THE
FUNDAMENTALS OF
EFFECTIVE
TECHNICAL WRITING

Hrittik Roy

WHY LISTEN TO ME?

ABOUT ME (@HRITTIKHERE)

🥑 @ LOFT LABS

GitHub Campus Expert

CNCF AMBASSADOR

Google Venkat Scholar

HRITTIK ROY

MORE OF ME
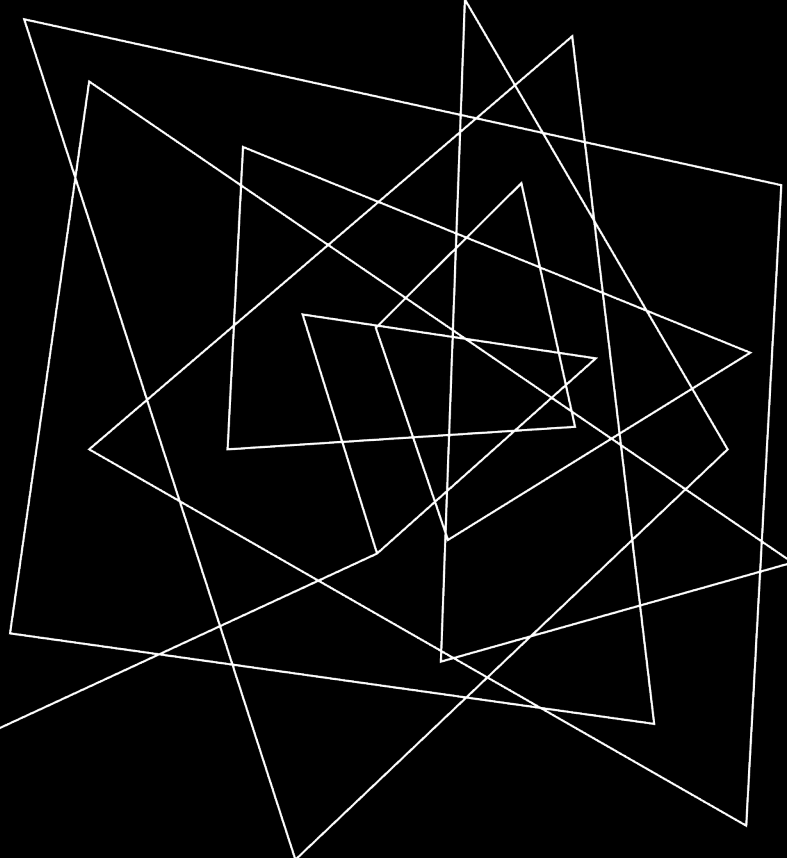# (120 + ARTICLES)

FROM HTTPS://GITHUB.COM/HRITTIKHERE/BLOGS

WHY WRITE?

WHAT DOES IT MEAN TO BE A TECHNICAL WRITER?

WHY DOES IT MAKE
SENSE TO WRITE?

HOW DO YOU GET STARTED?

EXERCISE

- What motivates you to write?

___

TYPES OF ARTICLES

IN DEPTH GUIDE —————— Technology decision-makers learning about a topic, but not looking for a specific tutorial yet

TUTORIAL —————— Hands-on software developers trying to learn a new skill or solve very specific problem

ROUNDUP —————— Developers comparing different options for solving a problem
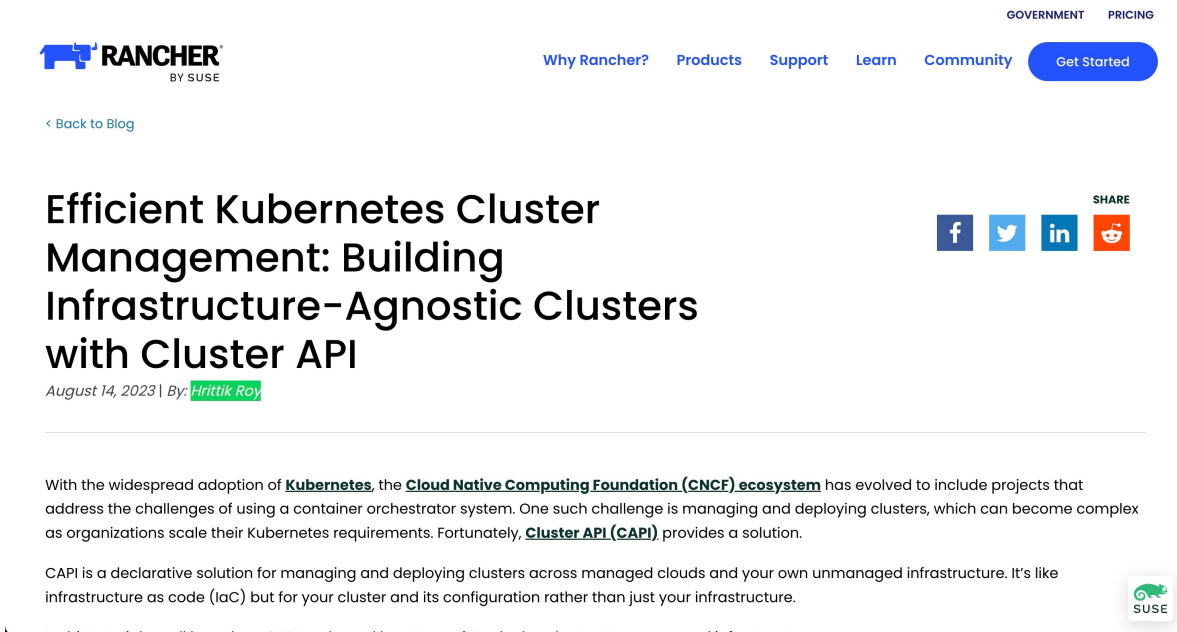
COMPARISON —————— Developers comparing different options for solving a problem

PERSUASION —————— Developers comparing different options for solving a problem

TYPES OF ARTICLES

GOVERNMENT   PRICING

RANCHER
BY SUSE

Why Rancher?   Products   Support   Learn   Community   Get Started

< Back to Blog

Efficient Kubernetes Cluster Management: Building Infrastructure-Agnostic Clusters with Cluster API

August 14, 2023 | *By:* Hrittik Roy

SHARE

With the widespread adoption of **Kubernetes**, the **Cloud Native Computing Foundation (CNCF) ecosystem** has evolved to include projects that address the challenges of using a container orchestrator system. One such challenge is managing and deploying clusters, which can become complex as organizations scale their Kubernetes requirements. Fortunately, **Cluster API (CAPI)** provides a solution.

CAPI is a declarative solution for managing and deploying clusters across managed clouds and your own unmanaged infrastructure. It's like infrastructure as code (IaC) but for your cluster and its configuration rather than just your infrastructure.

SUSE

What?
Step-by-step instructions

Who?
Hands-on software developers trying to learn a new skill or solve very specific problem

TUTORIAL
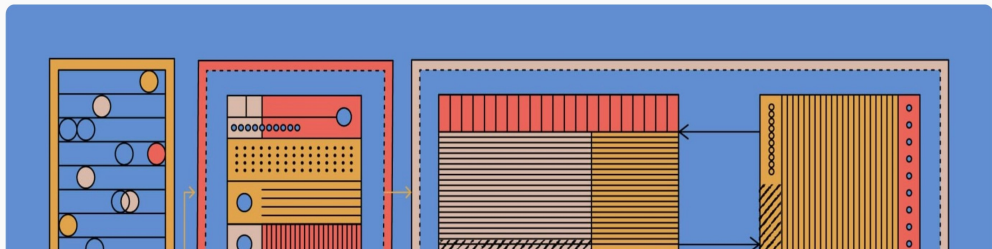
What?
List of many different options

Who?
Developers comparing different options for solving a problem

ROUNDUP

What?
Objective, side-by-side comparison of 2+ competing tools or services

Who?
Developers comparing different options for solving a problem

COMPARISON
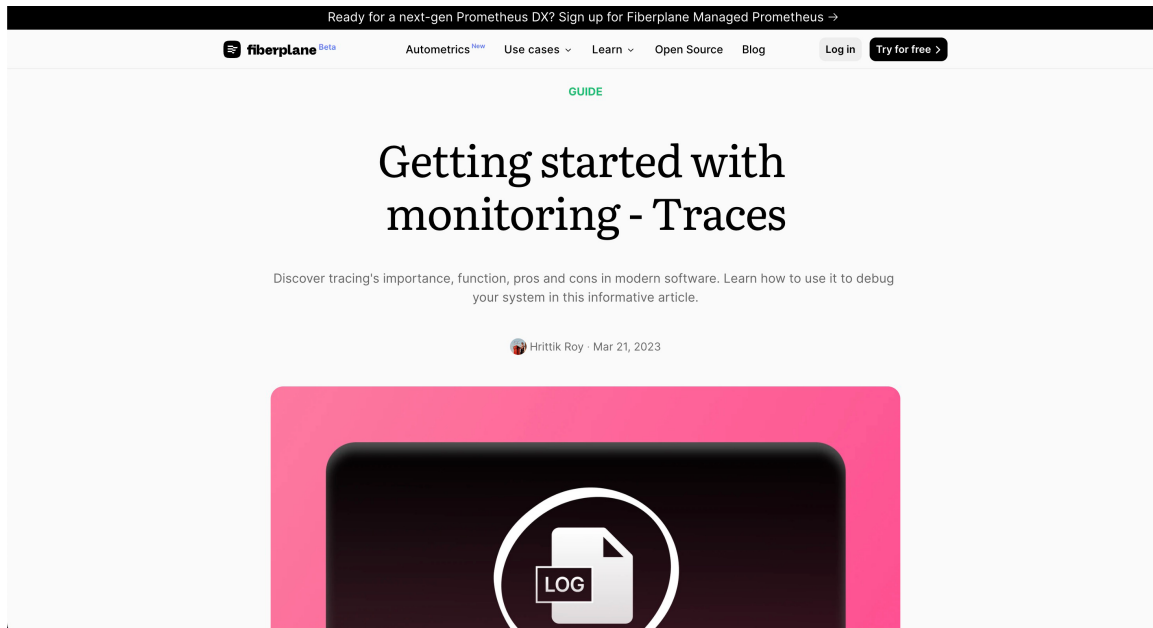
What?
Opinionated case for a specific solution to a problem

Who?
Developers comparing different options for solving a problem

PERSUASION

IN-DEPTH GUIDE

What?
Detailed explanation of a
topic, strategy, or tool

Who?
Technology decision-makers
learning about a topic, but
not looking for a specific
tutorial yet
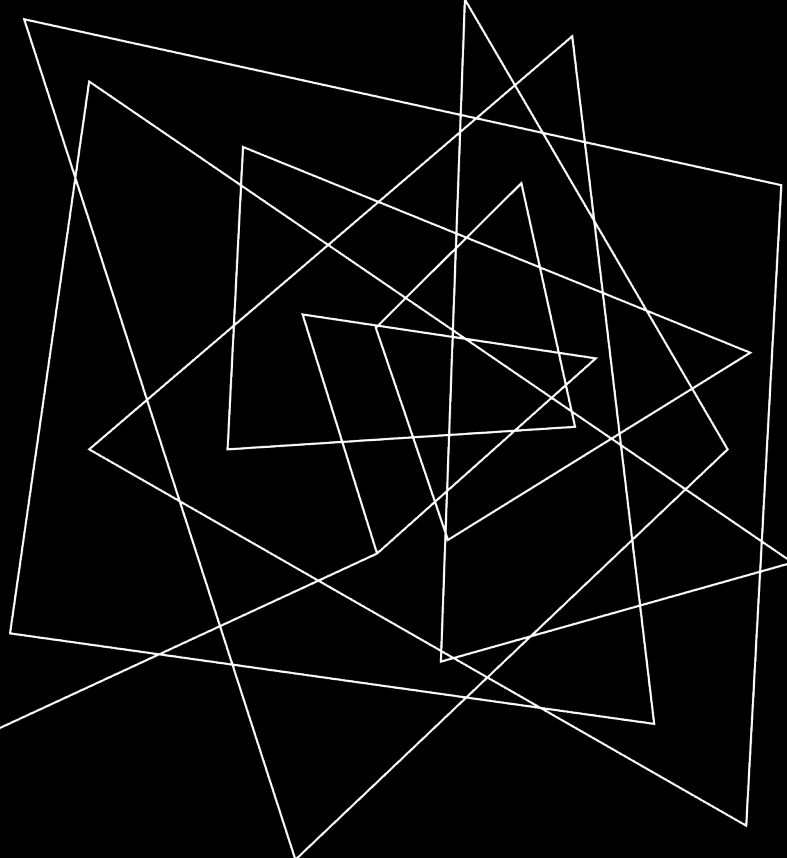
WHY DO TYPES
MATTER?

HOW CAN YOU EFFECTIVELY USE THEM?

EXERCISE

- Pick a recent article you wrote
- What type of article was it?
- Who was the intended audience?
- Why did you write it?

____

ORGANIZATION

WHAT DOES IT
MEAN TO ORGANIZE
AN ARTICLE?

Writing means organizing your thoughts.
If your mind is scattered, your writing is scattered.
If your mind is focused, your writing will be clear.

- ROBERT PEATE

WHY IS THIS IMPORTANT?

HOW CAN YOU
ORGANIZE YOUR
THOUGHTS?

RESEARCH

- Find, read 5-10 similar articles
- Write the code, build the demo app
- Make notes of any important information

———

OUTLINE

- Introduction
  - What tech we're talking about
  - Why you might use it
  - What you're going to learn
- How to do X with Y
  - Step 1
    - Why this step?
    - Explain step
    - Do the step
  - Step 2
    - Why this step?
    - Explain step
    - Do the step
- Conclusion

ORGANIZATIONAL PATTERNS

- Chronological
- Importance
- Problem & Solution
- Ranked Order

CHRONOLOGICAL

Crane and crane tower

Columns

Girders — Superstructure

Curtain wall

Ground level

Piles

Substructure or foundation

Rock

IMPORTANCE

PROBLEM & SOLUTION

NINTENDO CONSOLES
Ranked, Worst to Best
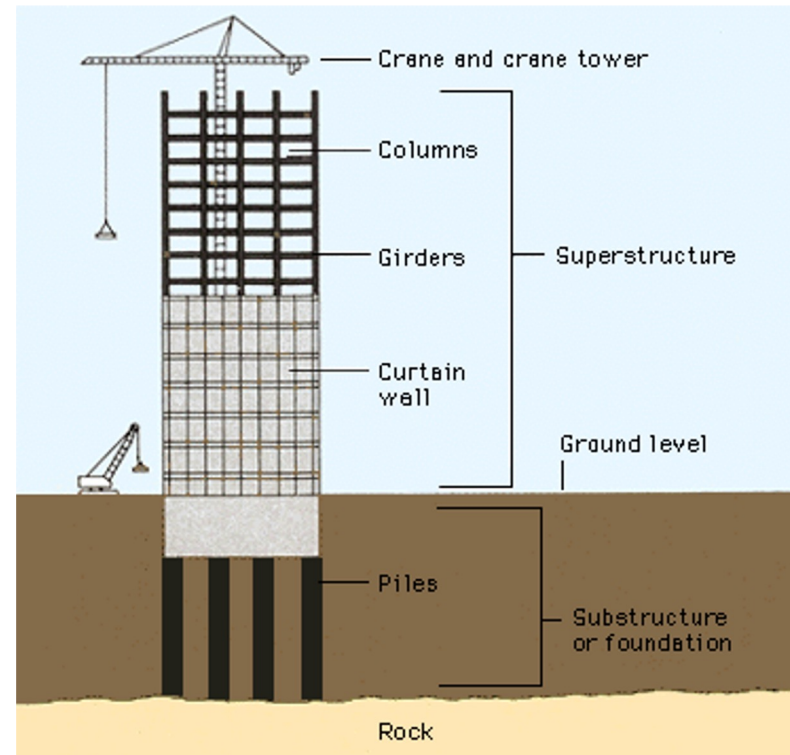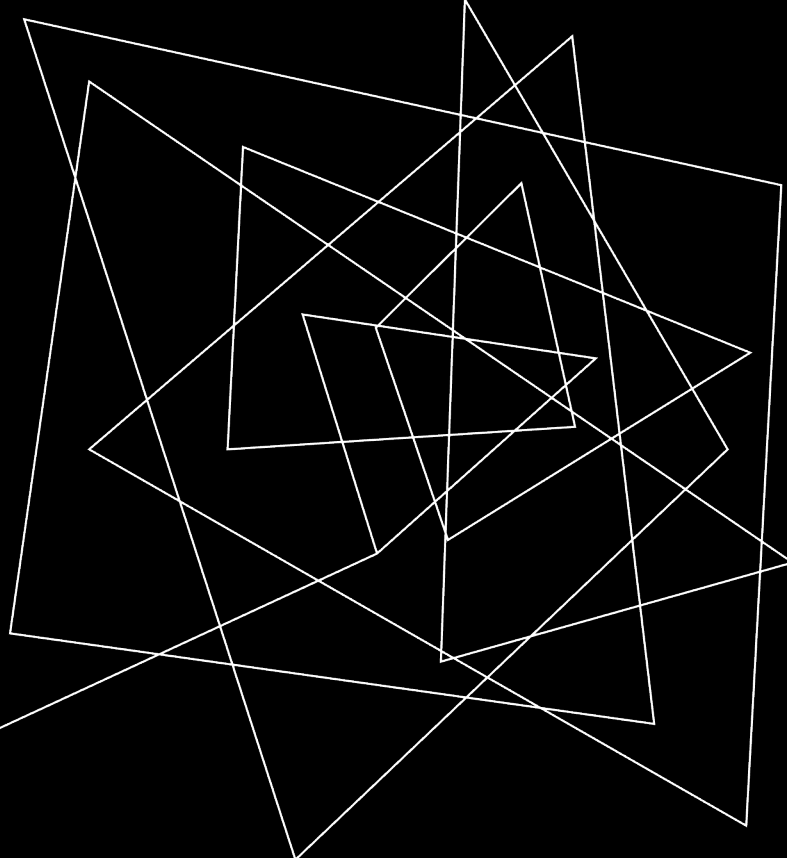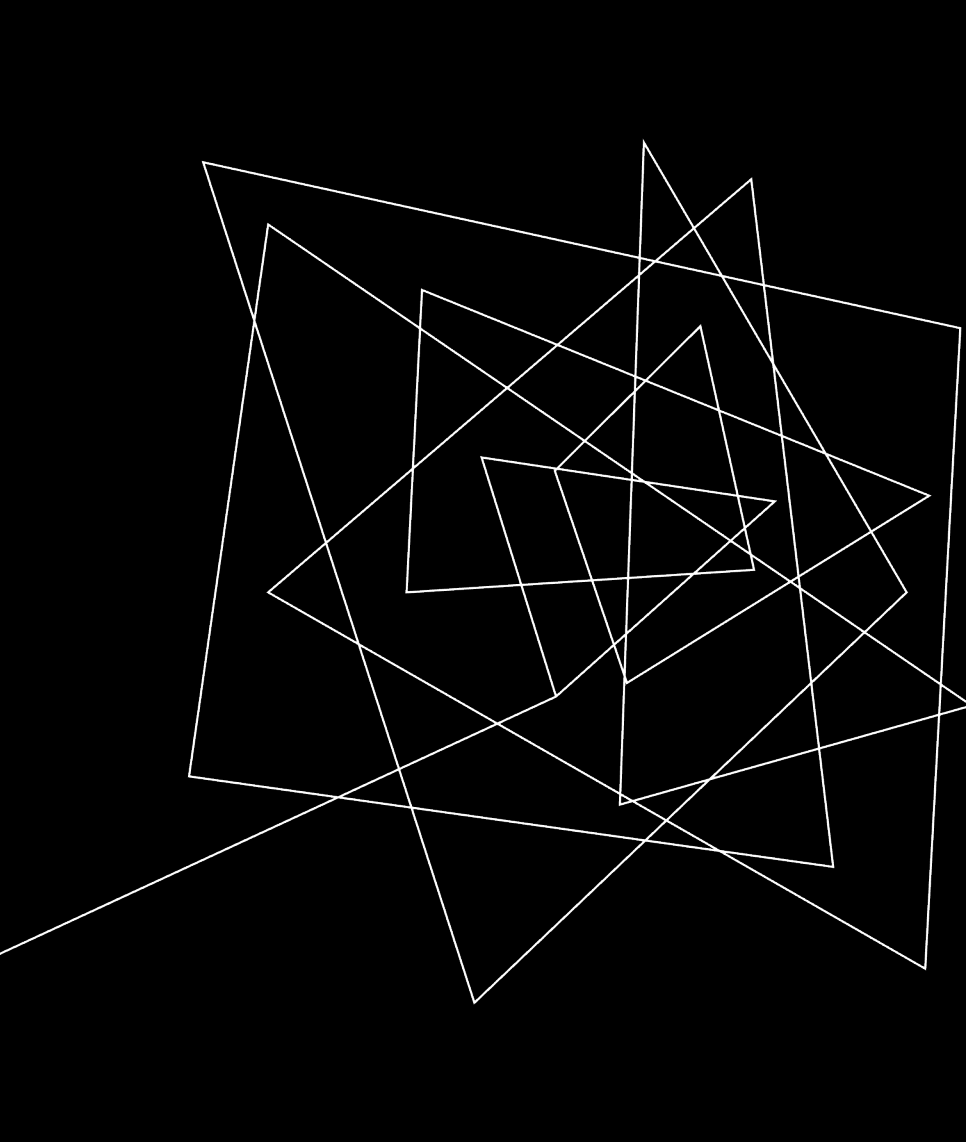
RANKED ORDER

EXERCISE

- Pick a topic you know well
- Creating a rough outline following an organizational method
    - Chronological
    - Importance
    - Problem & Solution
    - Ranked Order

INTRODUCTIONS & CONCLUSIONS

WHAT IS THE PURPOSE
OF INTRODUCTIONS AND
CONCLUSIONS?

WHY ARE
INTRODUCTIONS
AND CONCLUSIONS
IMPORTANT?

HOW CAN YOU
WRITE GOOD ONES?

INTRODUCTION EXAMPLES

BAD

Building an API in NestJS

This is my tutorial for building your first NestJS application.

[Tutorial starts here]

OKAY

Building an API in NestJS

In this tutorial, I'll show you how to build a NestJS API with authentication, field validation, and a Postgres database.

[Tutorial starts here]

BETTER

Building an API in NestJS

NestJS is a popular Node framework. It uses TypeScript and decorators to make adding validation, authentication, and data models feel like native parts of your application.

In this tutorial, I'll show you how to build a REST API in NestJS. You'll use Postgres for your data store and see how easy it is to add authentication and field-level validation to your app.

[Tutorial starts here]

BEST

Building an API in NestJS

Authentication and field-level validation are critical components in a REST API. A few years ago, I was working on a team that deployed an update to an endpoint without first ensuring that only admin users could change their roles. The bug went live, but we didn't catch it for a week in which time it was possible that users could have changed their role and even harvested data from other users.

Fortunately, after checking the logs, we found no violations like this, but using a framework like NestJS might have helped us prevent the issue. NestJS is a Node framework that uses TypeScript and decorators to add validation, authentication, and data models that feel like native parts of your code.

In this tutorial, I'll show you how to build a REST API in NestJS. You'll use Postgres for your data store and see how easy it is to add authentication and field-level validation to your app so you never run into a situation like my team did.

[Tutorial starts here]

CONCLUSION EXAMPLES

BAD

[Tutorial ends here]

That's how you build an API with NestJS.

OKAY

[Tutorial ends here]

In this tutorial, you've learned how to build your first API with NestJS. You saw how to add authentication, validation, and implement data models using Postgres and TypeORM.

BETTER

[Tutorial ends here]

Authentication and field-level validation are important components to a REST API. In this tutorial, you've seen how easy NestJS makes it to add these features to your API.

If you're interested in reading more about NestJS, download my comprehensive guide on the topic here. There are demo applications and even more code samples that you can use to build robust, secure APIs in NestJS.

BEST

[Tutorial ends here]

Now that you've seen how easy NestJS makes it to add authentication and field-level validation to your API, there's no excuse to make the same mistake my team did.

If you're interested in reading more about NestJS, download my comprehensive guide on the topic <u>here</u>. There are demo applications and even more code samples that you can use to build robust, secure APIs in NestJS.

EXERCISE

- Pick a recent article you wrote
- Rewrite the introduction and include the following
    - A "Hook"
    - Core Topics
    - Introduction

——

REFINING YOUR WRITING

WHAT DOES IT
MEAN TO REFINE
YOUR WRITING?

WHY DO YOU WANT
TO REFINE YOUR
WRITING?

REASONS FOR REFINING

- Consistency
- Quality
- More work
- Better reputation
    - Internally
    - Externally

———

HOW DO YOU
REFINE YOUR
WRITING?

TYPES OF EDITING EXPLAINED

STRUCTURAL EDIT
Reorganizing structure, consolidating repetition, cutting back rambling, new content suggestions

DEVELOPMENTAL EDIT
Reviewing and providing a written report on the book's structure and content

COPYEDIT
Reviewing paragraph structure, sentence structure, tone, readability, spelling & grammar, some feedback on content

PROOFREAD
Spelling, grammar, punctuation, consistency, typos

LEVEL OF DETAIL

Chapters

Paragraphs & sentences

Words

Tips for Editing
- Take a break first
- Read it out loud
- Use Grammarly
- Send it to a friend

SELF-EDIT

Types of Evidence in Writing
- Links to:
  - Academic Research
  - Surveys
  - Other Articles
- Quotes
- Examples

PROVE EVERY POINT
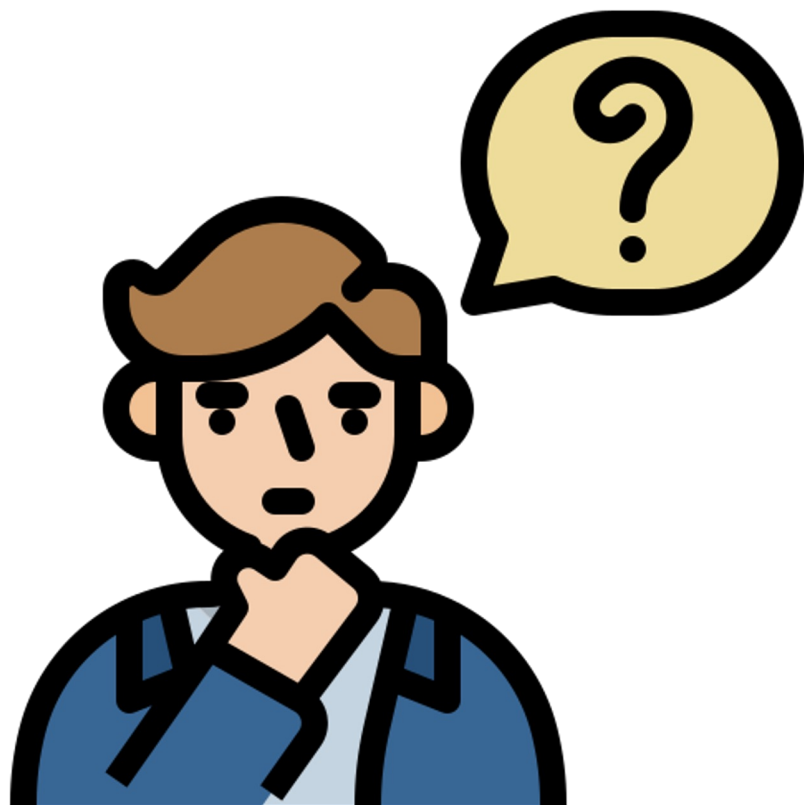
ANSWER THE "WHY"

Answering "How":
Next, import the Passport Node module and add it to your controller.

Answering "Why" and "How":
In order to support multiple authentication providers, OAuth, or JWTs, you can use the Passport package. Import the Passport Node module and add it to your controller.

This test is very hard to read because it's all presented in one big paragraph. I didn't even include any bold or italicized text for emphasis - everything is just crammed together, so there's no way for a reader to understand what it's saying without reading every single word. In fact, it could be presenting a lot of information that the reader doesn't actually need. They might be able to skip to the next portion of the tutorial if they already did this or if they know they don't need it. You shouldn't expect your readers to follow your tutorials blindly, they're probably mixing and mashing your tutorial with their project's requirements, so scanning over your tutorial will help them get a feel for the major steps involved. They'll also be able to leave the tutorial, come back, and figure out where they left off more easily when the text is broken up into defined chunks.

CONSIDER "SCANNABILITY"

Why Readers Scan
Consider your typical reader. They're busy and they probably want to get an idea of what your article is about before they dig in deep.

What Makes Text "Scannable"?
Headers, short paragraphs, and images or videos to break up long spans of text all help.

Testing Scannability
Zoom out. How does your article look from a distance? Zoom in, how does it look on mobile devices? Make sure a reader on any device can quickly get the main points just from the headers and images.

EXERCISE

- Pick a recent article you wrote
- Rewrite one section
    - Self-editing
    - Proving every point
    - Answering the "why"
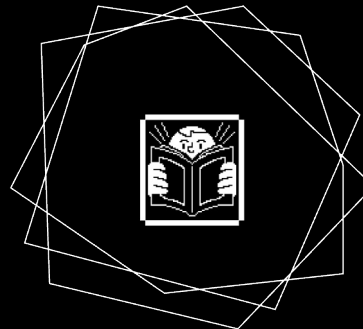   - Thinking of scannability

RECAP

- Why write?
- Understanding types of articles
- Organizing articles
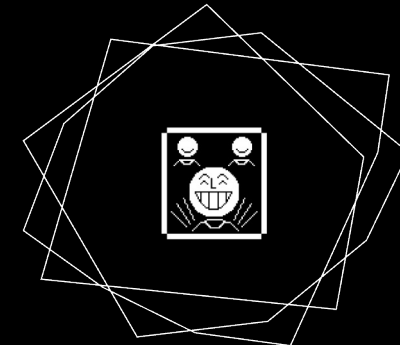- Introduce and conclude
- Refine your writing

WHAT'S NEXT?

INTERNSHIPS

Always helpful for DevRel, Dev and Technical Writer Roles

FREELANCING

Write Content and make a living

OPEN SOURCE PROGRAMS

Be a part of programs like GSOD, GSOC, LFX

THANK YOU

HRITTIK ROY

@HRITTIKHERE

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