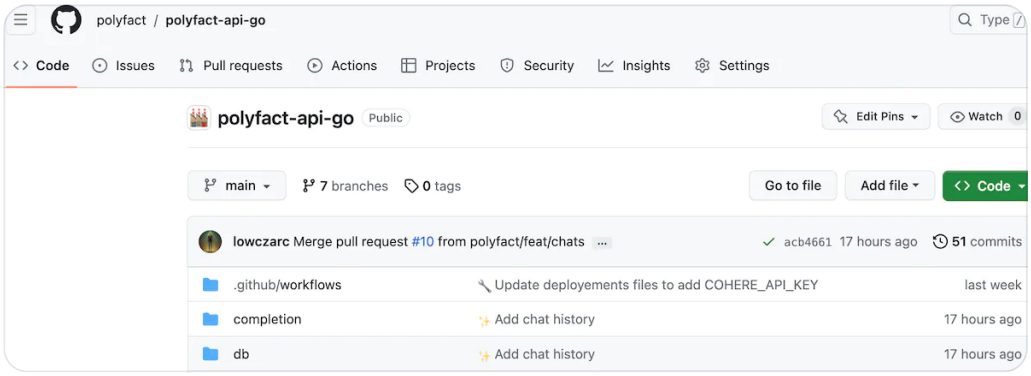
Jul 22, 2023

v0.11 ai-docs package

This is a version of the auto-generated docs we worked on using the new open-source Go API. It doesn't work perfectly, but it can help generate reference files for the documentation of your code. It is a foundational dev tool package, so we will return to it later to improve it.

GitHub | NPM

Jul 17, 2023

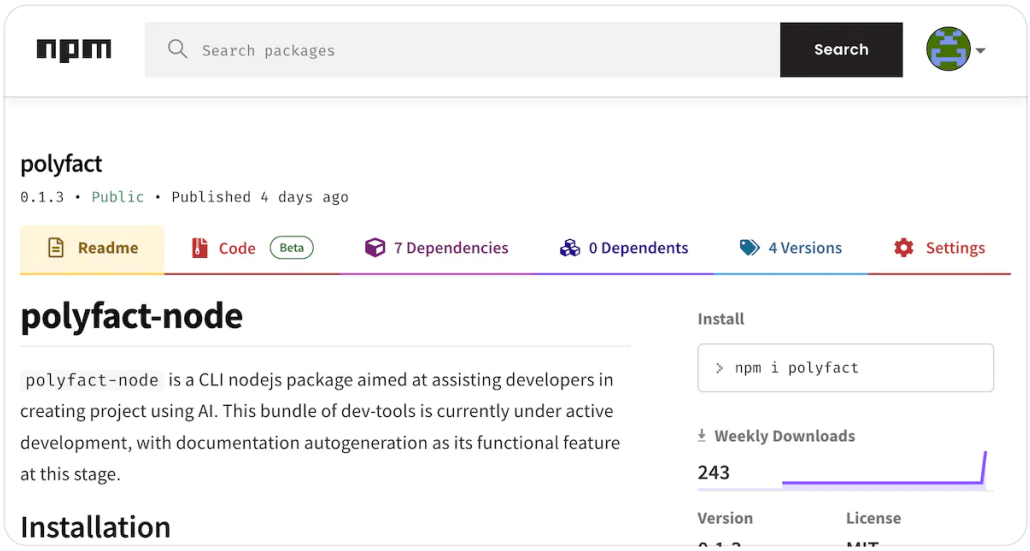


v0.10 Open-Sourcing the API

We decided to open-source the Polyfact API. The API is where the requests go through to be processed and sent along to LLM providers. It is written in Go. Some people talk about open-source but then keep a critical piece of their architecture close-source. We didn't want to be those people.

You can check out the repository, self-host if you want more control, and give us a star if you think it's cool!

Jul 10, 2023



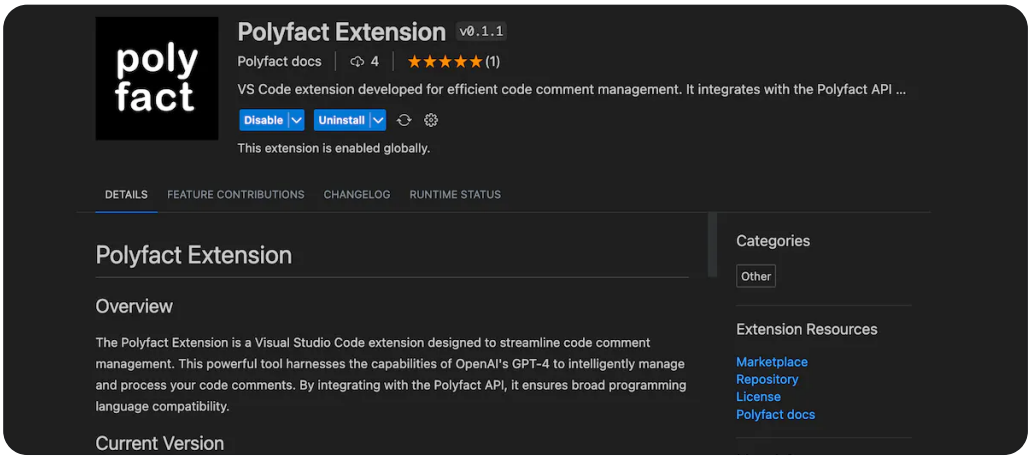
v0.9 Open-Sourcing the AI Docs Lib (NPM)

The polyfact NPM package can generate reference-based documentation for your code and automatically deploy a hosting website. The software will automatically generate refs for each file in your repo and deploy a static docs website. The NPM package is built on top of the Polyfact API and uses it to schedule generations, make sure they go through, store results in a DB, and embed results.

Just so you know, we still have some libraries to unbundle, but we will be releasing them soon.

Package on NPM

Jul 10, 2023



v0.8 VSCode references extension

The VSCode extension can help you add references to your code. Press CMD + SHIFT + D; the extension will create function references and insert them as comments in your code. The extension uses the Polyfact API to generate the references.

Download the Extension

Jul 3, 2023

Protocol Overview

新LSDs入门框架

unshETH 协议由几个液态股份衍生品（LSDs）组成，包装成单个 Omnichain ERC20 代币。每个 LSD 资产都有一个目标权重和最大权重。当一个 LSD 加入时，他们获得了保证的总锁定价值（TVL），达到目标权重的集中流动性，最大权重限制下的流动性，从协议中的每个资产的共享流动性中获益。unshETH 协议的组成由治理流程确定。

为了启动一个新的 LSD，将会有一个初始的流动性和治理引导期，在这个期间将运行共同营销和共同激励，类似于任何去中心化交易所（DEX），将该资产的权重设置为小于 5%。初始目标权重主要根据我们的风险框架确定，但也基于 LSD 协议在治理过程中的参与和共同激励。之后，将会有一个类似仪表盘的月度过程来设置协议的权重，项目可以通过质押 USH 直接参与，或者通过治理激励市场（如 Hidden Hand）将激励流向 vdUSH 质押者。

v0.7 Multilingual and reference translations

We added multilingual support and reference translation for the hosted version of the references. Our version production version of this translated the unshETH docs into Japanese, Korean, Spanish, Hindi, German, French, Mandarin, Arabic, Russian, and Portuguese. So far, it looks good!

Jun 29, 2023

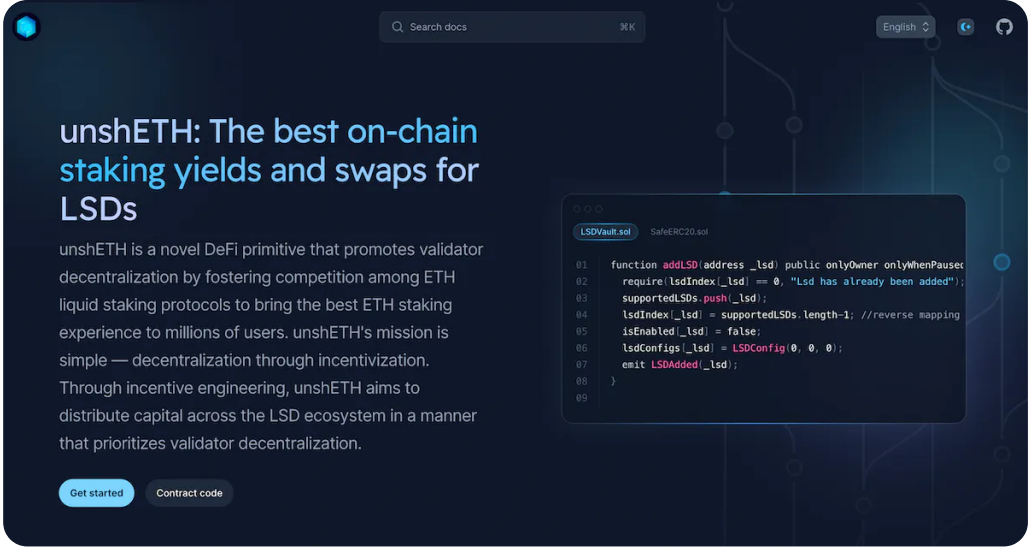
v0.6 Linking in-between reference files

We added links within references to other relevant references. This allows for cleaner navigation between references that share the same context or are linked. This is still an experimental and ‘dumb’ feature. Links are created based on imports and do not reference similar concepts or use cases in the code.

Improvements

- Links to other relevant reference files
- Links are generated based on the imports of your functions

Jun 25, 2023



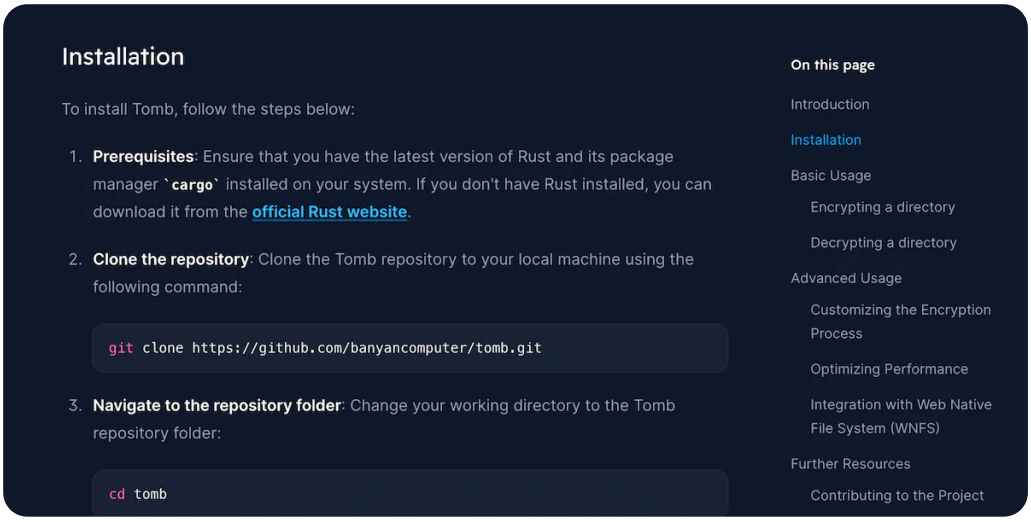
v0.5 Hosting sites

When we generate documentation for your code, we automatically host the references for you on `[your_project_name].polyfact.com`. This gives you a link to share with your users or community. The first three projects we did this for (and their docs): unshETH, Tomb (from Banyan), and Cairo.

Improvements

- Hosting a website for your docs
- Search in all your reference files
- Customizable URL or personal polyfact.com subdomain

Jun 12, 2023



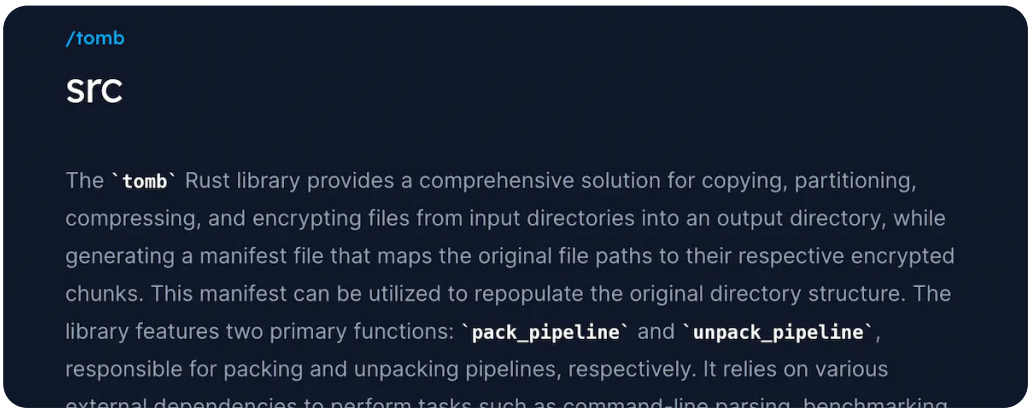
v0.4 Getting started

We now add a Getting Started guide at the root of your documentation. Following a specific structure, Getting Started offers an introduction to the project, instructions for installation or setup, details on basic usage, and, if applicable, advanced usage.

Improvements

- Getting Started based on all the folder and file references
- Clear JSON-based structure for higher predictability

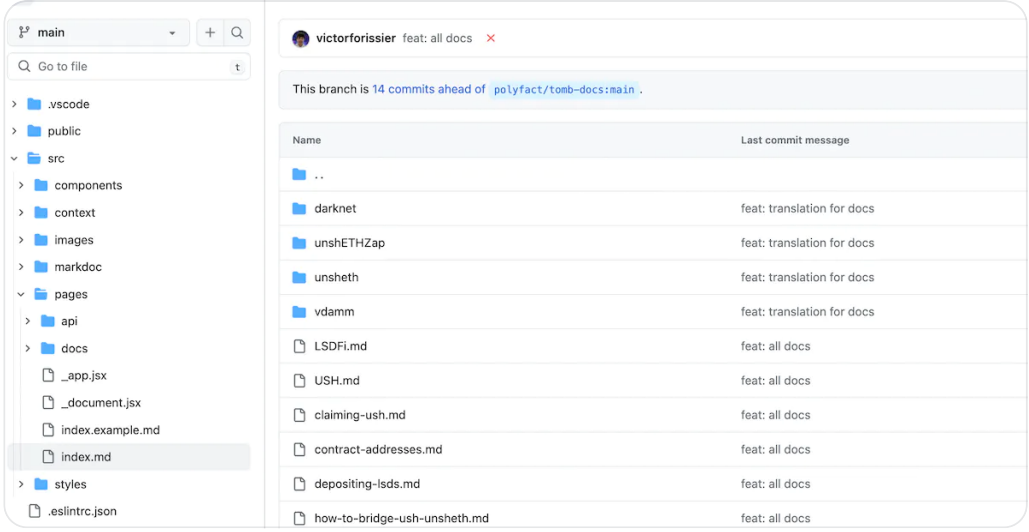
Jun 5, 2023



v0.3 Folder references

We now generate references for every repository folder for better categories and go towards a Getting Started and a broader understanding of the repo. Folder references take the references of all their children and try to summarize the essential information in them.

May 29, 2023



v0.2 Organized by files

Having all references organized into one big file was an issue. It makes them not very browsable. So the first thing we did when picking back up the documentation software made the references organized following the filesystem of their folder.

Apr 11, 2023

v0.1 Disorganized references

Our first experiment was a disorganized reference for some files in the Cairo 1.0 library from Starkware. They didn't have good documentation at the time, and I thought we could help. We ran a POC, which got us to do AI docs.

It was interesting to see how good LLMs were at generating references. But more experiments would show that the size of the Cairo repo was way

beyond what we could manage initially. We wouldn't touch references for another month, though, before coming back to it.