

# Introduction to technical writing

The fundamentals of technical writing | BUT 2025

The Red Hat Customer Content Services team



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at Red Hat for 4+ years.

Formerly English translator and teacher,  
currently also a clinical research coordinator.

# Organization of the *Fundamentals of technical writing* course:

Information about the course is available in [GitHub](#)

- Slides after each lecture

Goal of the course

Discord

<https://discord.com/invite/36aEfa7ret>

Communication channels

- Email, Discord

Laptop with administrative privileges needed for all lectures



## Grading

Pass/fail is based on total points (24 points)

- **14** points for attendance (2 points per day: 1 for morning, 1 for afternoon)
- **10** points for in-class assignments
- Additional points at the teacher's discretion for homework and in-class activity
- **75% of points (18 points)** needed to pass

## Graded in-class assignments

**10 pts in total, 1 pt for each assignment except Final project: 3 pts**

1. May 26: Tech writing aptitude test
2. May 27: Style quiz
3. May 28: Style guides in practice
4. May 29: Soft skills practical exercise
5. June 2: Markdown exercise as part of the Tooling class
6. June 2: S/LLM
7. June 3: Collaboration through version control
8. June 5: Final project - **value of 3 points**

# Course overview: Week 1

Day	AM programme 10:00-12:00	PM programme 13:00-15:00	Homework
Mon 26.5.	<b>Introduction to tech writing - presentation</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> </ul>	<b>Tech writing aptitude quiz</b> <ul style="list-style-type: none"> <li>• ~120 mins</li> <li>• Laptop needed</li> </ul>	<b>Text comparison</b>
Tue 27.5.	<b>Style I</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> </ul>	<b>Style quiz</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> </ul>	<b>Text rewrite</b>
Wed 28.5.	<b>Style II</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> </ul>	<b>Style guides in practice</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> </ul>	<b>How to edit other people's content without pissing them off</b>
Thur 29.5.	<b>Soft skills - theory</b> <ul style="list-style-type: none"> <li>• ~120 mins</li> <li>• Laptop needed</li> </ul>	<b>Soft skills - practical exercises in groups</b> <ul style="list-style-type: none"> <li>• ~120 mins</li> <li>• Laptop needed</li> </ul>	<b>Crucial conversations</b>

# Course overview: Week 2

Day	AM programme 10:00-12:00	PM programme 13:00-15:00	Homework
Mon 2.6.	<b>Hard skills - theory</b> <ul style="list-style-type: none"> <li>• ~40 min</li> </ul> <b>Tools</b> <ul style="list-style-type: none"> <li>• ~80 min</li> <li>• Laptop needed</li> <li>• GitHub account needed</li> </ul>	<b>S/LLMs</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> <li>• Account with OpenAI(chatGPT) or <a href="https://gemini.google.com">gemini.google.com</a></li> </ul>	<b>GitHub preparation</b>
Tue 3.6.	<b>Teamwork exercises</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> <li>• GitHub account needed</li> </ul>	<b>Collaboration through version control</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> <li>• GitHub account needed</li> </ul>	<b>Finishing PR for peer review</b>
Thu 5.6.	<b>Peer review + Final project part I</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> <li>• GitHub account needed</li> </ul>	<b>Final project part II + Course conclusion</b> <ul style="list-style-type: none"> <li>• ~120 min</li> <li>• Laptop needed</li> <li>• GitHub account needed</li> </ul>	

Red Hat

open source



software  
certifications

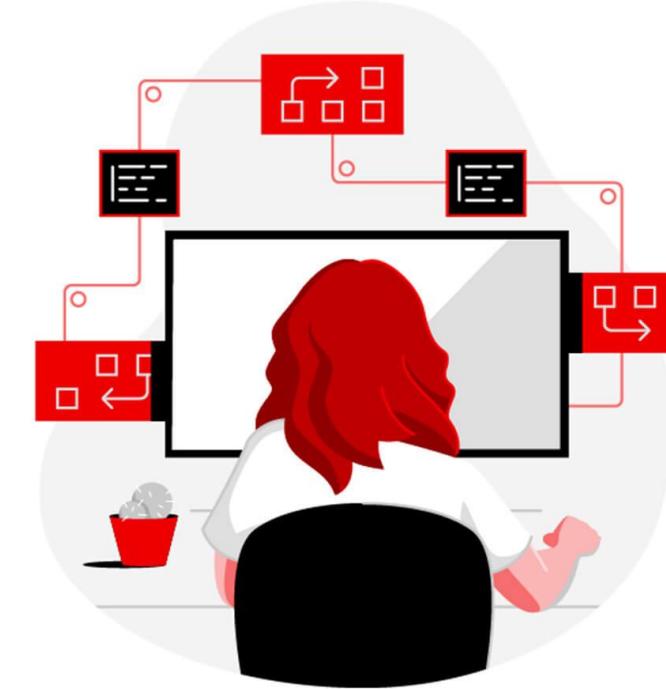
cloud

OpenShift

development tools

Ansible

technical support



RHEL

subscription

# What we'll discuss today

- What is technical writing?
- Types of technical documentation
- Role of technical writers
- Life of a technical writer
- It is all about users!
- Using AI
- In-class assignment

Instructions unclear, got stuck in washing machine.



What is technical writing for?

What is technical writing like?



## What is technical writing?

- Helps readers achieve their goal (learning or doing)
- Writes *about* the product, but *for* the user
- Technical information is accurate, clear, and effective
- Forms of tech writing:
  - Manuals, guides
  - Solutions, troubleshooting
  - Release notes, patch notes



## The importance of technical writing

- Users understand the product better and use it more effectively.
- Devs understand code quicker than parsing or experimenting.
- Customers make better decisions about buying the right product.
- Better knowledge-sharing

“How hard can it be?”



## EXERCISE 1: Tea

- Describe the process of making  
1 cup of loose-leaf tea



# Types of technical documentation

Manuals, guides	Solutions, troubleshooting	Release notes, patch notes
<ul style="list-style-type: none"><li>• “How do I do XY?, “What is XY?”</li><li>• Conceptual, procedural, referential</li><li>• Longer, more detailed, focused on a use case</li></ul>	<ul style="list-style-type: none"><li>• “XY is not working”, “How to fix the XY error?”</li><li>• Sometimes integrated into the product itself</li><li>• Focused on a specific problem, often curated by customer support</li></ul>	<ul style="list-style-type: none"><li>• “What changed in version XY?”, “What’s new in the latest XY?”</li><li>• Simple structure, brief, focused on a software version</li></ul>

# Types of technical documentation

## Chapter 20. Installing and managing Windows virtual machines

To use Microsoft Windows as the guest operating system in your virtual machines (VMs) on a RHEL 9 host, Red Hat recommends taking extra steps to ensure these VMs run correctly.

For this purpose, the following sections provide information on optimizing Windows VMs on the host, as well as installing and managing these VMs.

### 20.1. Installing Windows virtual machines

You can create a fully-virtualized Windows machine on a RHEL 9 host using the graphical Windows installer inside the virtual machine (VM), a Windows guest operating system (OS).

To create the VM and to install the Windows guest OS, use the `virt-manager` command or the RHEL 9 web console.

#### Prerequisites

- A Windows OS installation source, which can be one of the following:
  - An ISO image of an installation medium
  - A disk image of an existing VM installation
- A storage medium with the KVM `virtio` drivers.

To create this medium, see [Preparing virtio driver installation media](#).

### Unable to SSH to new Virtual Machine after upgrading the template to RHEL 8.7 or 9

 **SOLUTION VERIFIED** - Updated November 29 2022 at 9:49 PM - [English](#) ▾

#### Environment

- Red Hat Enterprise Linux (RHEL) 9
  - cloud-init-22.1-5 or higher (9.1)
  - cloud-init-21.1-10 or higher (9.0)
- Red Hat Enterprise Linux (RHEL) 8
  - cloud-init-22.1-5 or higher (8.7)
- Configuration file `cloud.cfg` originally created on RHEL 8.4 with `cloud-init-20.3-10` or lower
- Red Hat Virtualization 4
- Red Hat OpenStack Platform 16
- Red Hat OpenShift Container Platform 4
- Amazon AWS
- Microsoft Azure
- Google Cloud Platform

#### Issue

- Unable to SSH to a Virtual Machine after upgrading it to RHEL 8.7, 9 or higher versions.
- During first boot, sshd fails to start on new Virtual Machines:

```
Nov 29 08:49:18 rhe18 systemd[1]: Starting OpenSSH server daemon...
Nov 29 08:49:18 rhe18 sshd[2946]: Unable to load host key: /etc/ssh/ssh_host_rsa_key
Nov 29 08:49:18 rhe18 sshd[2946]: Unable to load host key: /etc/ssh/ssh_host_ecdsa_key
Nov 29 08:49:18 rhe18 sshd[2946]: Unable to load host key: /etc/ssh/ssh_host_ed25519_key
Nov 29 08:49:18 rhe18 sshd[2946]: sshd: no hostkeys available -- exiting.
Nov 29 08:49:18 rhe18 systemd[1]: sshd.service: Main process exited, code=exited, status=1/FAILURE
Nov 29 08:49:18 rhe18 systemd[1]: sshd.service: Failed with result 'exit-code'.
Nov 29 08:49:18 rhe18 systemd[1]: Failed to start OpenSSH server daemon.
```

#### Resolution

## Chapter 1. Overview

### 1.1. Major changes in RHEL 9.1

#### Installer and image creation

Following are image builder key highlights in RHEL 9.1 GA:

- Image builder on-premise now supports:
  - Uploading images to GCP
  - Customizing the `/boot` partition
  - Pushing a container image directly to a registry
  - Users can now customize their blueprints during the image creation process.

For more information, see [Section 4.1, "Installer and image creation"](#).

#### RHEL for Edge

Following are RHEL for Edge key highlights in RHEL 9.1-GA:

- RHEL for Edge now supports installing the services and have them running with the default configuration, by using the `fdo-admin` CLI utility

For more information, see [Section 4.2, "RHEL for Edge"](#).

#### Security



## The role of technical writers

- Understand the subject → Describe it well enough to save work and stress for the readers.



## Who can be a technical writer **ANYONE!**

*(...with some effort)*

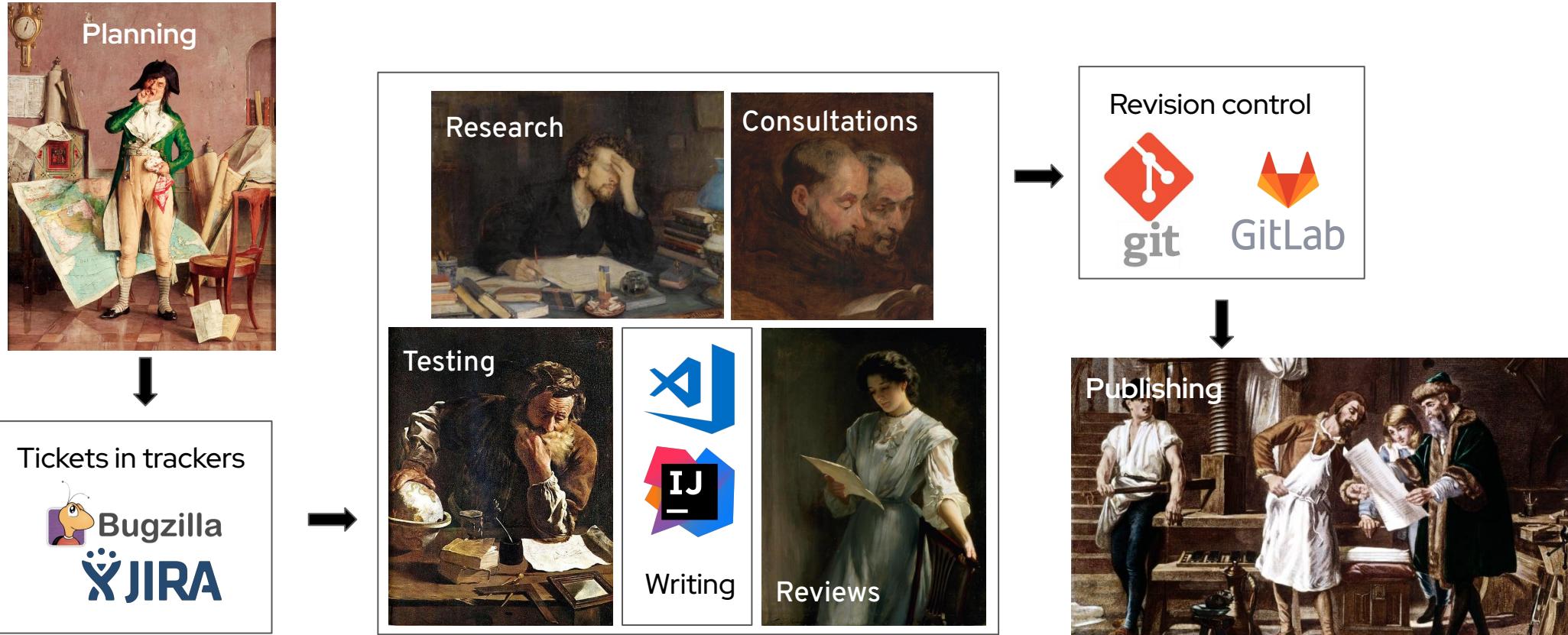
However, it helps to have experience with:

- Written composition in English
- The related subject matter (such as IT)
- Teamwork

What people think I do  
when I tell them that I am a technical writer:



# How documentation actually happens



Credits:

- The Passion of Creation by Leonid Pasternak; wikimedia Commons, PD-Russia-expired, edited
- Domenico Fetti - Archimedes, Wikimedia Commons, PD-US, edited
- Anonymous, a Copy after a painting traditionally attributed to Van Dyck of Two Monks Reading, Wikimedia Commons, PD-US, edited
- Thomas Kennington - Reading the letter, Wikimedia Commons, PD-US, edited
- Giovanni Battista Quadrone - The Cartographer, Wikimedia Commons, PD-US, edited
- ClassicStock



#### QUICK TIP



Get acquainted with the concept of [user personas](#). While not a technical writing concept, personas can help you customize your content to best suit your target audience.

## The user

The user is the focus of your writing. Make sure you know who your target audience is and tailor your content accordingly.

Best practices for user-focused content:

- Use second person.
- Make the content action-oriented.
- Ask for user feedback.
- See what I did there?

# User story

User stories help plan new features and functionalities in Agile development. They focus on what the user wants and how the proposed feature/functionality can help them reach their goal:

“As a [type of user], I want to [goal], so that [benefit].”

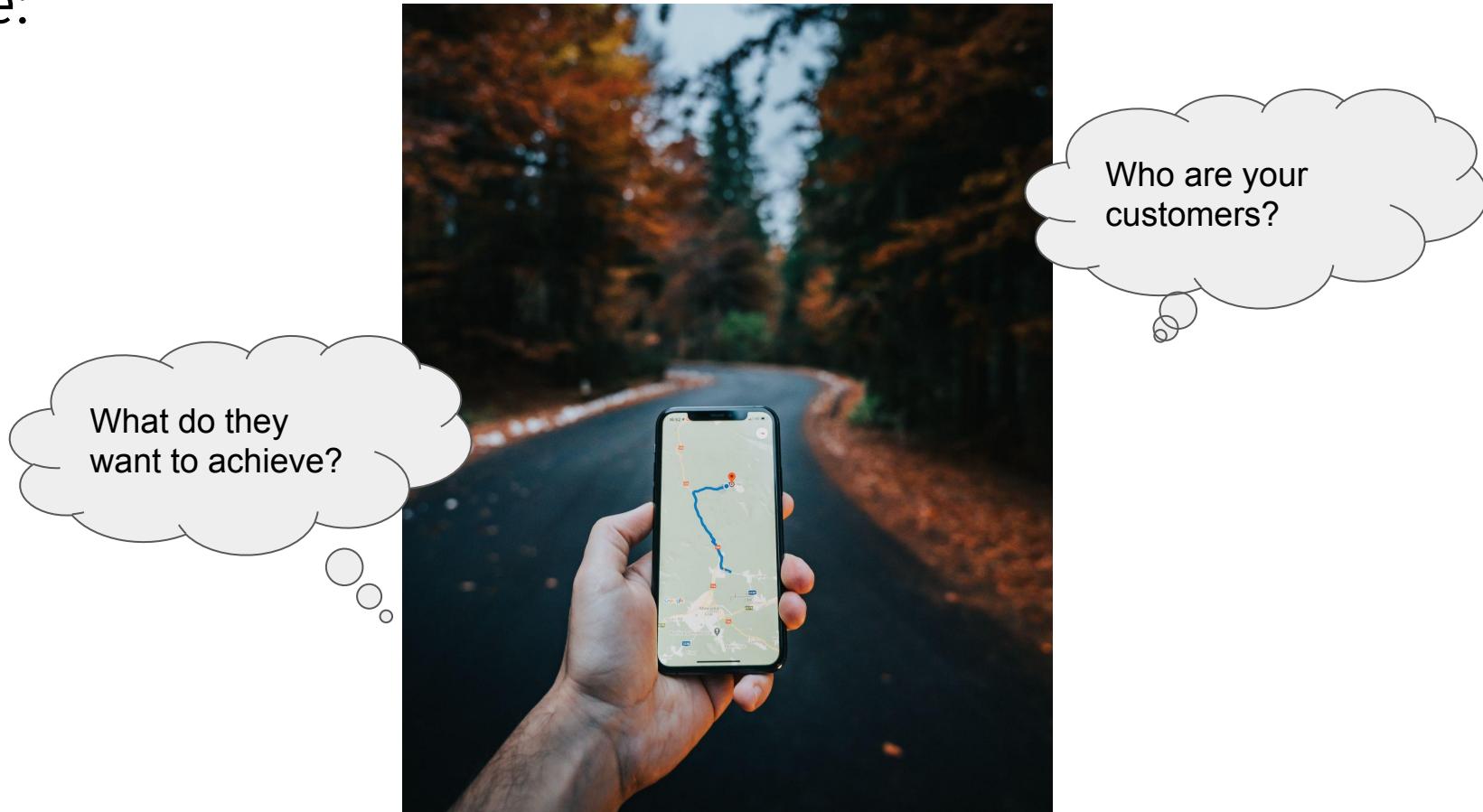
User stories are visualized as maps that capture each step the user takes when using the proposed feature/functionality to achieve their goal.

User story map elements:

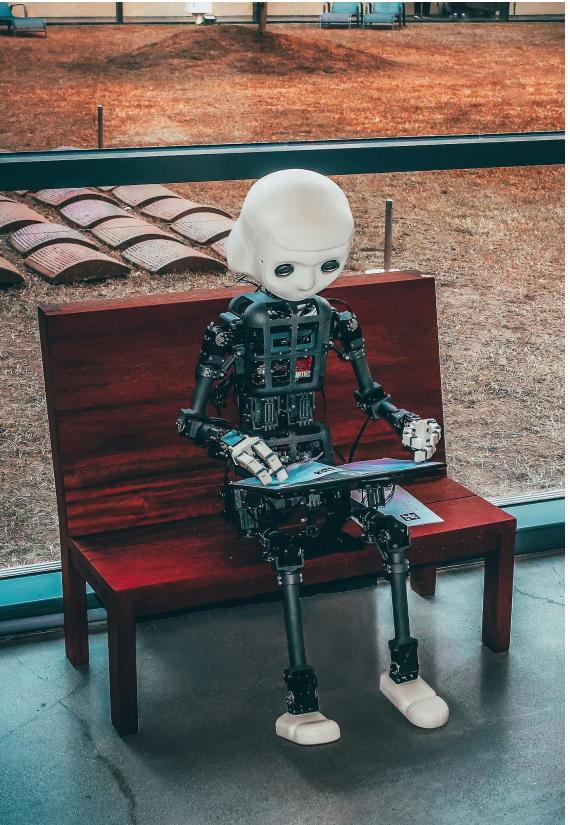
- Activities
- Steps
- Details

## EXERCISE 2: What do users want

Online maps and navigation - try to think of as many user stories as possible:

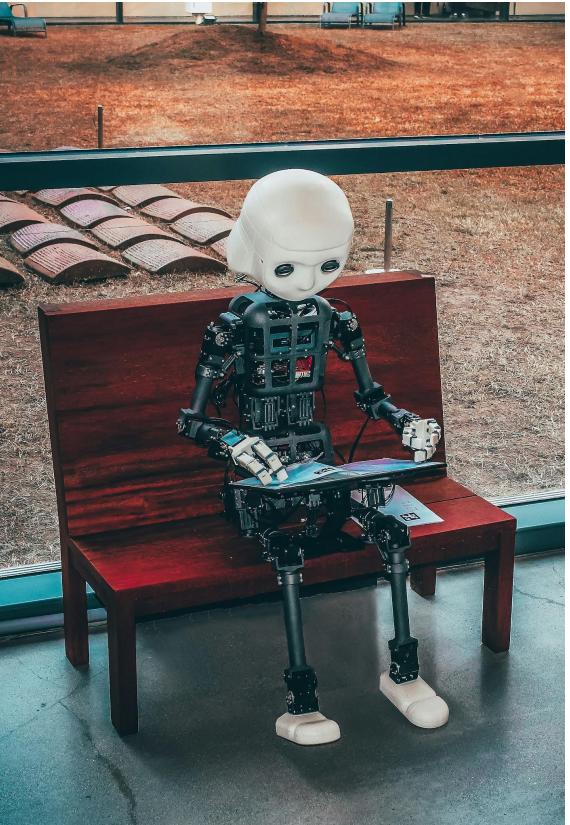


# How (not) to use AI tools (LLMs)



*“If I were you, I would use AI a lot and trust it very little.”*  
- Graham Morehead, AI/ML professor

- AI tools produce output that seems great but very often isn't.
- Use it for:
  - Brainstorming
  - Overcoming writer's block
  - Initial research into well-known areas
- Don't use it for:
  - Homeworks :)
  - Writing documentation (without thorough review)
  - Research into obscure or recent areas



**TLDR:**

**Don't use AI tools in this course unless  
you're explicitly told to do so!**

# Summary



- DOCUMENTATION
  - Technical writing
  - Types of documentation
- WRITER
  - The role of technical writers
  - What tech writers usually do
- USER
  - = king, target audience, user stories



## IN-CLASS ASSIGNMENT

[\[Click here to create a copy of the assignment doc\]](#)

# Thank you