Lunch & Learn

An Introduction To:
Understanding AI-Assisted Regulatory Workflows

12pm November 20th, 2025

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Disclaimer

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Land Acknowledgement

Welcome!

Today's Session:

- What AI is (and what it isn't)
- General vs Specific AI Tools
- Prompting and Evaluating Responses
-Data Privacy, Accuracy and Professional Responsibility
- Trax Codes

PRESENTED BY: DIGITAL trax

PARTNERS: OBOA

AI TRAINING COURSE

UNDERSTANDING AI-ASSISTED REGULATORY WORKFLOWS

WHAT YOU'LL LEARN

- AI FUNDAMENTALS AND ITS ROLE IN REGULATORY WORK
- FRAMEWORKS FOR ASSESSING WORTHINESS OF AI TOOLS
- EXECUTE WORKPLACE TASKS (E.G. PERMIT REVIEWS) ASSISTED BY AI
- APPROACH AI TOOLS INFORMED, SAFELY, AND RESPONSIBLY
- BUILD A PERSONALIZED ACTION PLAN FOR INTEGRATION OF AI INTO WORKFLOW

EARN CPDP CREDITS!*

TAKE THE COURSE FOR FREE!

- ACCESS THE TRAINING **FREE-OF CHARGE** ON YOUR ASSOCIATION'S LEARNING PORTAL
- VISIT WWW.TRAX.CO/AI-TRAINING FOR MORE INFO

*ASSOCIATION MEMBERS **MUST** TAKE TRAINING **THROUGH THEIR ASSOCIATION'S TRAINING PORTAL** TO CLAIM CPDP CREDITS

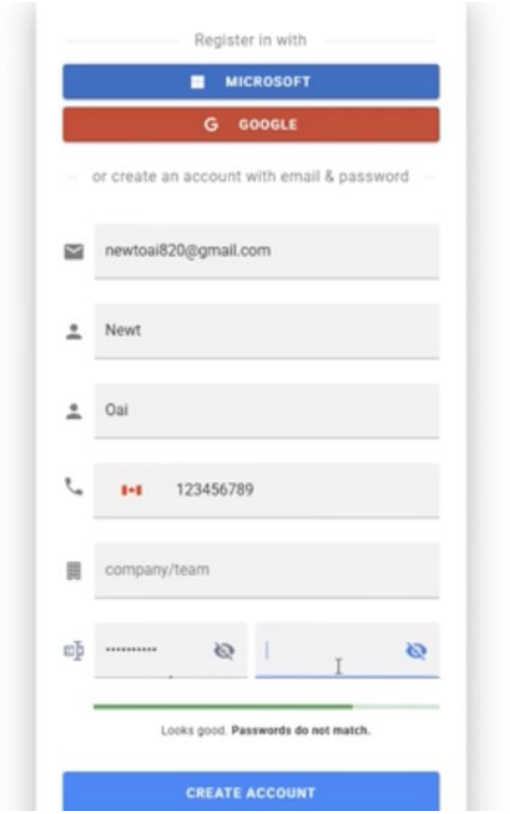
Before we begin…

Suggested

Open Trax Codes on a computer or phone:

https://app.trax.co/

Sign up for a free trial for use in this session.



An Introduction To:

Understanding AI-Assisted Regulatory Workflows

Introduction

ChatGPT

Gemini

alexa

trax codes

THOMSON REUTERS

Copilot

Who We Are

trax

DIGITAL

SFU
SIMON FRASER UNIVERSITY

UNIVERSITY OF WATERLOO
COMPUTER SCIENCE

BUILDING OFFICIALS' ASSOCIATION OF BC
FIRE HEALTH SAFETY STRUCTURAL
B O A

OBOA
ONTARIO BUILDING OFFICIALS ASSOCIATION

First Nations National Building Officers Association
Association nationale des agents du bâtiment des premières nations
20 YEARS ANS

AI is Already Here

THOMSON REUTERS

trax codes

43%

Using GenAI in Professional Work

300

Municipalities in Canada

Supporting Capacity

4.5 million

Permits Needed by 2030

5000

Building Officials in Canada

CMHC SCHL

Your Voice & AI

"It's the way of the future. We need to be able to understand it and use it wisely."

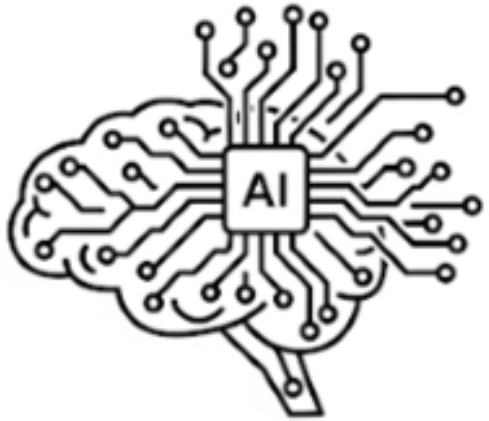
"How can AI benefit the inspection process?"

"How can AI accelerate permit review?"

Your Voice & AI

- Have you used a LLM / chat-based AI tool before?
- What are you curious or interested about with AI?
- What concerns do you have about using AI at work?

AI Skills Framework



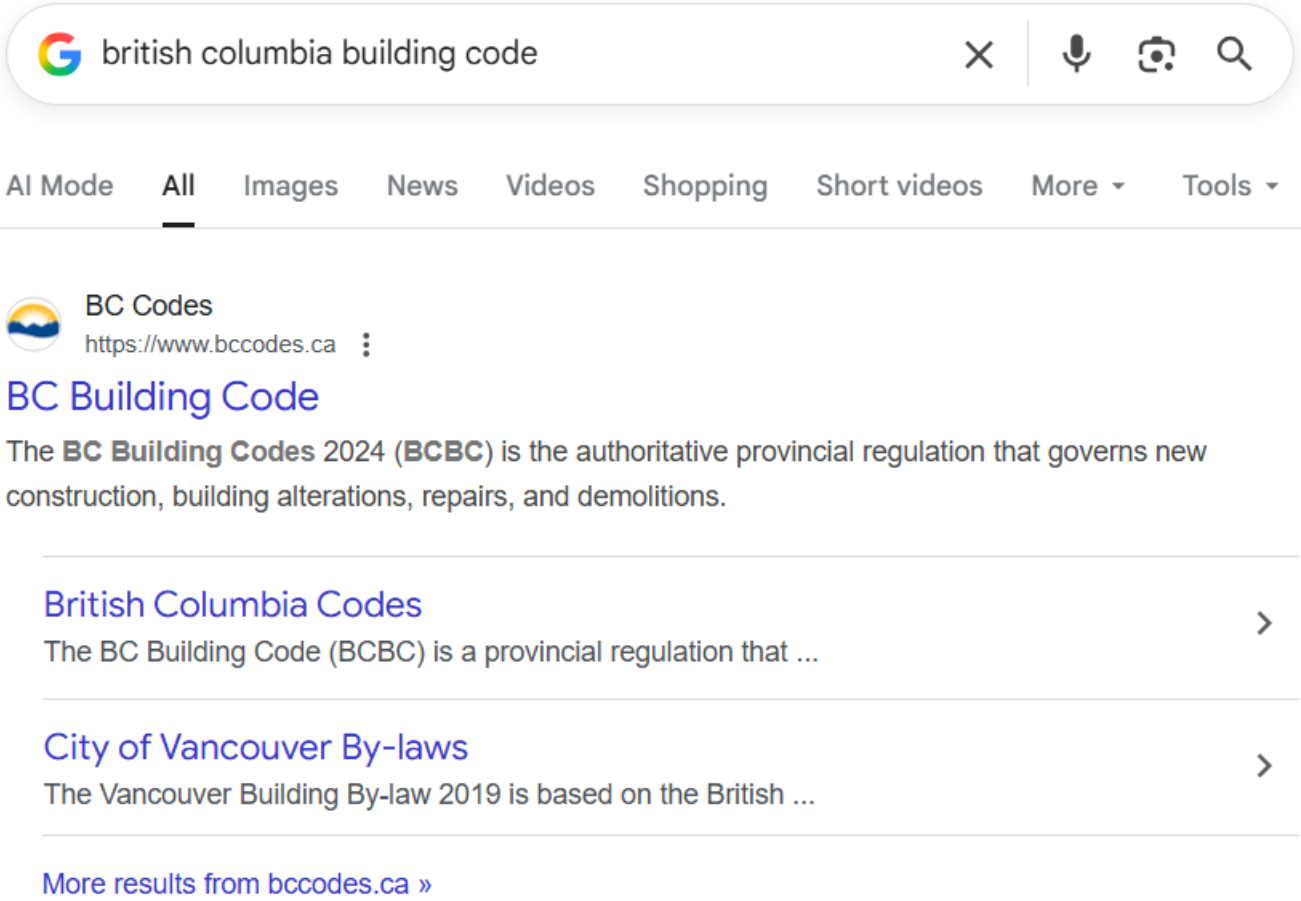
What is AI (and LLMs)?

When to use AI tools?

How to use AI tools?

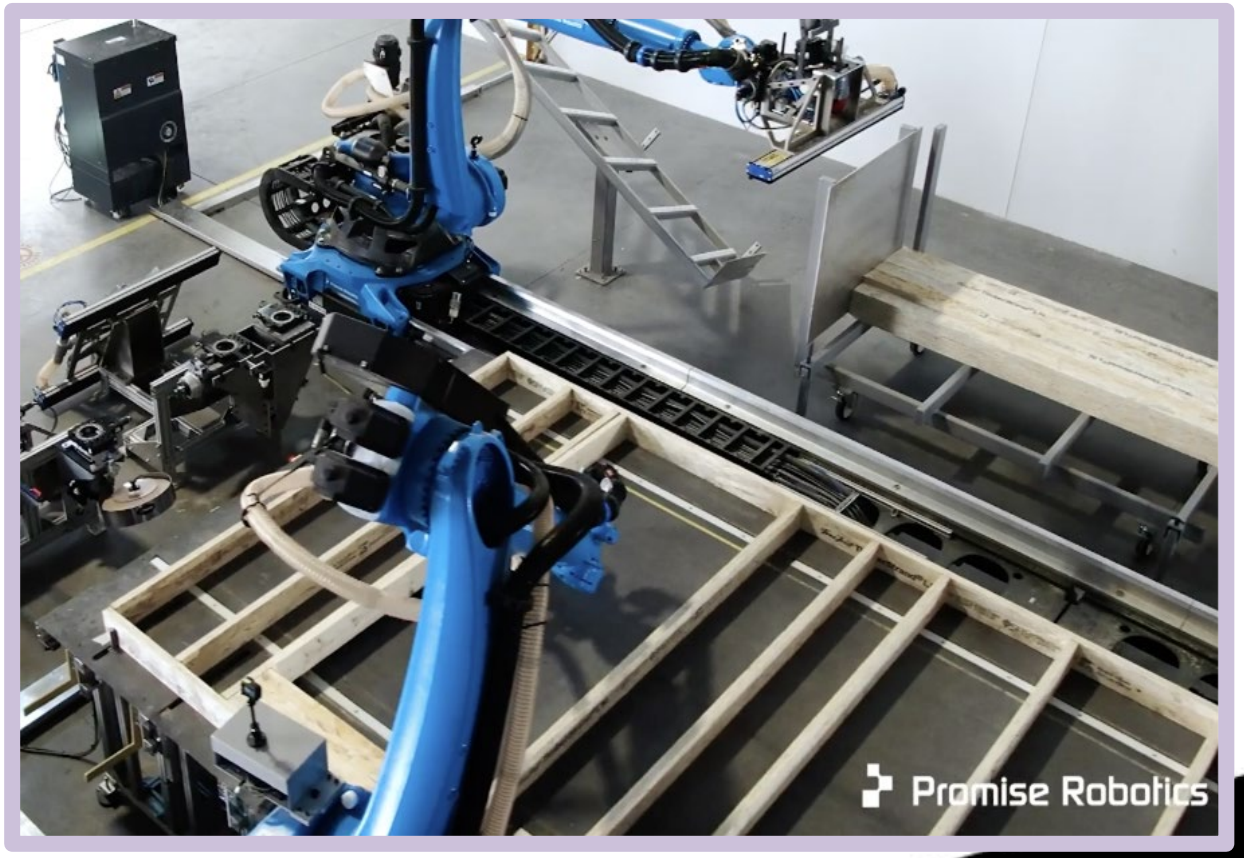
Which AI tools to use?

Current Use of AI



Current Use of AI

dConstruct & Promise Robotics



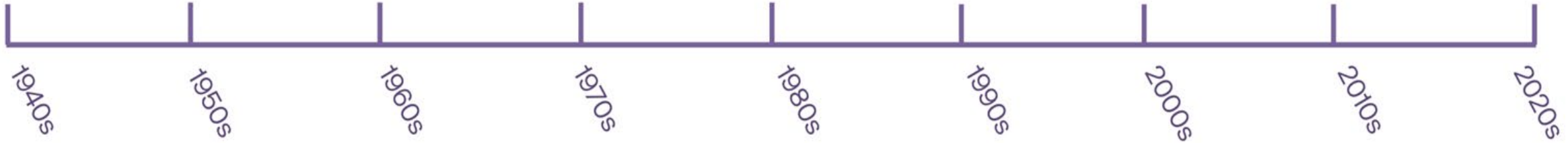
AI Breakthroughs

2017

A technical breakthrough led to the current explosion of AI everywhere.

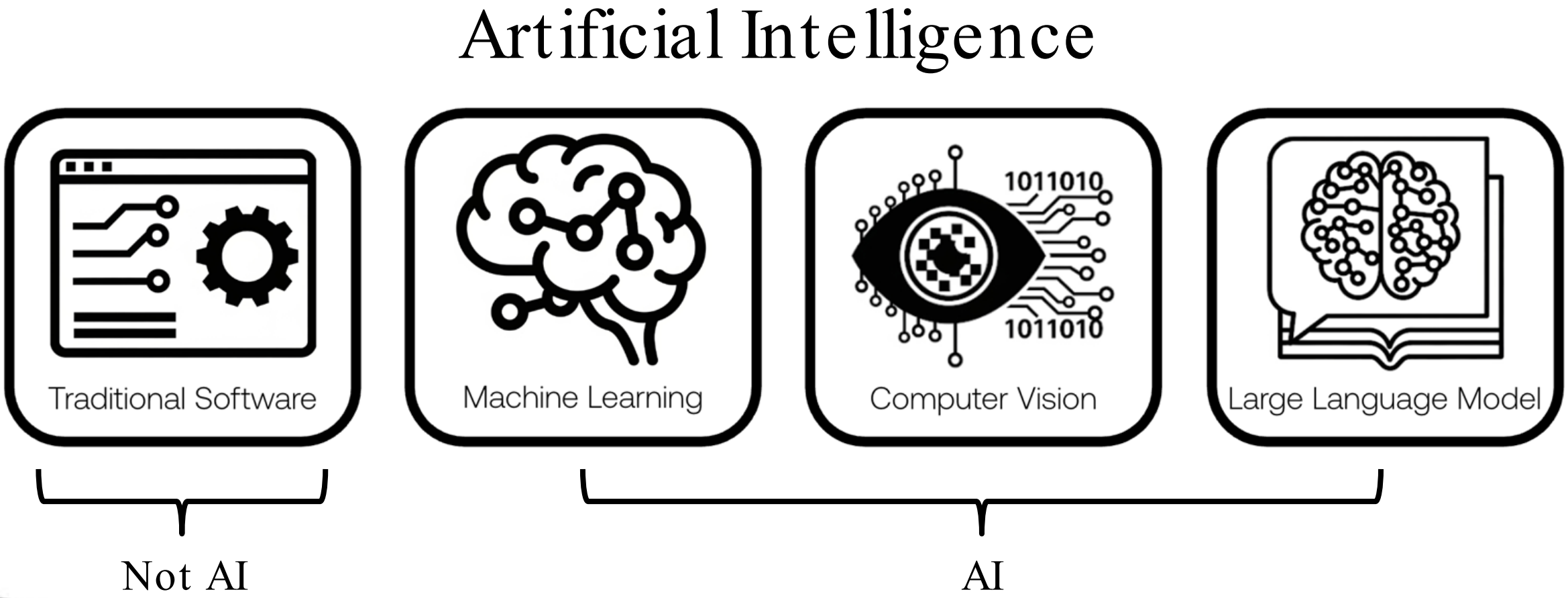
2022

Public launch of ChatGPT. By January 2023 it had 100 million users.



We now have people collaborating with AI tools in their personal and professional life.

What is AI?


Artificial Intelligence
Traditional Software
Machine Learning
1011010
1011010
Computer Vision
Large Language Model
Not AI
AI

LLMs in Action

Are there any requirements for operable windows in a group D office space?

trax

BACK

Are there any requirements for operable windows in a group d office space?

ALL | TABLES | FIGURES | TERMS | QUESTION & ANSWER

FILTERS

Most Current

Jurisdiction

All | Ontario | British Columbia | Alberta | Saskatchewan | New Brunswick | Newfoundland and Labrador | Nova Scotia | Prince Edward Island | Northwest Territories | Yukon | Nunavut | National

TRAX BUILDING CODES COPILOT

The British Columbia Building Code does not explicitly state requirements for operable windows in Group D office spaces. However, it is essential to ensure that any windows used for egress meet the necessary safety and accessibility standards, particularly in relation to escape routes and emergency exits.

References:

- 3.2.2.64. Group D, up to 2 Storeys (British Columbia Building Code 2024)
- A-3.8.2.1. Accessibility (British Columbia Building Code 2024)
- A-9.9.10.1.(1) Escape Windows from Bedrooms (British Columbia Building Code 2024)

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How do LLMs Work?

Large Language Models (LLMs)

Training

Dataset

Output

LLMs: Myths & Reality

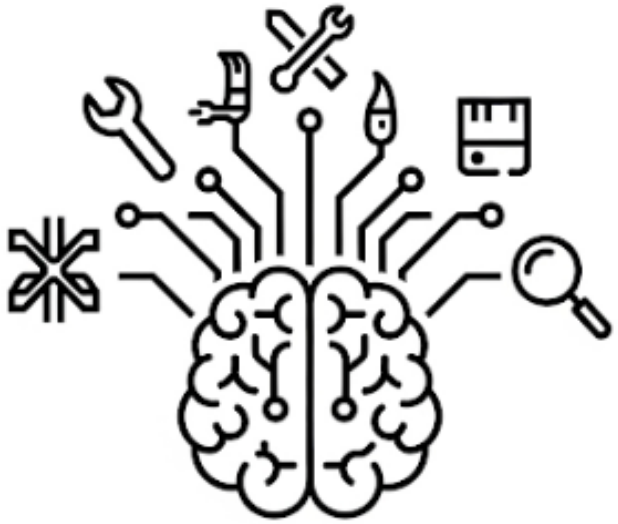
Roles: Humans vs. AI

Think of AI as a…

- tool
- assistant
- support

It needs <u>oversight</u>.

Selecting a Tool



Which AI tools to use?

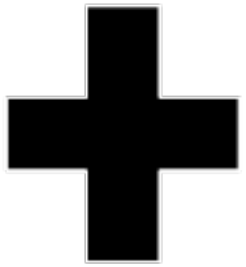
General vs. Specific

General Use Tools

Very Large Dataset

Can Have Trouble "Unmixing" Data in its Responses

Training



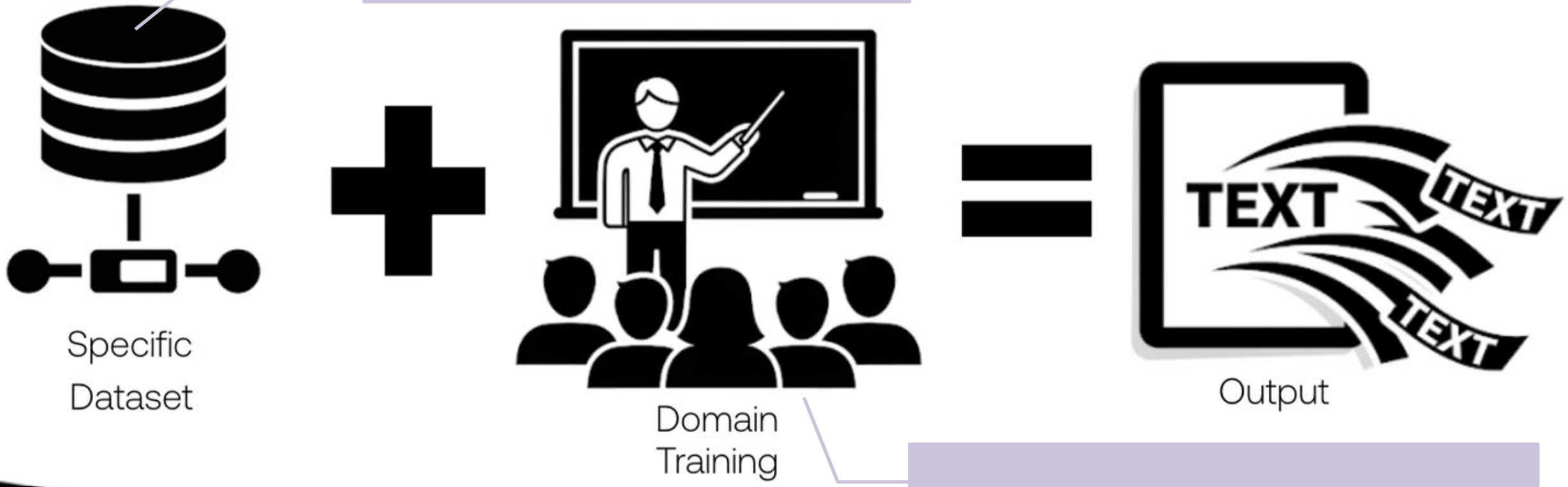
Dataset

Output

Trained on Large Dataset

Specific Use Tools

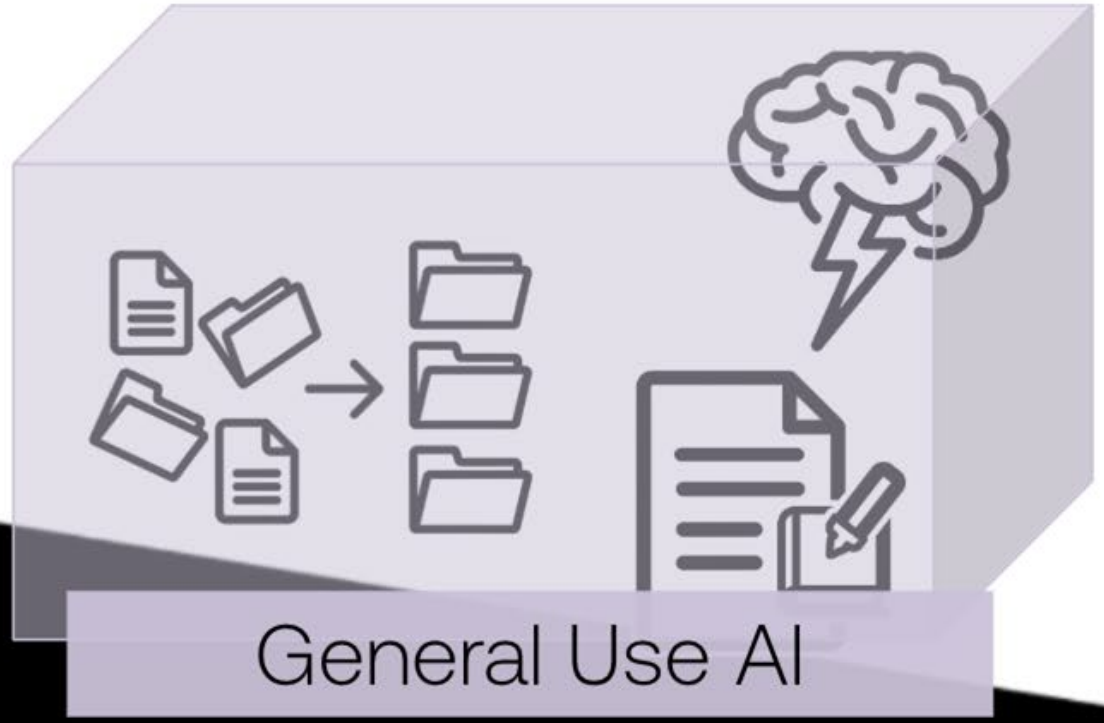
Specific Domain Dataset



Experts Vetting Training and Responses

When to Use AI?

Some common current uses: brainstorming, summarizing, reviewing, (re)organizing–depending on the tool's purpose and design.



Selecting an AI Tool

Design & Training

- ☑ Designed for the area of expertise I'm interested in?
- ☑ Designed by people who are themselves experts in that area?
- ☑ Designed for people like me who have expertise in that area?

Dataset

- ☑ Selective of what information is included in its dataset?
- ☑ Transparent about what information is included in its dataset?
- ☑ Constantly updating its dataset with current information?
- ☑ Able to filter by the date/version/etc. of the information in its dataset?

Trustworthiness

- ☑ Making up answers when it doesn't have the correct one?
- ☑ Showing where it got its information so you can verify?

Quantity vs. Quality

High Quantity, General Purpose Dataset

High Quality, Code-Specific Dataset

Quality of Dataset

ChatGPT

General Use LLM that might have regulatory info

Not able to unmix older and newer information

Unable to filter select information, like jurisdiction-specific regulations

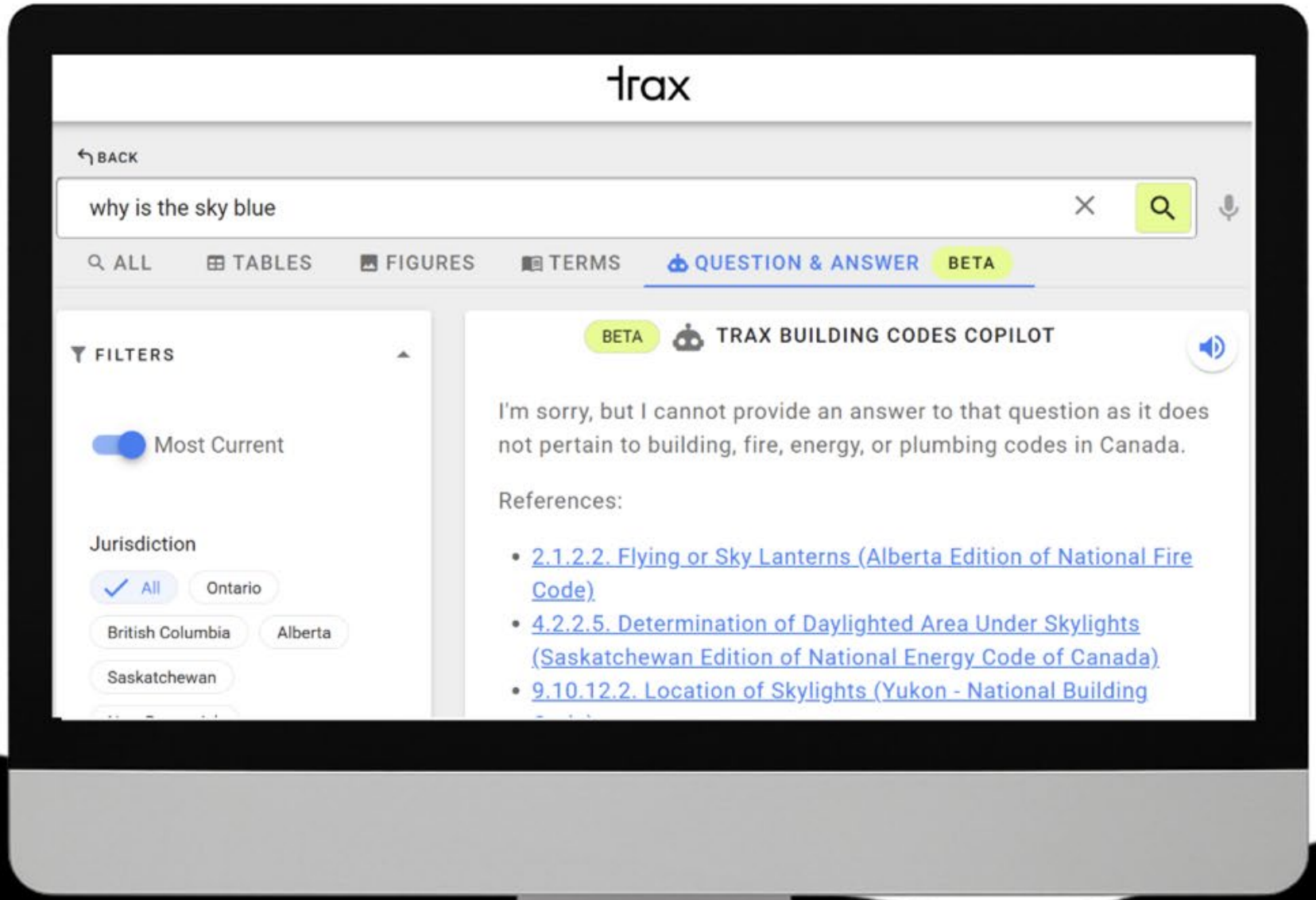
trax codes

Specific Use LLM

Only has information on building codes, fire codes, etc.

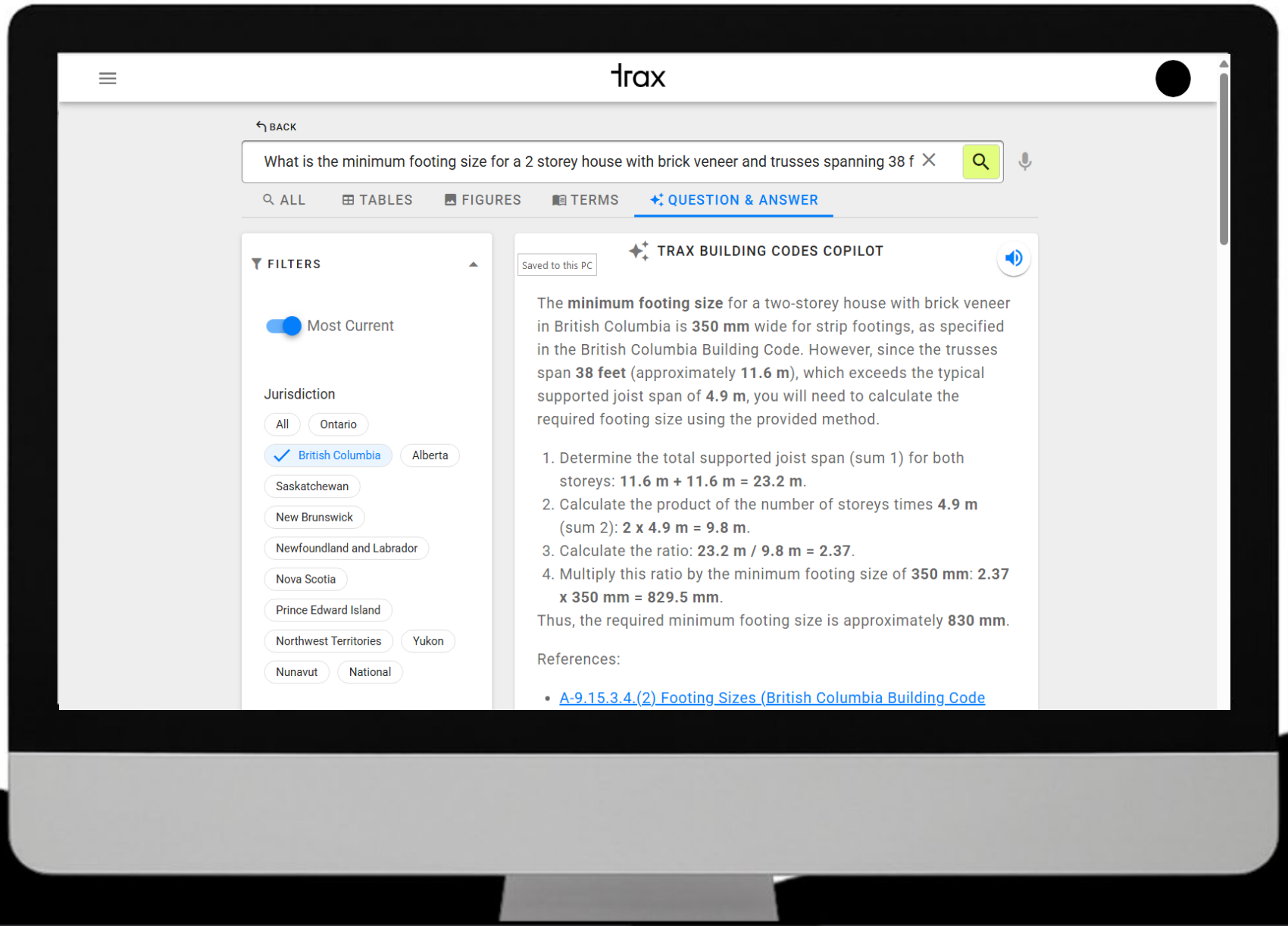
Can set the jurisdiction and versions of the codes with a filter

Dataset & Hallucinations



Regulatory Info Example

What is the minimum footing size for a 2 storey house with brick veneer and trusses spanning 38 feet in British Colombia?



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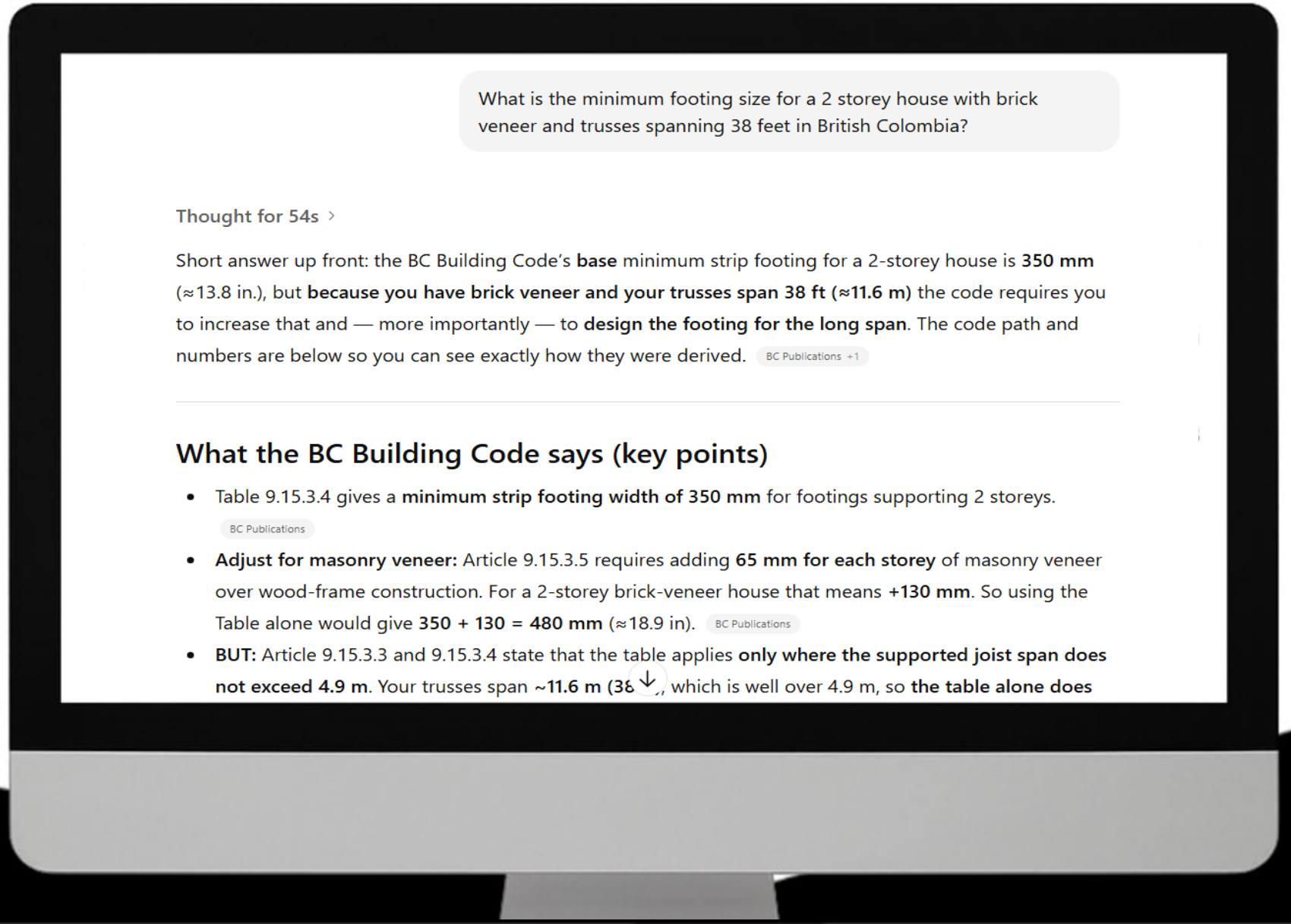

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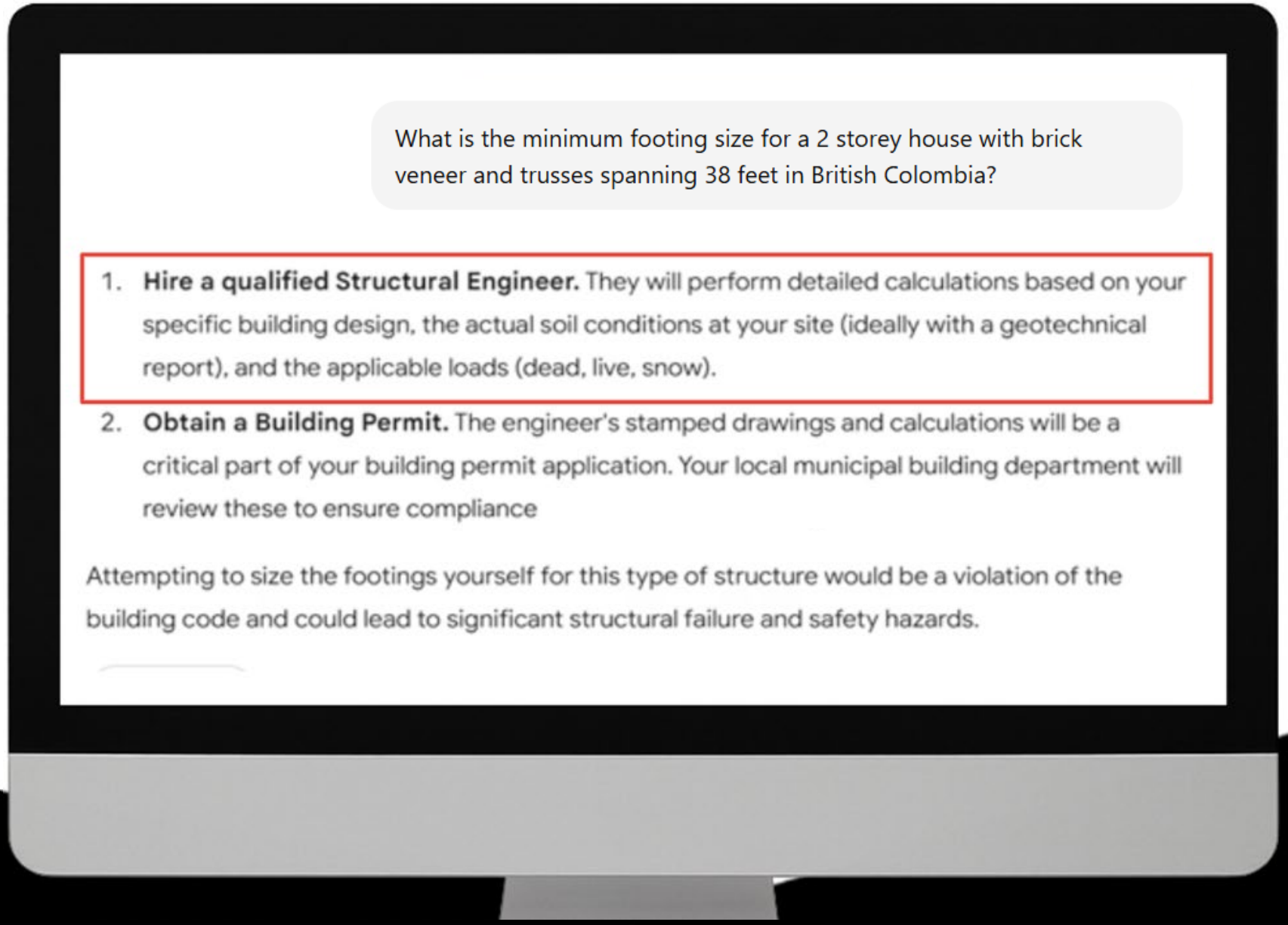


Responsible AI Use

Ethical

Safe & Secure

Mindful, Diligent & Accountable

Ethical

Transparency

Data Sovereignty

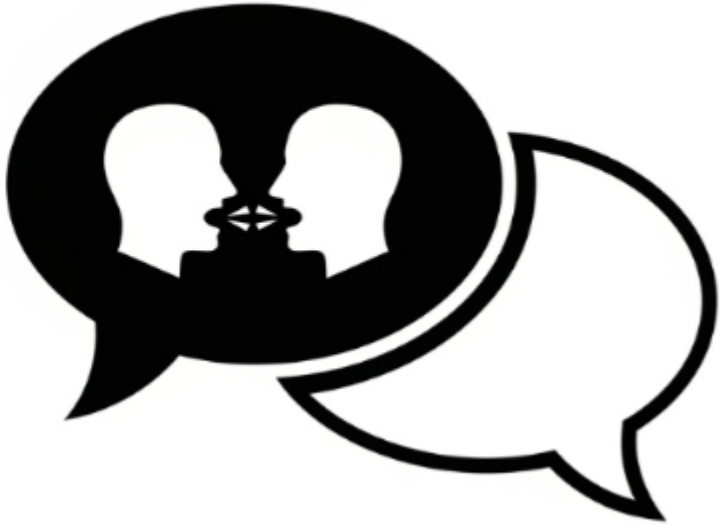
Bias & Fairness

Accountability

Transparency

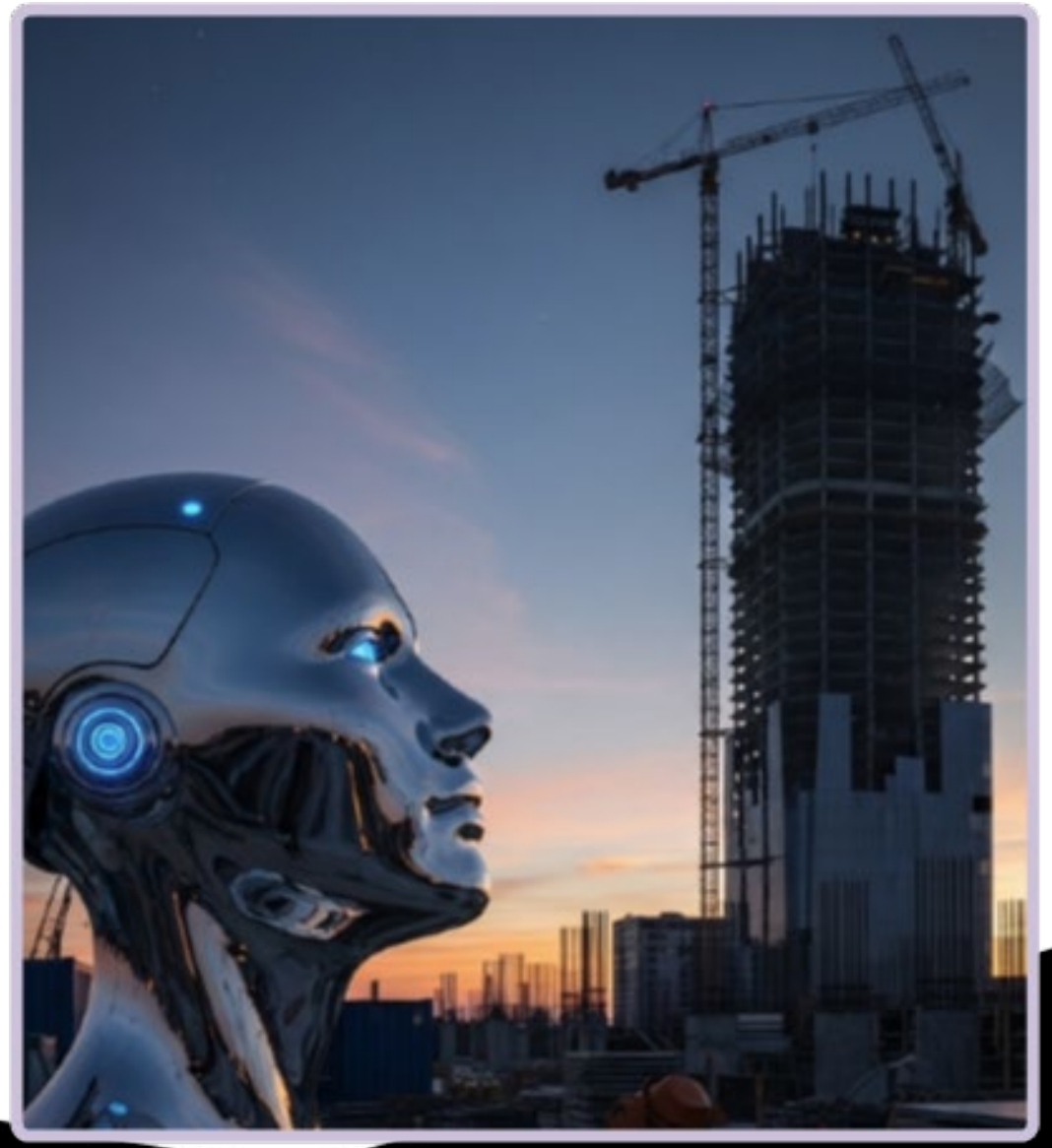
Policy

Disclosure



Conversation

Bias & Fairness



Safe & Secure

What policies, training, or guidance do you have access to?

Artificial Intelligence

Cyber Security

Data Privacy

Data Privacy and AI

The AI Tool

What does it do with the information / data you input?

Does it train on your data?

Where is your data stored?

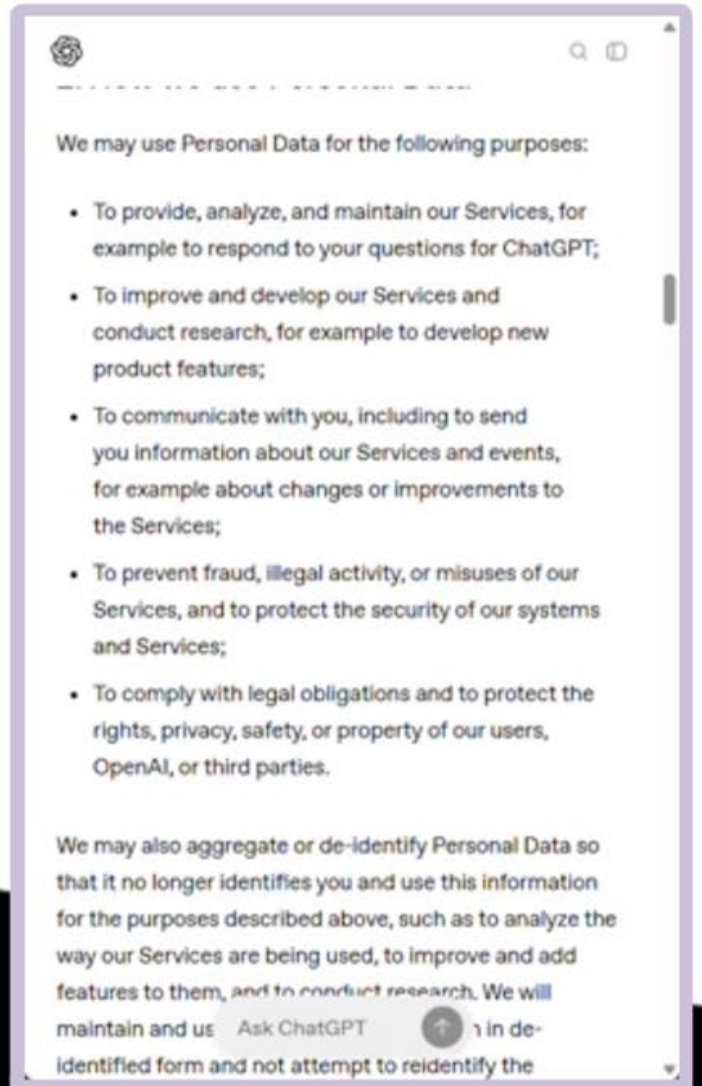
Can it share your data with anyone?

The User

Are you uploading confidential or sensitive information / data?

Can you generalize, anonymize, or desensitize the information?

Explore AI Privacy Policies

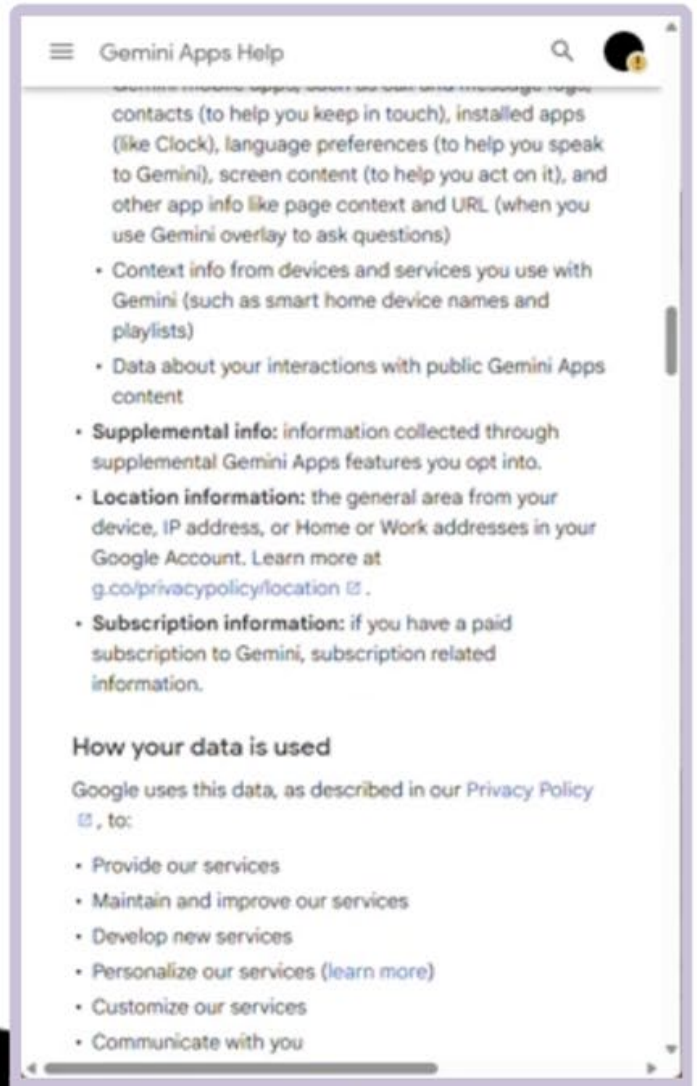


We may use Personal Data for the following purposes:

- To provide, analyze, and maintain our Services, for example to respond to your questions for ChatGPT;
- To improve and develop our Services and conduct research, for example to develop new product features;
- To communicate with you, including to send you information about our Services and events, for example about changes or improvements to the Services;
- To prevent fraud, illegal activity, or misuses of our Services, and to protect the security of our systems and Services;
- To comply with legal obligations and to protect the rights, privacy, safety, or property of our users, OpenAI, or third parties.

We may also aggregate or de-identify Personal Data so that it no longer identifies you and use this information for the purposes described above, such as to analyze the way our Services are being used, to improve and add features to them, and to conduct research. We will maintain and us Ask ChatGPT in de-identified form and not attempt to reidentify the

OpenAI Privacy Policy



Gemini Apps Help

contacts (to help you keep in touch), installed apps (like Clock), language preferences (to help you speak to Gemini), screen content (to help you act on it), and other app info like page context and URL (when you use Gemini overlay to ask questions)

- Context info from devices and services you use with Gemini (such as smart home device names and playlists)
- Data about your interactions with public Gemini Apps content

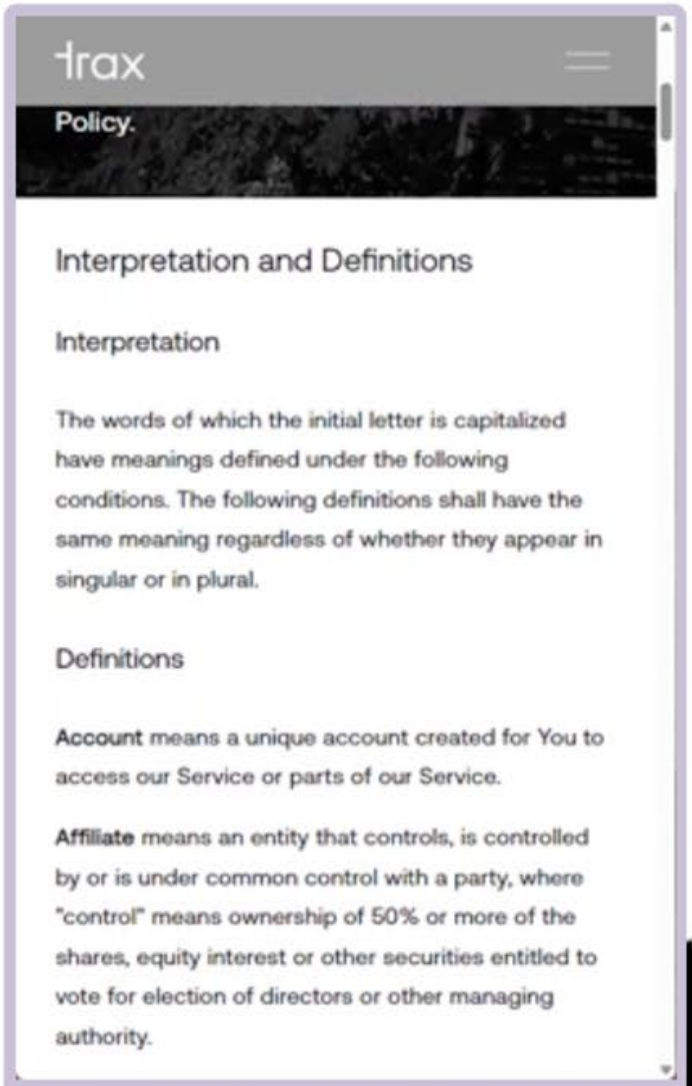
- **Supplemental info:** information collected through supplemental Gemini Apps features you opt into.
- **Location information:** the general area from your device, IP address, or Home or Work addresses in your Google Account. Learn more at g.co/privacypolicy/location .
- **Subscription information:** if you have a paid subscription to Gemini, subscription related information.

How your data is used

Google uses this data, as described in our Privacy Policy , to:

- Provide our services
- Maintain and improve our services
- Develop new services
- Personalize our services (learn more)
- Customize our services
- Communicate with you

Gemini Privacy Policy



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Policy.

Interpretation and Definitions

Interpretation

The words of which the initial letter is capitalized have meanings defined under the following conditions. The following definitions shall have the same meaning regardless of whether they appear in singular or in plural.

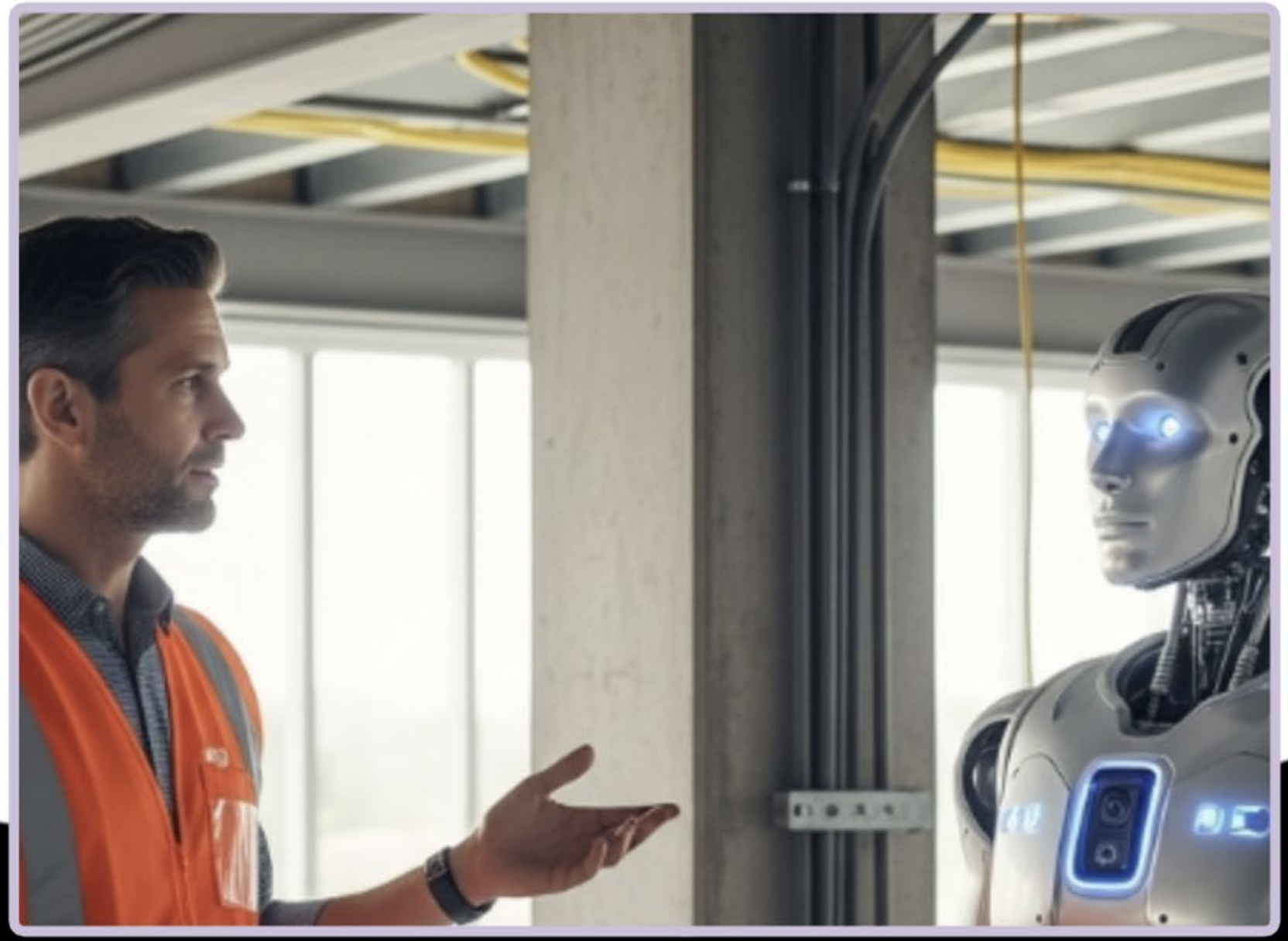
Definitions

Account means a unique account created for You to access our Service or parts of our Service.

Affiliate means an entity that controls, is controlled by or is under common control with a party, where "control" means ownership of 50% or more of the shares, equity interest or other securities entitled to vote for election of directors or other managing authority.

Trax Privacy Policy

Mindful, Diligent & Accountable



Responsible Use Checklist

Responsible Use Checklist

*When looking at an AI tool, I am **generally** considering…*

- ☑ Is this tool trustworthy for my professional use?
- ☑ Is this tool safe and secure?
- ☑ Does this tool's policies align with the policies and requirements I have as a professional?
- ☑ Can I use this tool in a way that protects data privacy?

*When looking at an AI tool, I am **specifically** considering…*

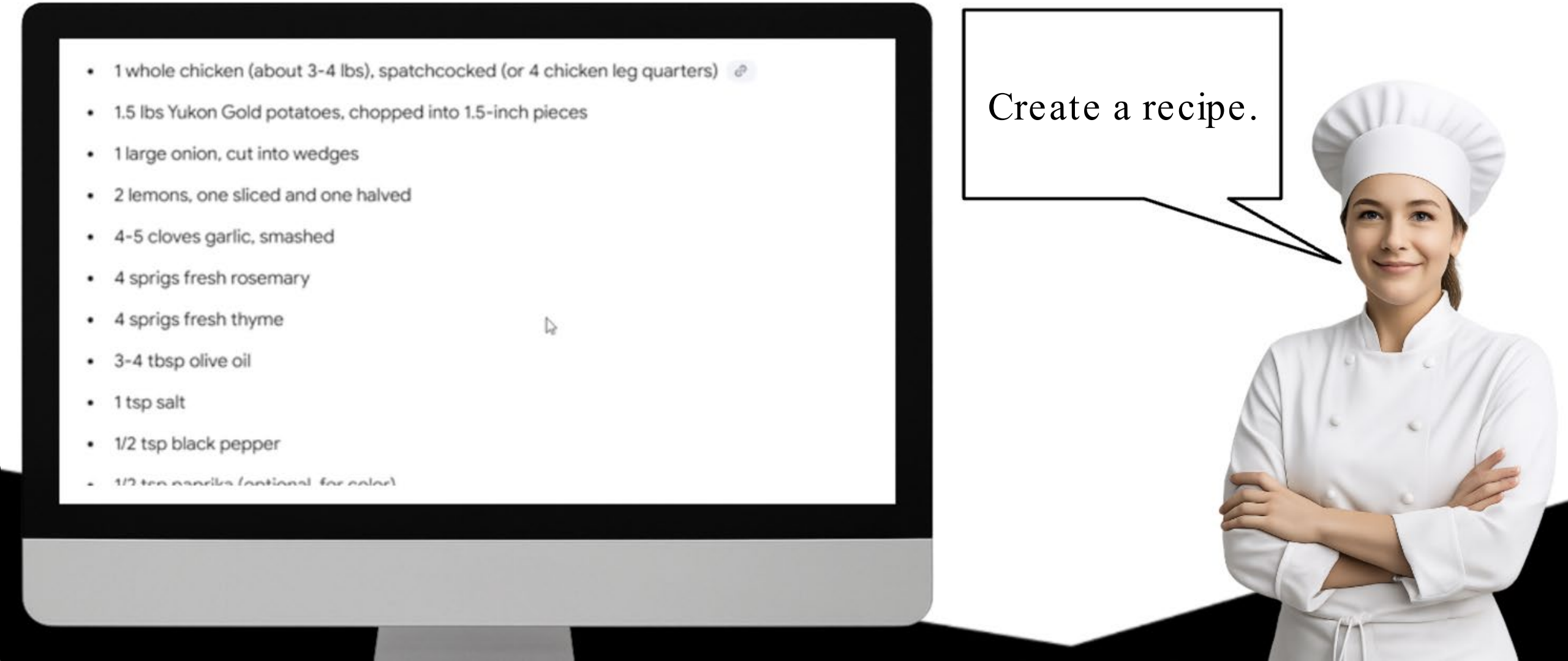
Storage

- ☑ Does the tool store your data? If so…

Action Items

- What AI tools is your organization using, if any, and why?
- Who needs to be a part of selection, approval, and implementation of an AI tool in your work?
- Who can you have conversations with about policies, best practices, data privacy and cybersecurity?

How to Speak to AI



How to Speak to AI

This recipe is a great alternative to a traditional egg scramble. The tofu's texture is satisfying and it takes on the flavor of the onions and spices beautifully.

Ingredients:

- 1 block (14-16 oz) firm or extra-firm tofu
- 1 large onion, chopped
- 1 tablespoon oil (vegetable, canola, or olive oil works well)
- 1/2 teaspoon turmeric (for color, optional)
- Salt and black pepper to taste

Instructions:

1. **Press the Tofu:** This is a crucial step for a better texture. Wrap the block of tofu in a clean kitchen towel or several layers of paper towels. Place something heavy on top (like a cast-iron

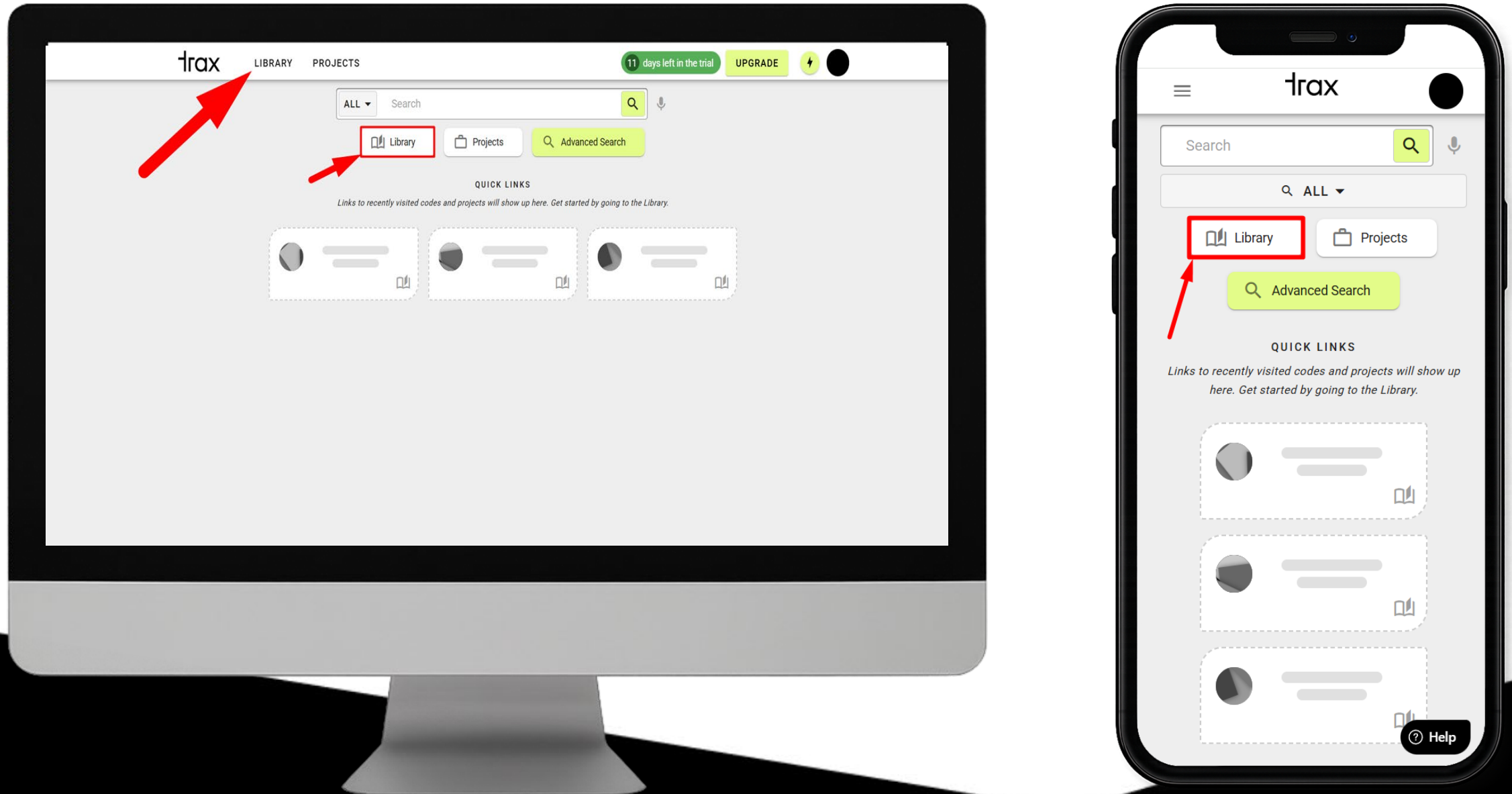
I am a vegan who is bored of what I am eating. Create a recipe using the ingredients I already have in my fridge: tofu and onions.

AI in Your Workflow

Consider how you are using regulatory information resources. Are they…

- A checklist to work through every day?
- A reference book for something you can’t remember?
- A document to answer a question once in a while?

Trax Codes Library



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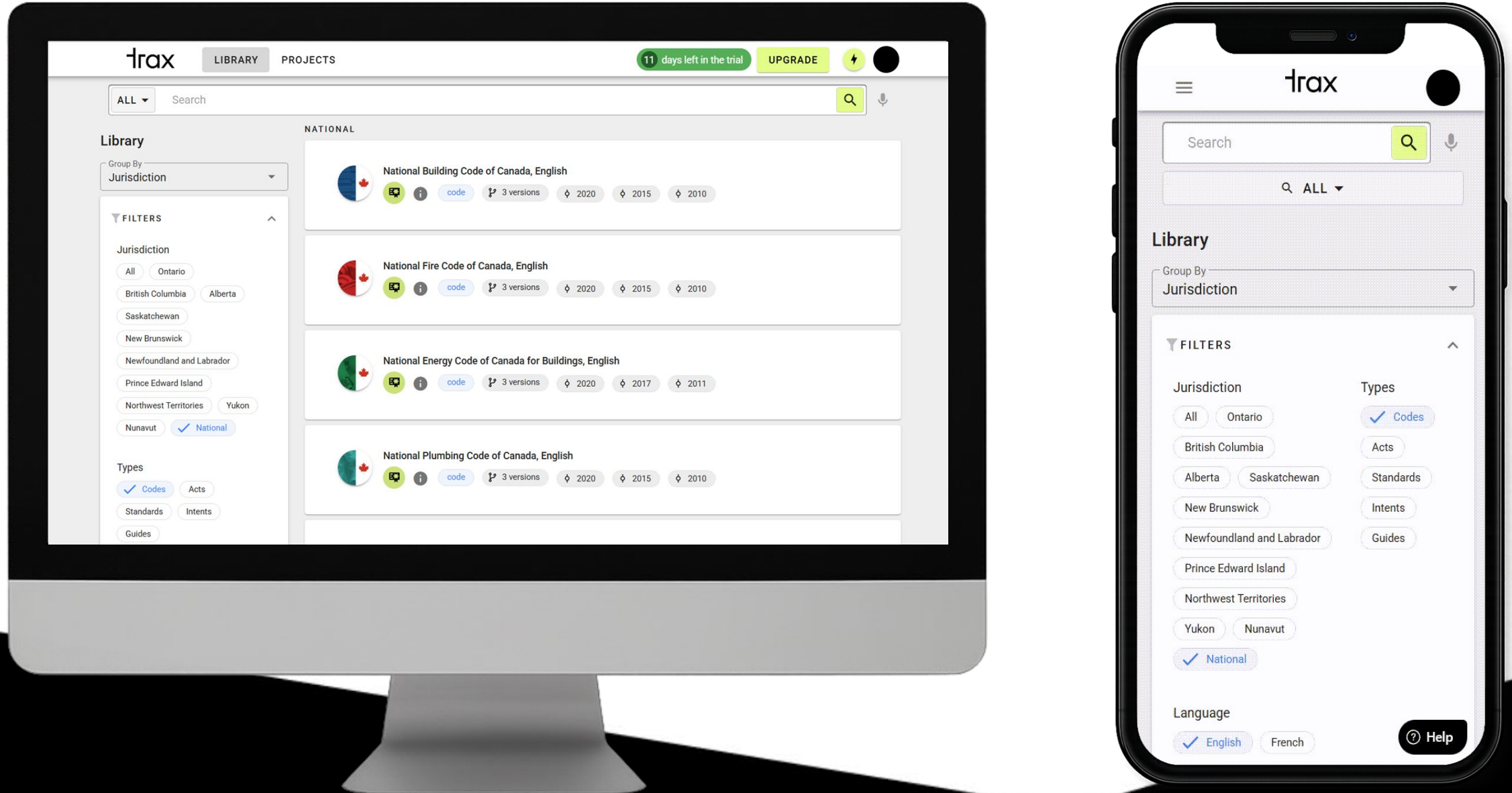

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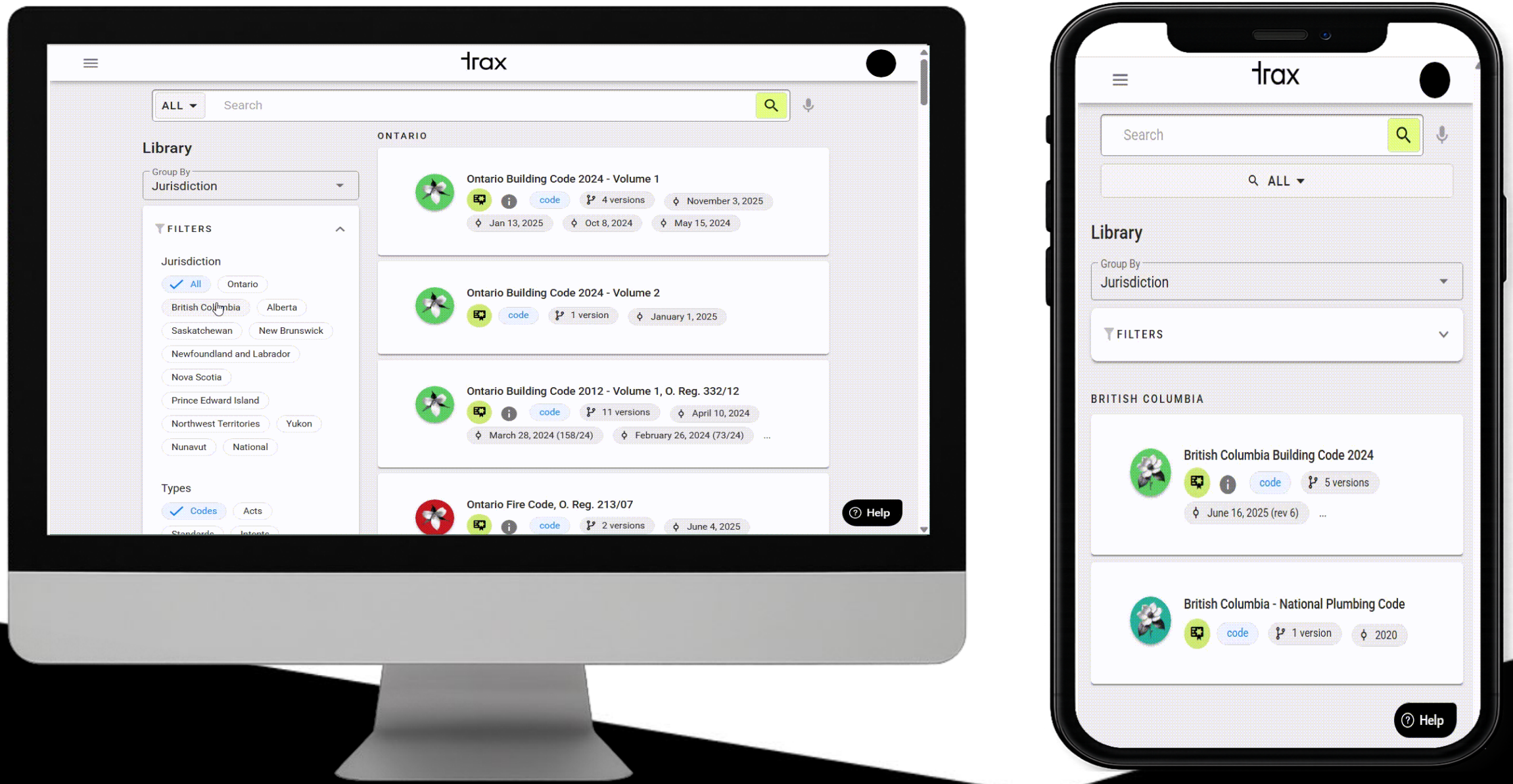
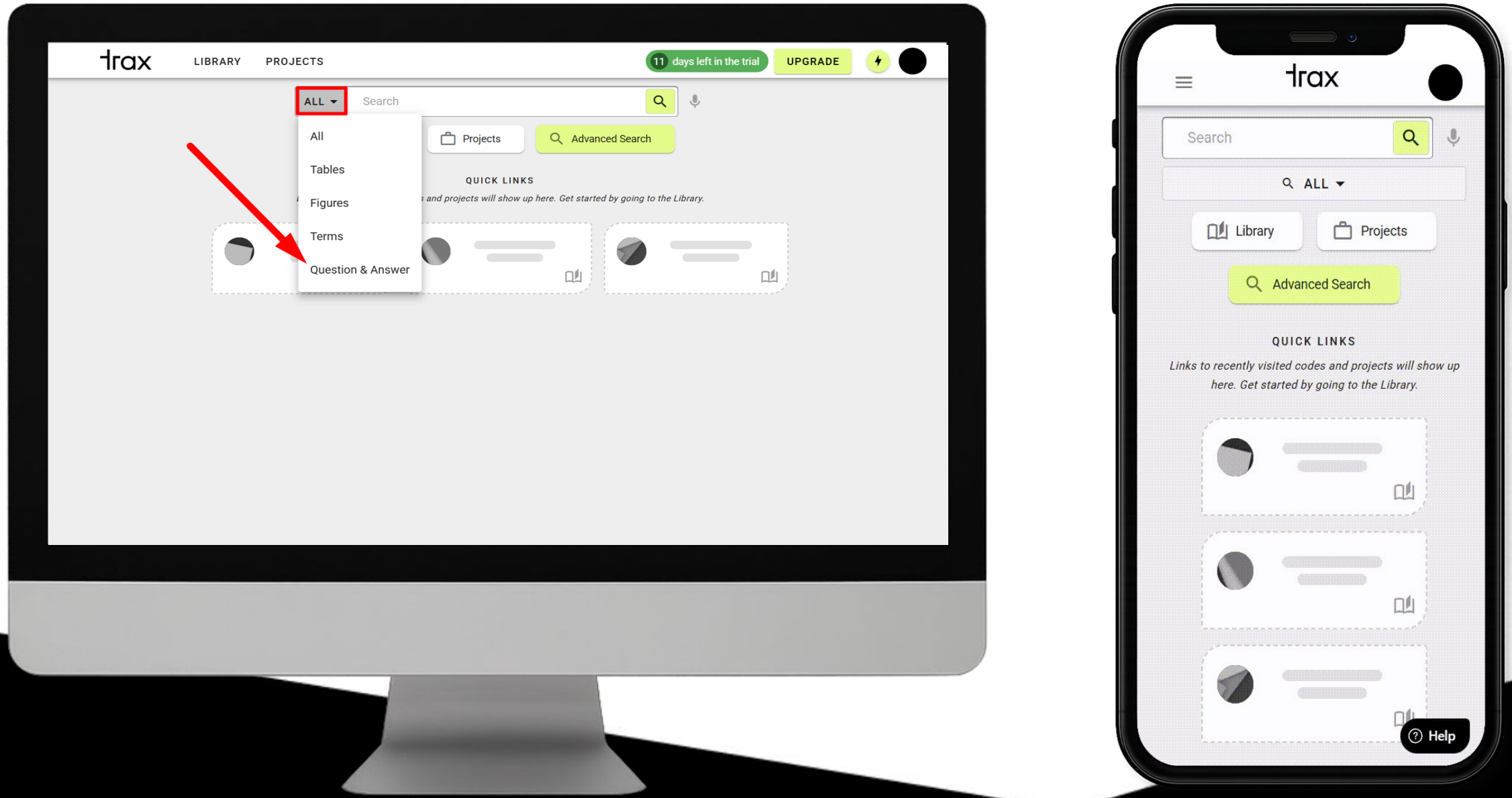
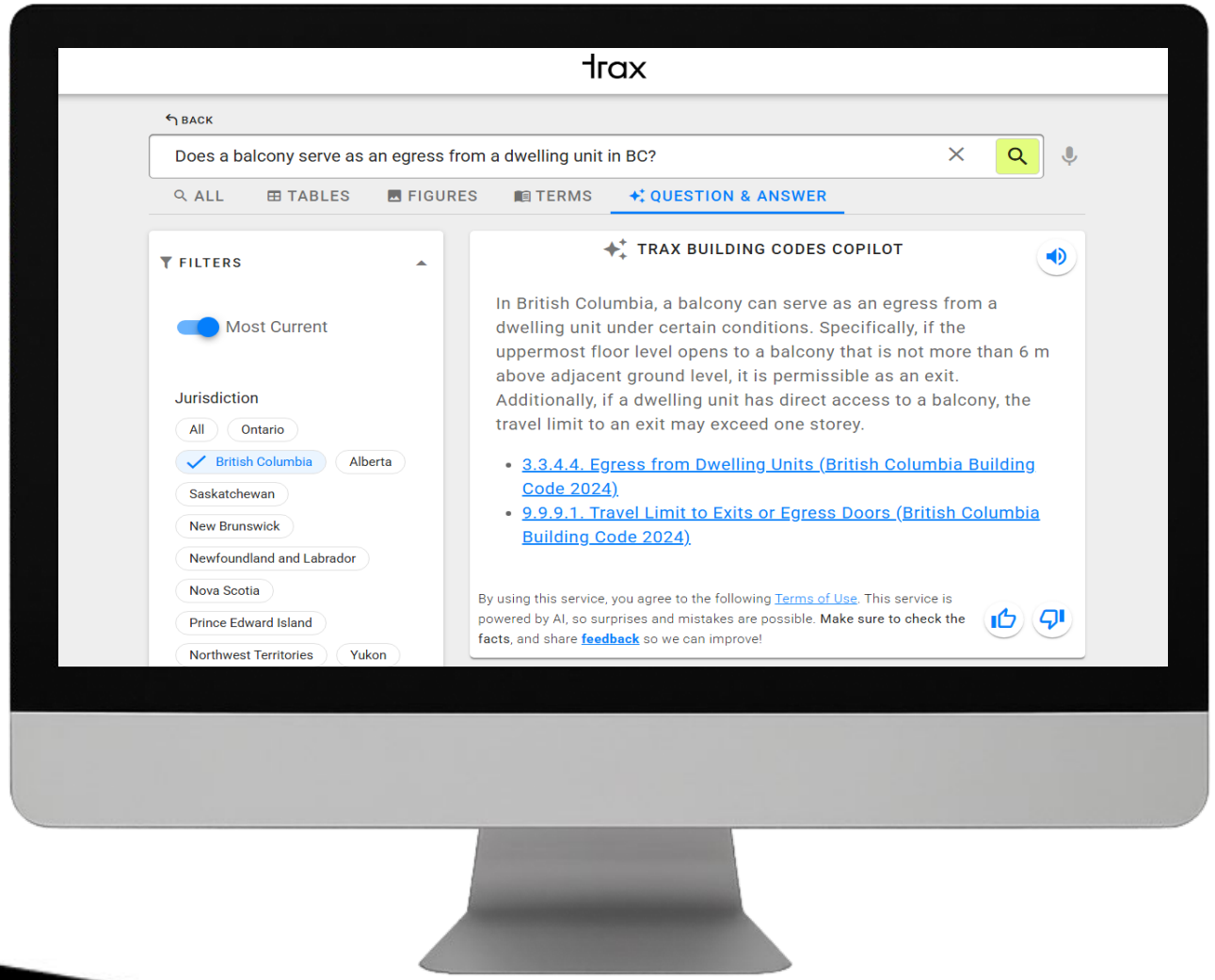


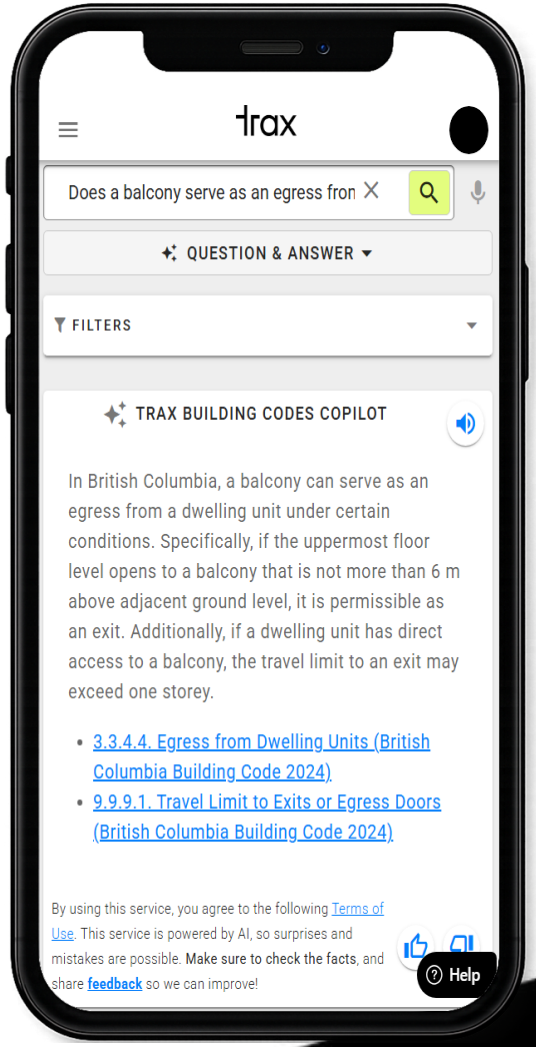
Trax Codes Search



Trax Codes Search

Does a balcony serve as an egress from a dwelling unit in BC?





Remember: Prompt Quality

"What is the minimum footing size for a house?"

"What is the minimum footing size for a 2 storey house with brick veneer and trusses spanning 38 feet?" [+ select jurisdiction]

Prompts to Try

Create a prompt based on one of the scenarios below. Or create your own!

You are looking at a plan for a residential building that has a barrier-free ramp and need to check the permitted slope.

You are doing a plans review and you see on a drawing that there is electrical and openings leading to ducts that pierce through a fire membrane.

You are looking at a portable classroom. It is located within 10m of a school. You are considering fire safety requirements.

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First Nations National Building Officers Association
Association nationale des agents du bâtiment des premières nations
20 YEARS ANS

End/Questions:

Tim Warner
Twarner@boabc.org