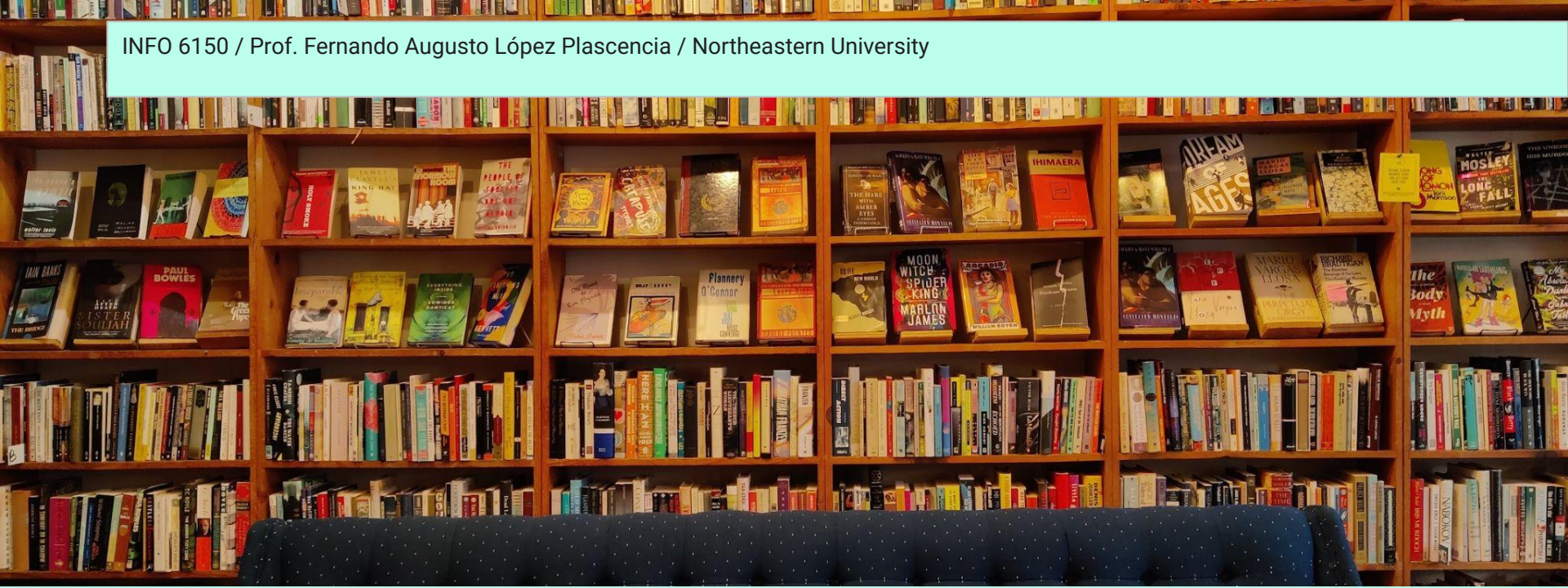
INFO 6150 / Prof. Fernando Augusto López Plascencia / Northeastern University



Week 2

Requirements, UX, IA

Requirements and User Experience

Now wait a minute. Wasn't this course about frontend?

No product is successful without thinking about UX. A little investment goes a long way!

For a website or app, this is doubly so.

The earlier we know the best way to handle something, the cheaper and easier it is to implement.

What is User Experience?

“A person's perceptions and responses that result from the use or anticipated use of a product, system or service.”

— ISO 9241-210, Ergonomics of human-system interaction—Part 210: Human-centered design for interactive systems

- Meet the exact needs of the user
- Simplicity and elegance that produce delight

Interaction Design Foundation - IxDF. (2016, June 1). What is User Experience (UX) Design?. Interaction Design Foundation - IxDF. https://www.interaction-design.org/literature/topics/ux-design

What is User Experience?

Meet the exact needs of the user

- We need to understand them

Simplicity and elegance that produce delight

- Achieved through design

“No product is an island. A product is more than the product. It is a cohesive, integrated set of experiences. Think through all of the stages of a product or service – from initial intentions through final reflections, from the first usage to help, service, and maintenance. Make them all work together seamlessly.”

— Don Norman, inventor of the term “User Experience.”

Interaction Design Foundation - IxDF. (2016, June 1). What is User Experience (UX) Design?. Interaction Design Foundation - IxDF. https://www.interaction-design.org/literature/topics/ux-design

Then, what is UI? What is usability?

User Interface (UI) refers specifically to the parts of the app or website that allow the user to interact with it, such as the visual components and input components. The part of UX that deals specifically with web UI is also called **web usability.**

A good UX considers not just the UI, but the whole experience (for example, backend considerations.)

We will go deeper into usability in a future lesson.

The website development process

- Discovery and planning
  - What is the problem?
  - What are we doing to address it?
- Development
  - Actually doing the things
- Deployment
  - Shipping
- Maintenance
  - Keeping up and measuring success

The website development process

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  - Keeping up and measuring success

An example: Meet Martha

Martha is the owner of Bay Area Medical Care, a small private clinic in Alameda.

Martha needs a website to get word out about the clinic, as well as to allow users to make, edit and cancel appointments.

Image generated with Gemini 2.5 Flash

First, understand the **user**.

Discovery and planning

You need to understand the following:

- Who are the **users**? What are they looking for?
  - There can be many types of users. You want to identify them, and how they may interact with the page.
- Understand **what information** will there be in the site, and what **functionality** we need.
  - How does the information relate to each other?

Discovery and planning

Then, you can propose a solution.

- Design how users will find the information.
- Organize the information within the pages.

We will talk more about this later.

Understanding the users

Different people behave differently. We want to provide a solution that works for all.

How is people different?

How will a person's preferred usage of the website / all change depending on the above?

Understanding the users

Different people behave differently. We want to provide a solution that works for all.

How is people different?

- Age
- Sexual identification / orientation
- Culture / language
- Familiarity with technology
- Disabilities (including temporary)
- Etc. etc.

How will a person's preferred usage of the website / all change depending on the above?

Understanding the users' context

We also want to understand the **context.**

How will a person's preferred usage of the website / app change depending on their current situation?

Understanding the users' context

We also want to understand the **context:**

- Being in a hurry (eg. need to find something / do something **now**)
- Poor data connection
- Urgency (is it a life-or-death situation? Not really?)
- Is this a professional setting?
- Is the person acting on behalf of someone else?
- Etc. etc.

How will a person's preferred usage of the website / all change depending on the above?

Doing discovery

To find these answers, we can do **interviews** first.

- **Stakeholder interviews:** A stakeholder is whoever wants the product to be built; a “promoter”. They are often the ones responsibles for the project, from the client side.
- **Field studies and user interviews:** These are made to the people that will actually use the product.

In both cases, you will want to understand:

- What they want from the product,
- What pain points are there with existing alternatives (or with the product, if already built).

At this stage you may also want to do **competitive testing:** what have other people done? How do they do it? What can we learn from them?

Persona analysis

Create “personas”: fictitious characters that embody representations of your users. Describe who they are, what their relationship is with the website / app, what their possible contexts are, and how they would use the website / app.

Example for the Bay Area Medical Care website:

- Alice: a 72 year old lady with poor understanding of technology; she is a client of the hospital and usually does everything via phone.
- Adam: a 30 year old doctor that works for the hospital part time
- (Who else can you come up with?)

How do they use the website? Can you come up with a few **use cases**?

> Ask the AI for ideas and examples.

Tip: you can use a template like this one.

Persona analysis

Example for the Bay Area Medical Care website:

- Alice: a 72 year old lady with poor understanding of technology; she is a client of the hospital and usually does everything via phone.
- Adam: a 30 year old doctor that works for the hospital part time
- (Who else can you come up with?)

Tip: you can use a template like this one.

What to do with personas?

The simple way:

- Try to come up with how they would interact with the website, app, or product; write down your findings.
- This will be enough for small products.

The more structured way:

- There are many tools that can help with more complex scenarios. One of them is **User Journey Maps.**

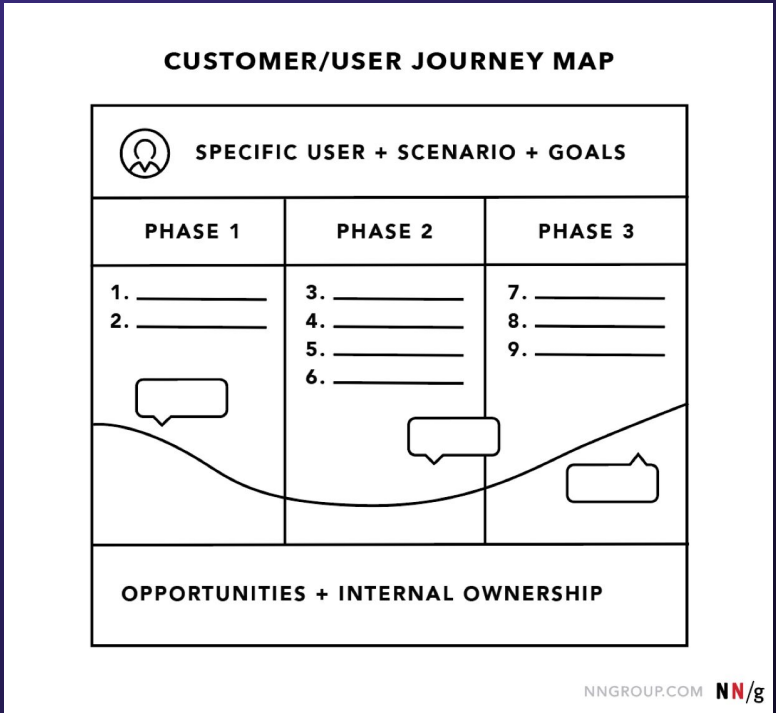
User Journey Maps

A tool to describe how the users may interact with the website or app in order to accomplish a goal.

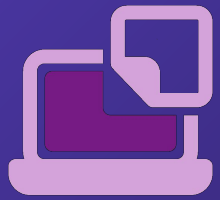
Has five components:

- The person: one of your personas.
- The environment: what they will try to do. For example, “make a medical appointment”.
- Journey Phases: in general, what steps do they follow to do this. For example: “find a doctor”, “contact the doctor’s office”, “follow the appointment process”.
- Actions, Mindsets, Emotions:
  - What is the person trying to do?
  - What are they thinking?
  - How are they feeling? (Frustrated? Happy? Doubtful?) This is indicated by **a line**.
- Opportunities: Your ideas on how to improve each part of the process.

User Journey Maps



Source: NNG Journey Map Example by Nielsen Normal Group



Created by HideMaru
from Noun Project

User Journey Maps

Let’s create a map for one of our personas.

- Who are they?
- What do they want to do? Split by phases.
- What are they thinking, how are they feeling?
- What can we do to improve this experience?

Icon by HideMaru for Noun Project

User Journey Map Example

User: Alice: a 72 year old lady with poor understanding of technology; she is a client of the hospital and usually does everything via phone.

Environment: Alice needs to change the date of her next appointment and no one answers the phone at the hospital.

User Journey Map Example

User: Alice: a 72 year old lady with poor understanding of technology; she is a client of the hospital and usually does everything via phone.

Environment: Alice needs to change the date of her next appointment and no one answers the phone at the hospital.

Phases:

Finding the website	Finding the appointment	Requesting the change
- Search for the website - Ensure it's the right website	- Login with user and password (where are those?) - Find the link to list appointments - Figure out how to change the appointment	- Selecting the new date and time - Getting a confirmation

User Journey Map Example

Finding the website	Finding the appointment	Requesting the change
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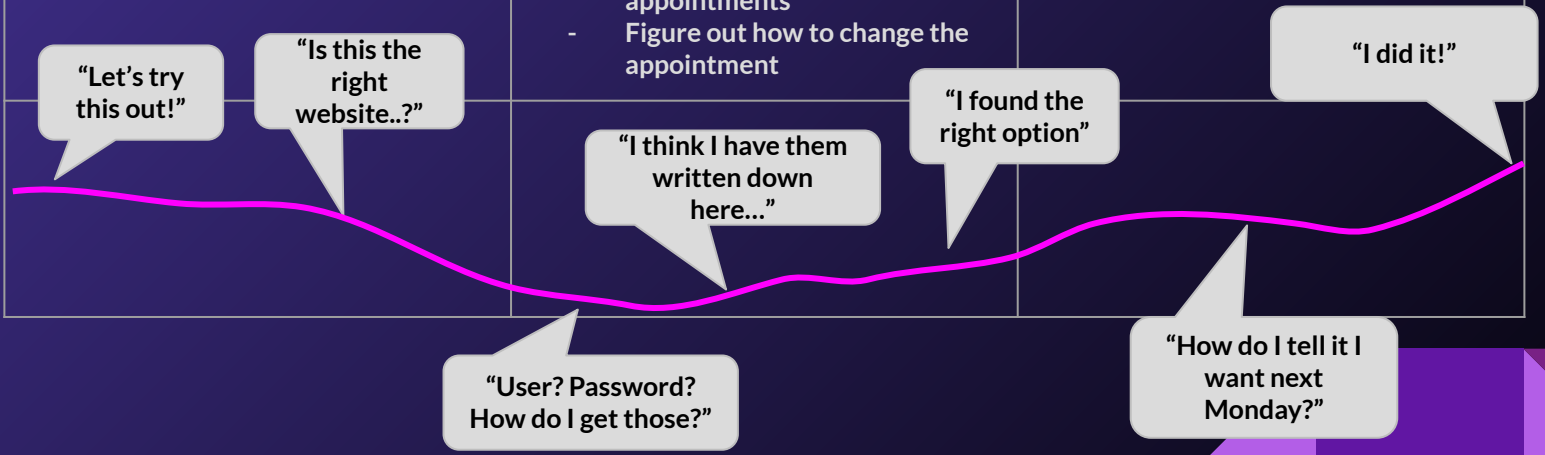

User Journey Map Example

Opportunities:

- Make the website easy to find in Google.
- Make it very easy to recognize that this is the website for Bay Area Medical Center.
- Use big fonts and easy to understand words to find options such as appointments.
- Make sure users have help if they forgot usernames and passwords.
- Ensure the way to enter information, such as dates, is user friendly.

(but also:)

- Make sure there is 24/7 phone help

What’s next?

Now that we have finished the **discovery,** we’ll go through **planning.**

Information Architecture

In this lesson:

- What is information architecture
- Planning and organizing a website; website maps
- SEO
- Semantic HTML
- Putting it all together: an example

Information Architecture

- What's the difference between **data** and **information?**

Information Architecture

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- **Data:**
  - Anything that can be known.
  - Inputs and outputs of processes.

Information Architecture

- What's the difference between **data** and **information?**
- **Data:**
  - Anything that can be known.
  - Inputs and outputs of processes.
- **Information: Useful data.**
  - Data that is relevant.
  - Data that someone cares about.
- "Data" can be noisy. "Information" is not.

Information Architecture

Means: how to organize data in a way that is

- Relevant
- Intuitive (easy to find)
- Understandable

Think: What's the information architecture of a newspaper? A magazine? A book?

Image by macrovector on Freepik

First, understand the user.

We already did this. Ideally we

- Interviewed stakeholders (at a minimum),
- Interviewed users,
- Possibly created personas,
- Possibly made user journey maps.

We know who the user is, what they want to do and (more or less) what we want to give them.

Understanding the information

- What kind of information?
  - If complex: how does it relate to each other?
- What functionality does the website or app need?
- How to organize it?

The website map

Now that you know your users, contexts and information, it’s time to create a solution.

You will express that:

- **Website maps,**
- **Flow charts,**
- **Low- and High-fidelity mockups.**

(We will talk about the flow charts next week.)

The website map

Website maps are hierarchical. They will be enough for smaller use cases, and will provide a blueprint for larger ones.

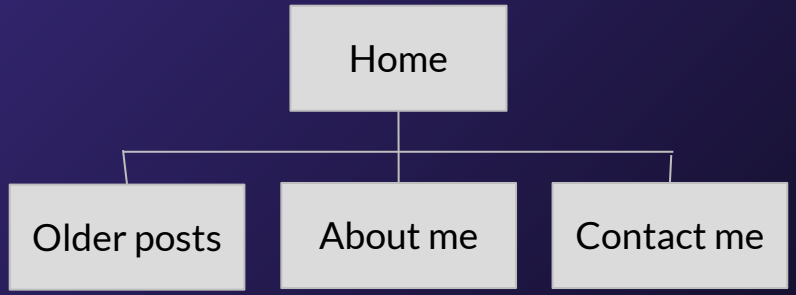
A website map shows:

- What pages are in the website or app;
- What information each page contains.

It also organizes the pages in sections.

The website map

Each box is a page. A page can have sub-pages to create a website section. (Example: a blog.)

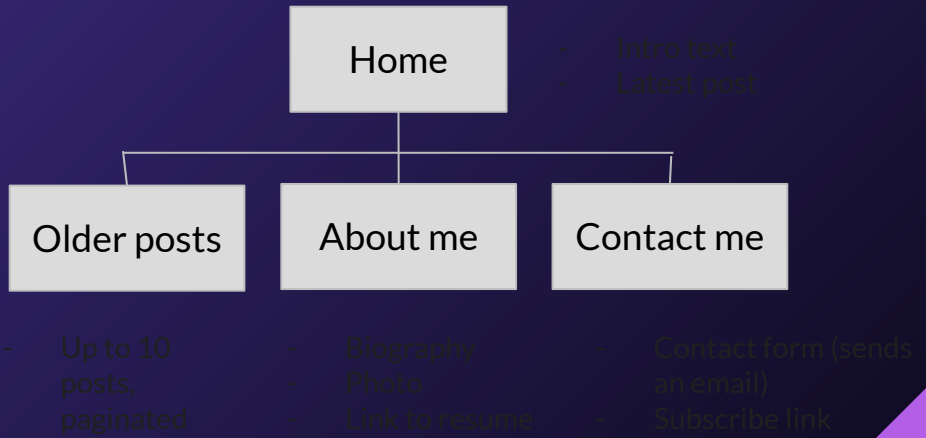


The website map

Each box is a page. A page can have sub-pages to create a website section.

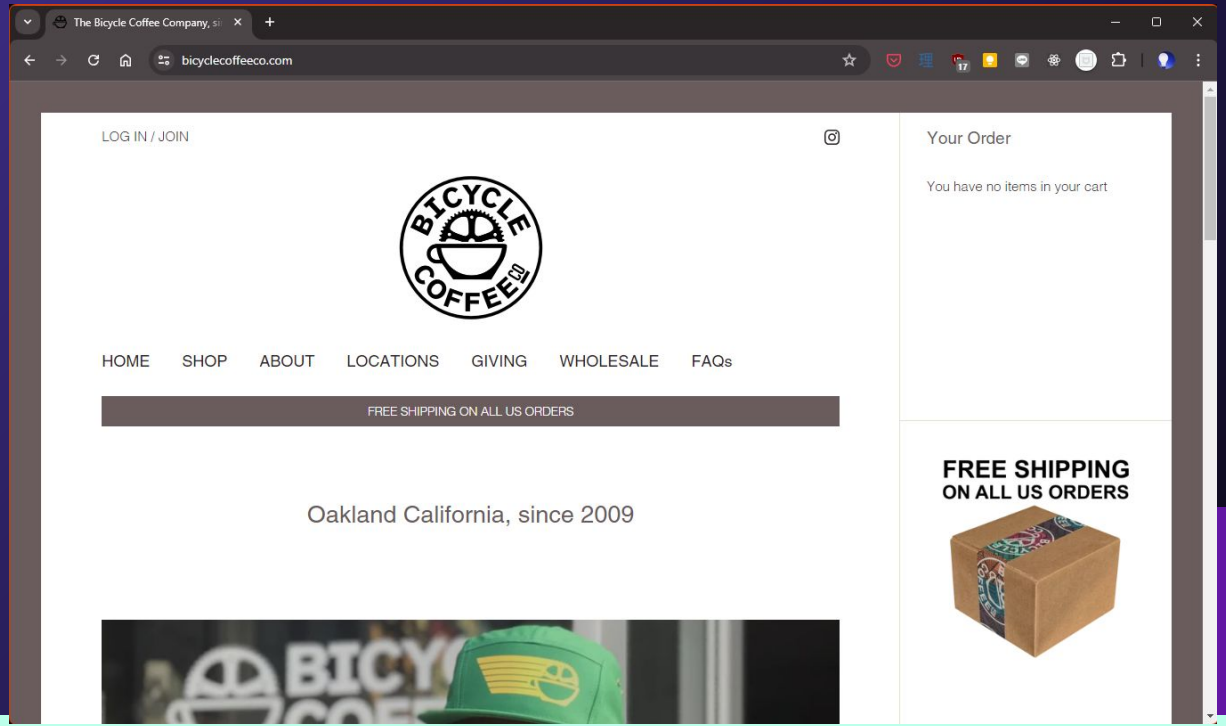
You can add what information is on each page using notes or lists.

Remember: only use boxes for pages! A box means a page.



The website map

Example: the Bicycle Coffee Co. website map (https://www.bicyclecoffeeco.com/)



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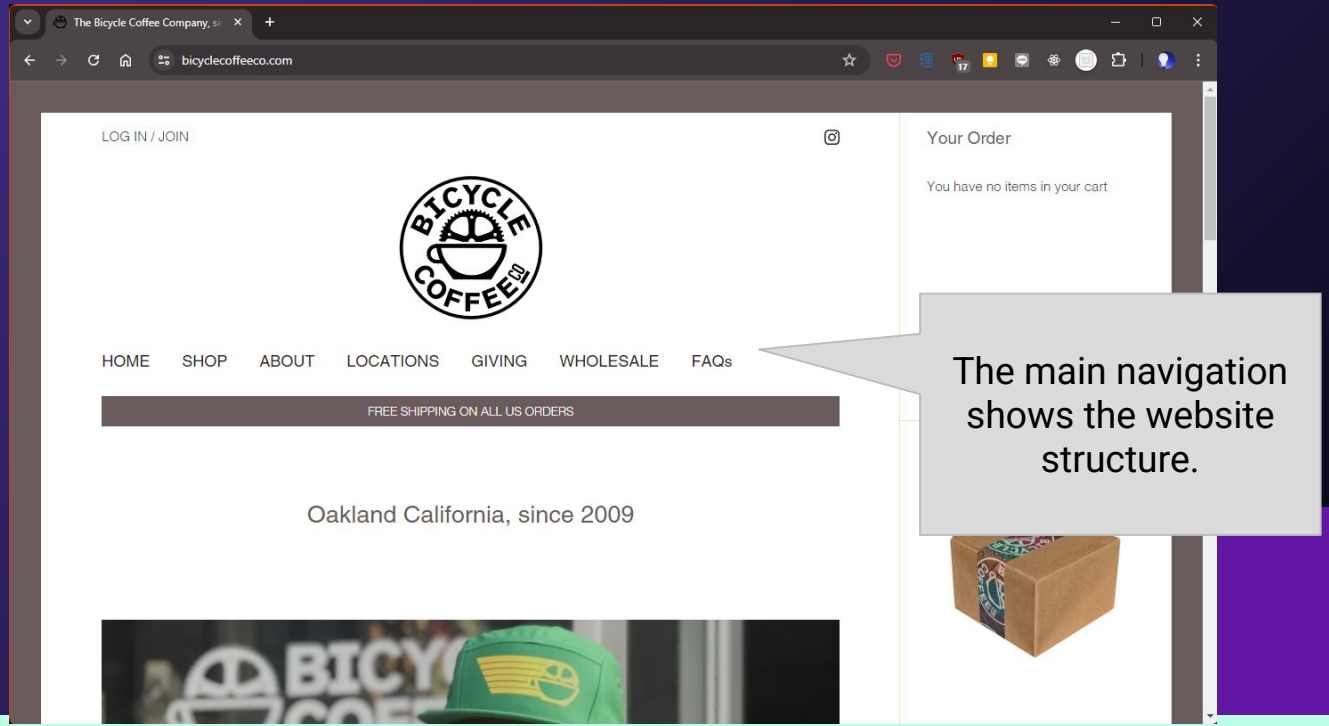

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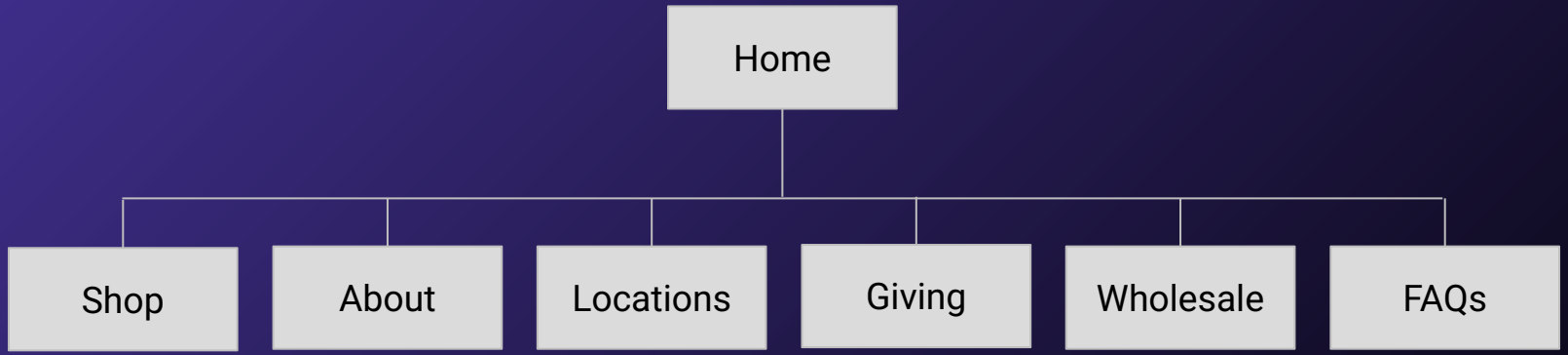

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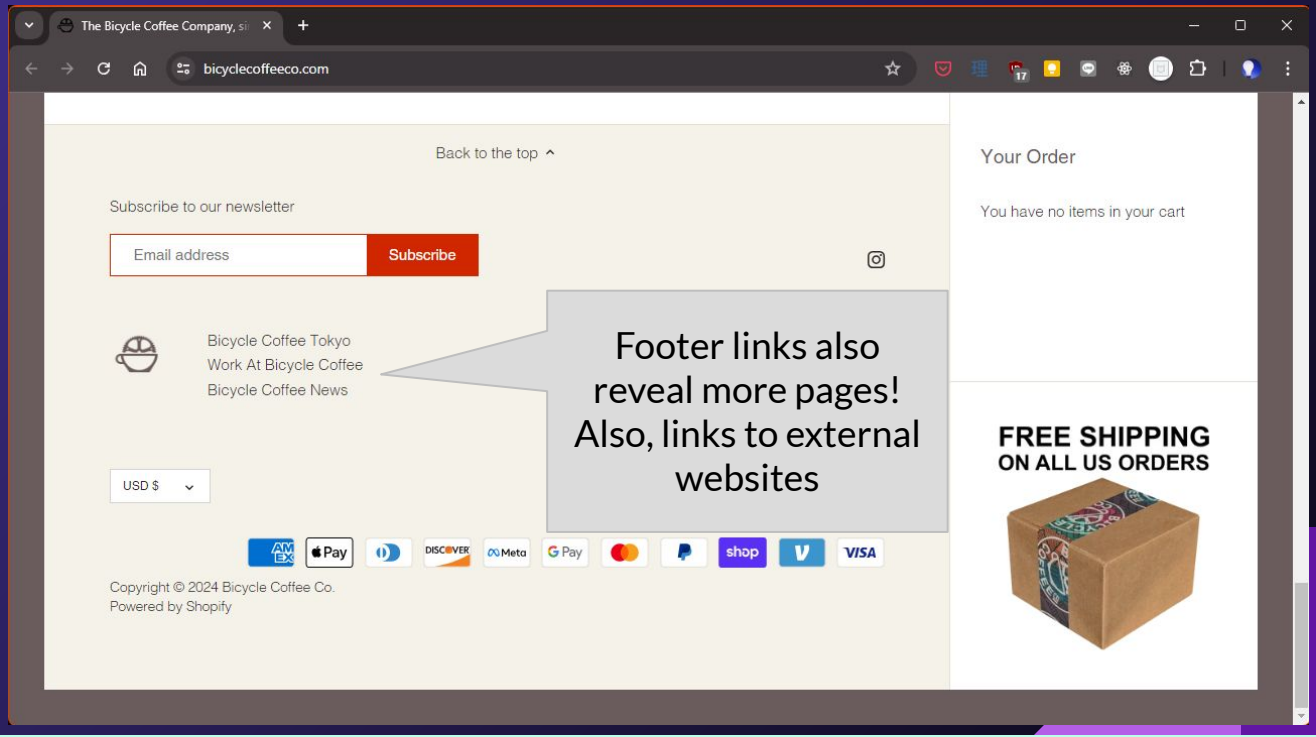

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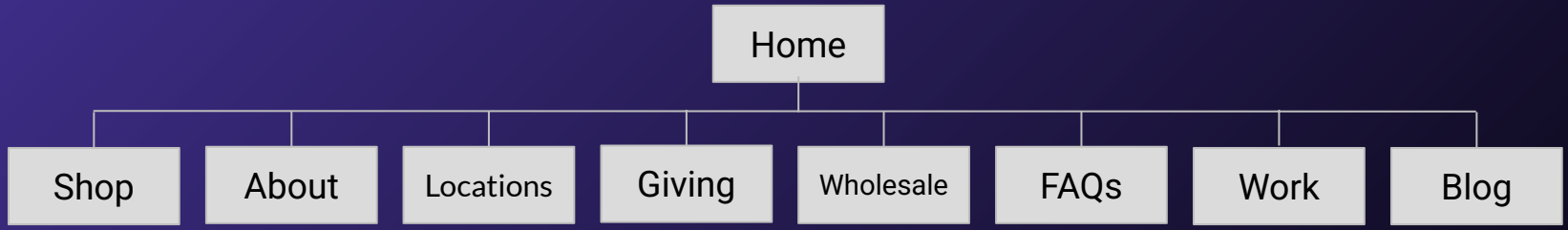
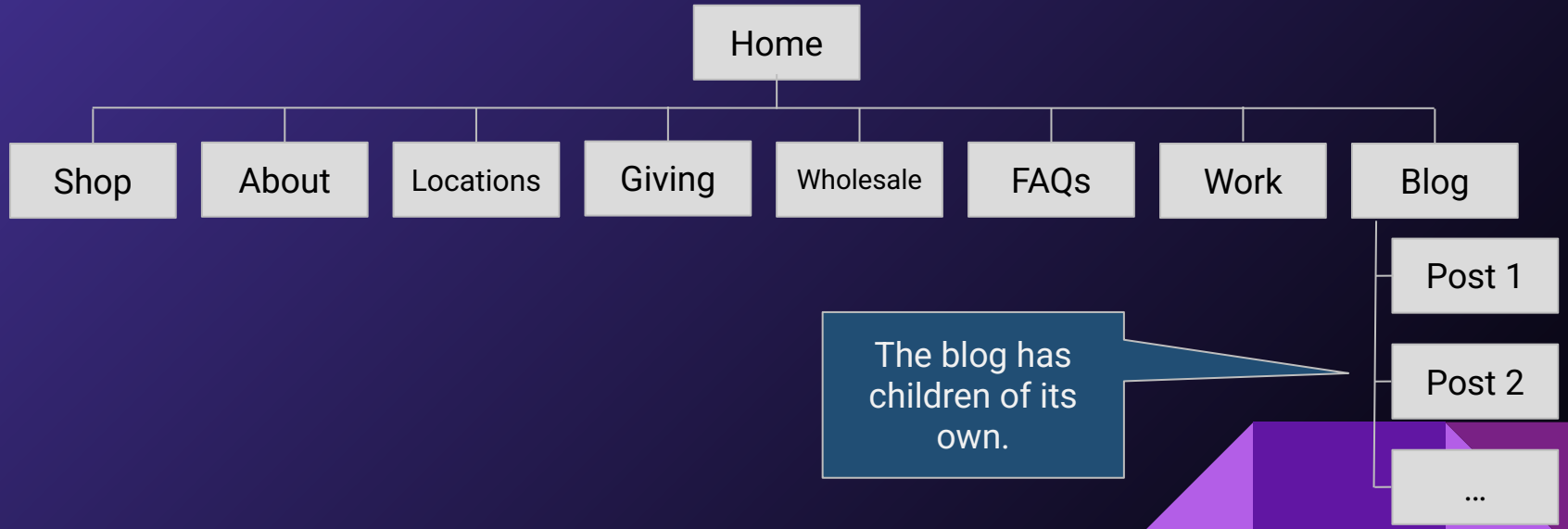


Added the new pages.

The website map

Example: the Bicycle Coffee Co. website map (https://www.bicyclecoffeeco.com/)



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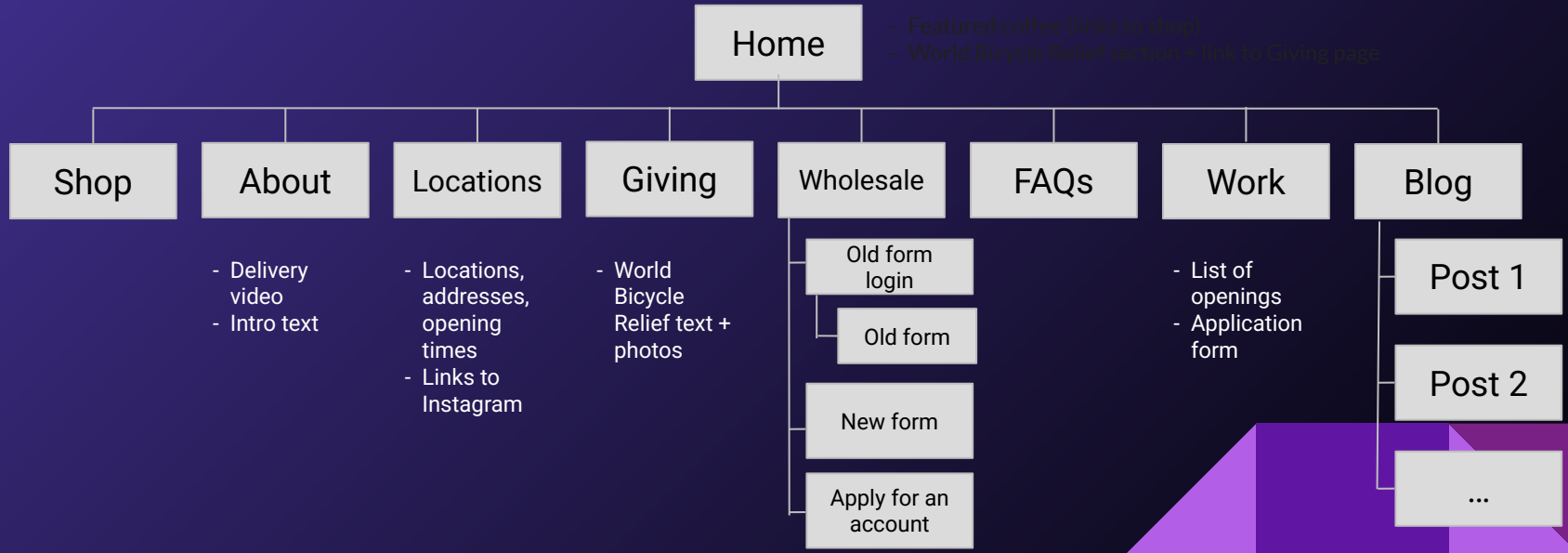

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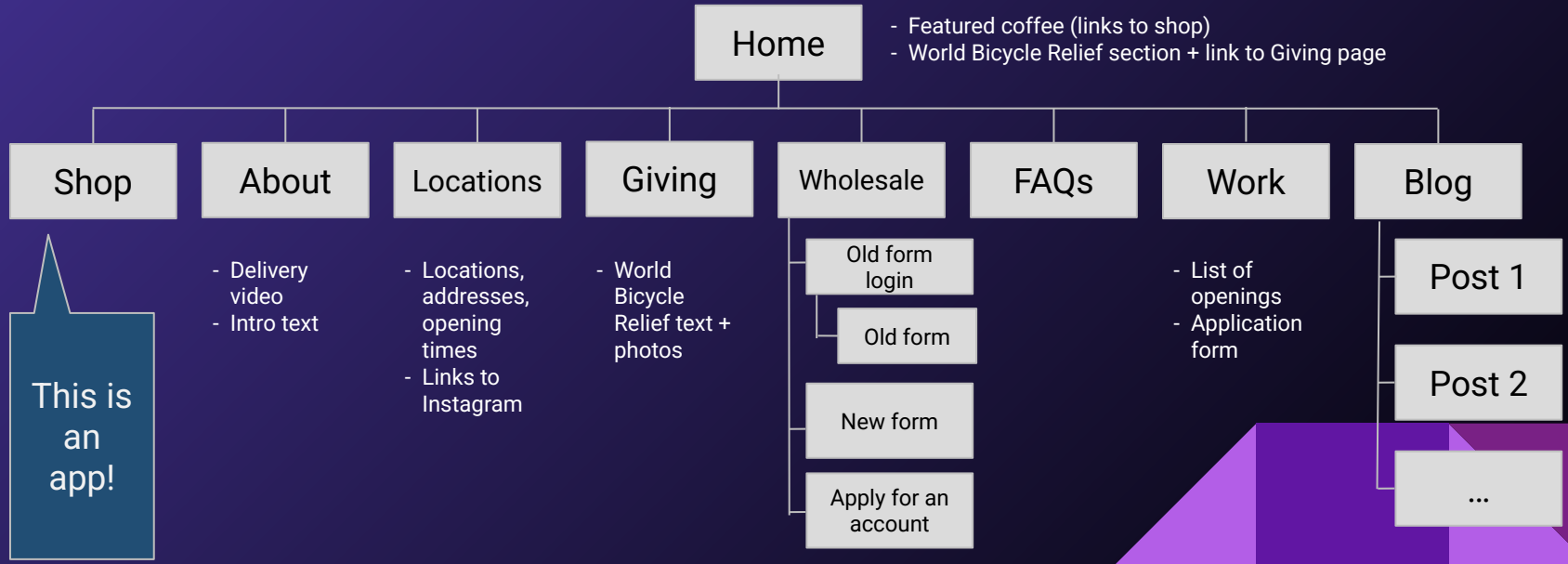
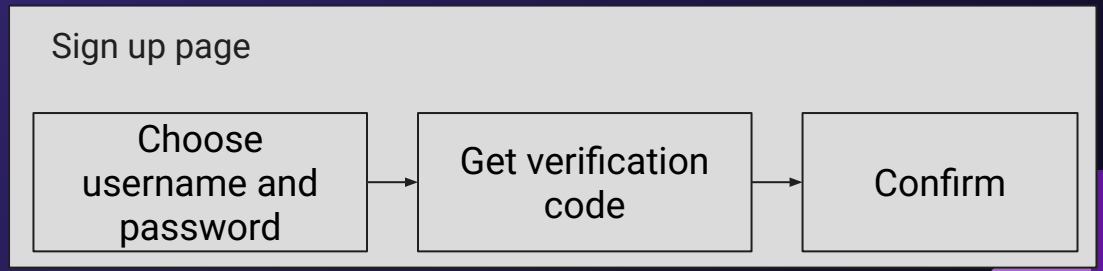


What about apps?

Apps will generally have static and dynamic parts.

We can represent different screens in the map, if that serves your purpose better.

You can also represent **processes with steps** as connected boxes. This can be part of the website map if needed.



A box chart example

Example: the Bicycle Coffee Co. shop (https://www.bicyclecoffeeco.com/)

Here, the emphasis is on the screens we will display.

Let’s first explore the process.

The Bicycle Coffee Company, si

bicyclecoffeeco.com

SHOP COFFEE

See our full coffee selection

Featured Products

View all

2.5 lb Medium Roast Coffee $38.00

Add to cart

Sold Out

Coffee Canister & 12 oz Bag Bundle $39.00

Panther Camp Cup $30.00

– 1 +

in your cart

12 oz Light Roast Coffee $18.00

Add to cart

Your Order View cart

Subtotal: $48.00

Checkout

Products (2 items)

Panther Camp Cup
$30.00

– 1 +

Remove

Your Shopping Cart – Bicycle C

bicyclecoffeeco.com/cart

LOG IN / JOIN

$30.00

BICYCLE COFFEE CO

HOME SHOP ABOUT LOCATIONS GIVING WHOLESALE FAQs

FREE SHIPPING ON ALL US ORDERS

Shopping cart

Continue shopping

Check out

Description	Price	Quantity	Total
 Panther Camp Cup	$30.00	– 1 + Remove	$30.00

Update cart

Add a gift note:

Subtotal: $30.00

Check out

shop Pay PayPal G Pay

Checkout - Bicycle Coffee Co.

shop.app/checkout/18068409/c/0735b16400cbbb83cf549ce831f09be8/shoppay?redirect_source=checkout_...

shop Pay

fa_lopez@hotmail.com

Ship to

Fernando Augusto Lopez Plascencia, 539 39th Street, Apt 523, Oakland CA 94609, US

Shipping method

FREE SHIPPING · Free

Payment option

Pay now - Pay the entire amount today

Payment method

VISA Visa ···· 0696

Sign me up for news and offers from this store

Pay now

You're earning 1% Shop Cash by using Shop Pay on this order!

Check out as guest

Panther Camp Cup $30.00

Discount code Apply

Subtotal	$30.00
Shipping	FREE
Estimated taxes	$3.08
Total	USD $33.08

Checkout - Bicycle Coffee Co.

bicyclecoffeeco.com/checkouts/c/0735b16400cbbb83cf549ce831f09be8?locale=en-US&skip_shop_pay...

Express checkout

shop Pay | PayPal | G Pay

OR

Contact

Log in

Email or mobile phone number

Enter an email or phone number

Email me with news and offers

Delivery

Country/Region
United States

First name (optional)
Fernando Augusto

Last name
Lopez Plascencia

Company (optional)

Address

Enter an address

Apartment, suite, etc. (optional)

City

Enter a city

State
California

ZIP code

Enter a ZIP / postal code

Shipping method

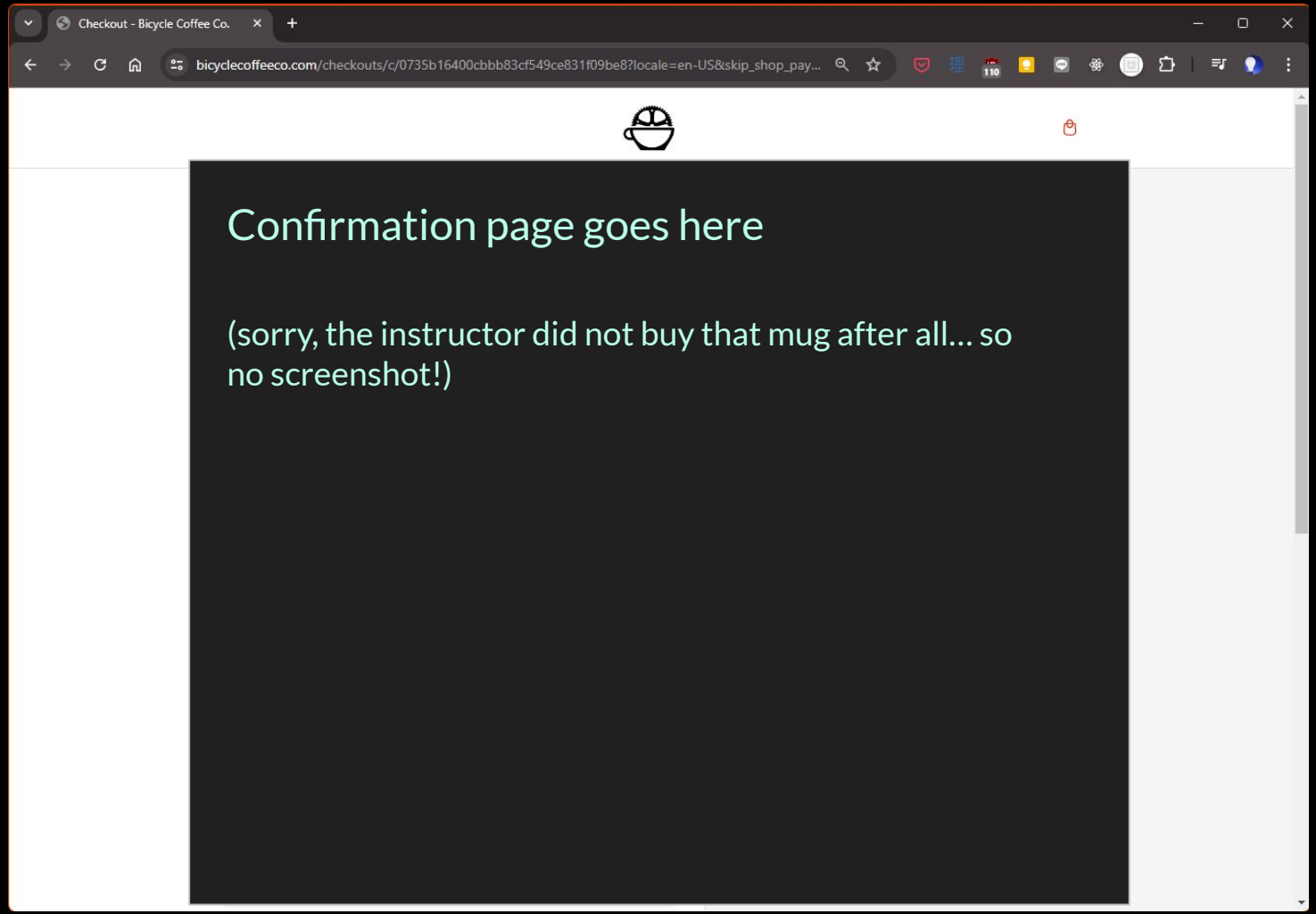
Enter your shipping address to view available shipping methods.

Panther Camp Cup $30.00

Discount code

Apply

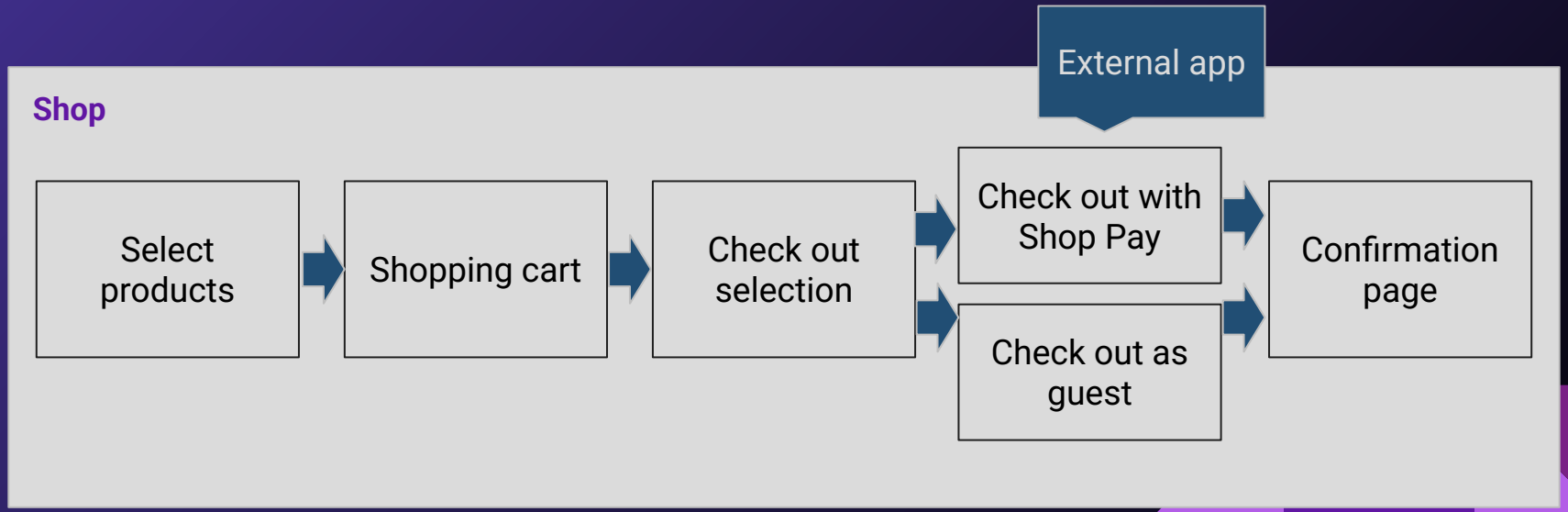
Subtotal	$30.00
Shipping	Enter shipping address
Total	USD $30.00


Checkout - Bicycle Coffee Co.
bicyclecoffeeco.com/checkouts/c/0735b16400cbbb83cf549ce831f09be8?locale=en-US&skip_shop_pay...
Confirmation page goes here
(sorry, the instructor did not buy that mug after all… so no screenshot!)

A box chart example

Example: the Bicycle Coffee Co. shop (https://www.bicyclecoffeeco.com/)

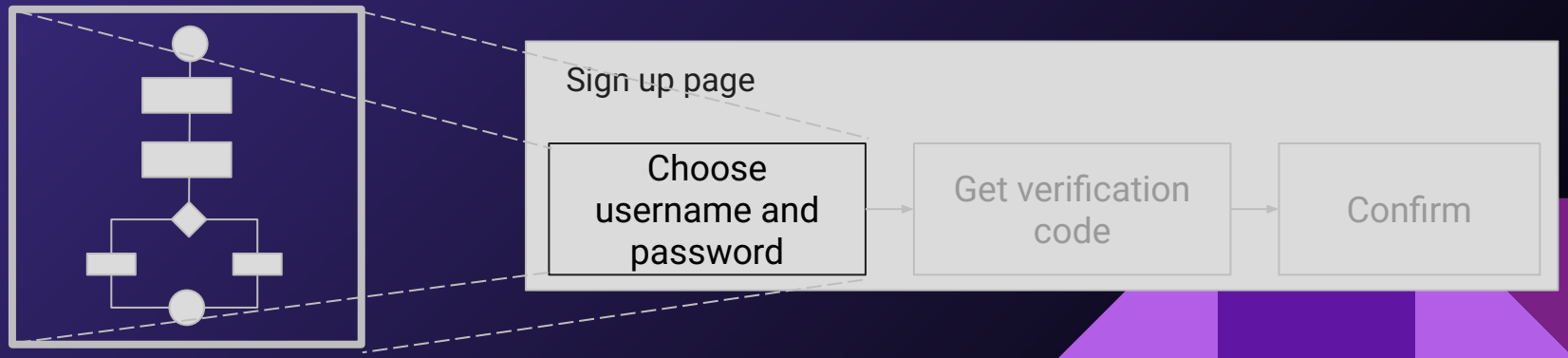
Here, the emphasis is on the screens we will display.



Flowcharts vs. box charts

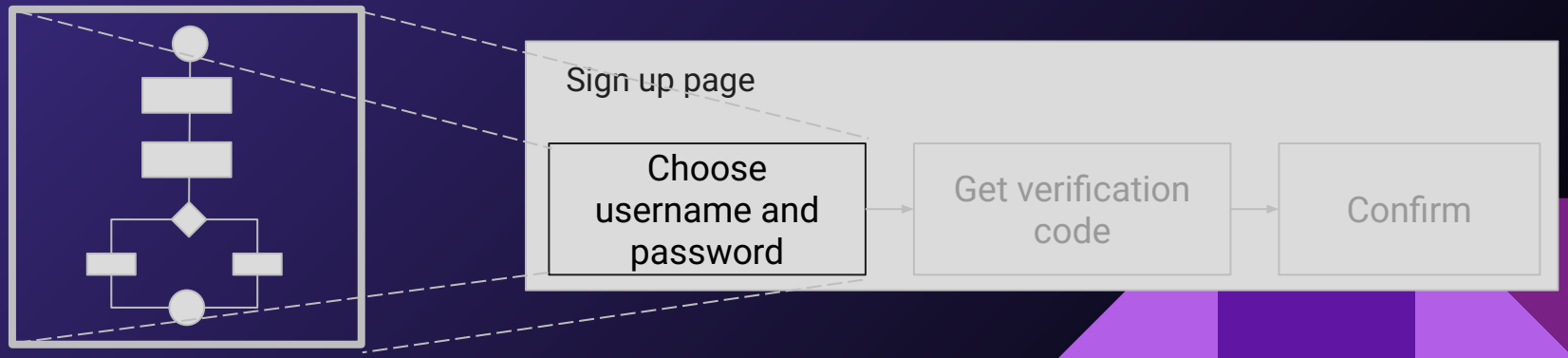
Boxes in box diagrams are more generic than flowcharts.

A box usually represents a wide “section” of a process. Each one can contain many smaller steps with logic in them. For example, the “choose username and password” may contain steps to: write the username, write the password twice, check that the password follows certain rules, etc.



Flowcharts vs. box charts

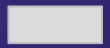
For complex processes, it may be useful to first know the process (eg. flowchart) and then split it in steps.



Flowcharts: a primer

The main symbols of a flowchart and what they mean:

“Start” or “end” - it’s a circle



Instruction or step (eg. something that is done)

Decision (eg. a question with “yes” or “no” answer)

Connector: to join two flows - it’s a smaller circle, or a dot

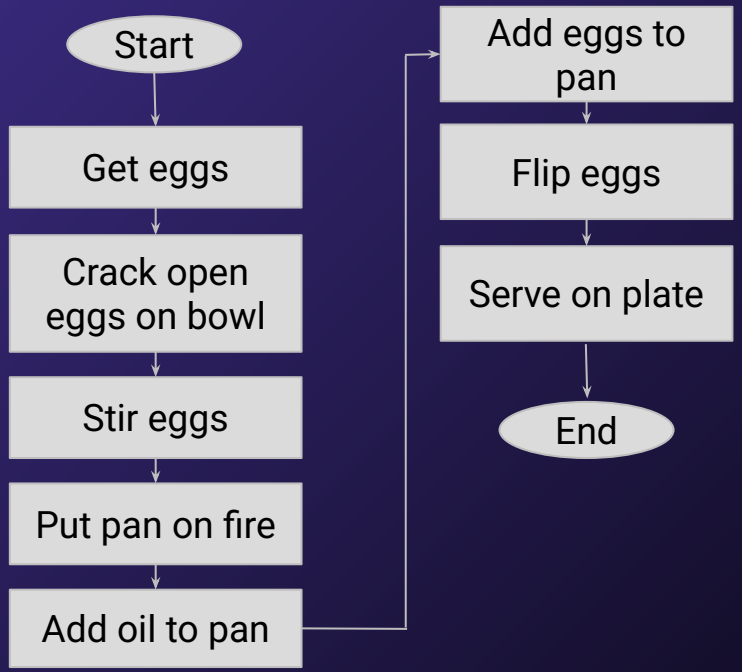
Flowcharts: a primer

Flowchart rules:

- Connect symbols with arrows in the direction of the flow.
- Symbols have only one input (one arrow going in) and one output (one arrow going out).
  - Exceptions: conditions have two outputs; connectors have two inputs
- Always extend the chart down and to the right, wherever possible
  - You may also use connectors with letters to split the graph in sections if needed

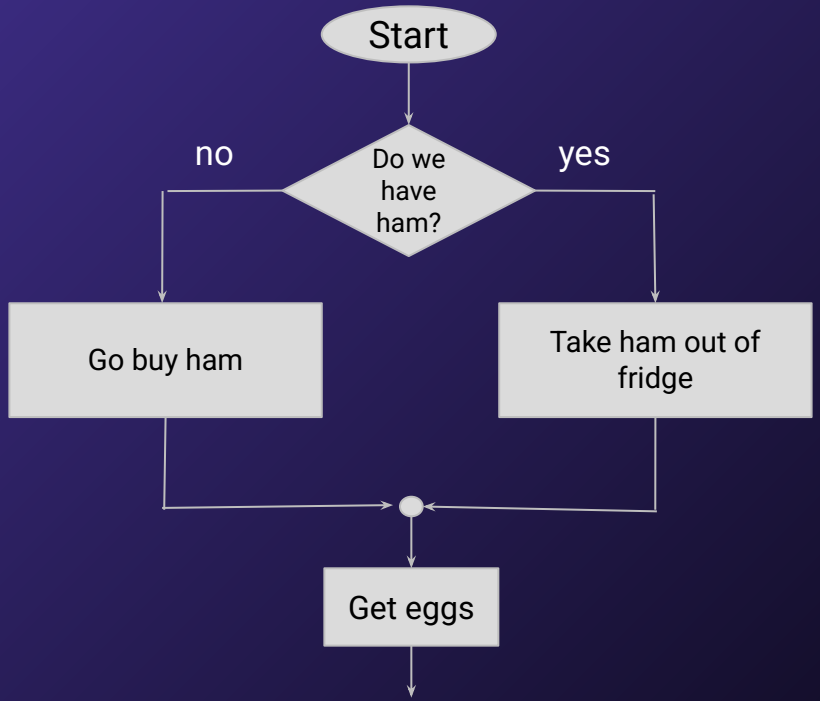
Flowcharts: a primer

Example: Making an omelette

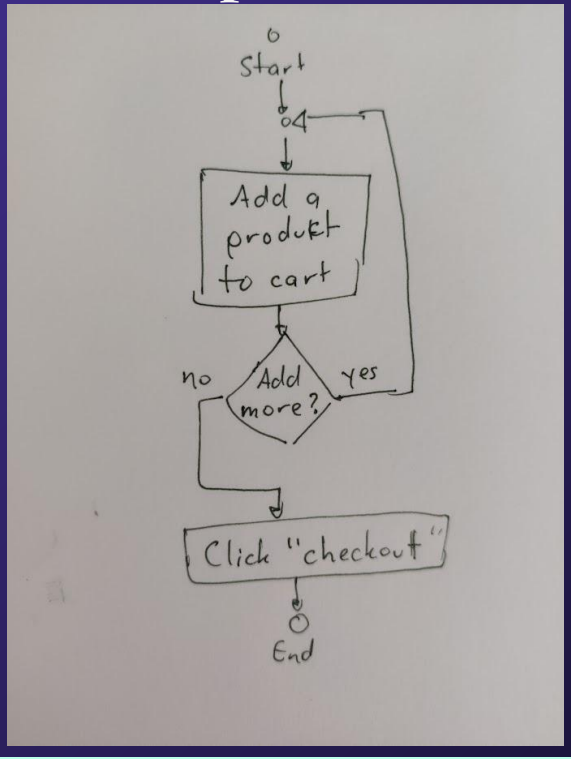


Flowcharts: a primer

Example with decisions: Making an ham omelette



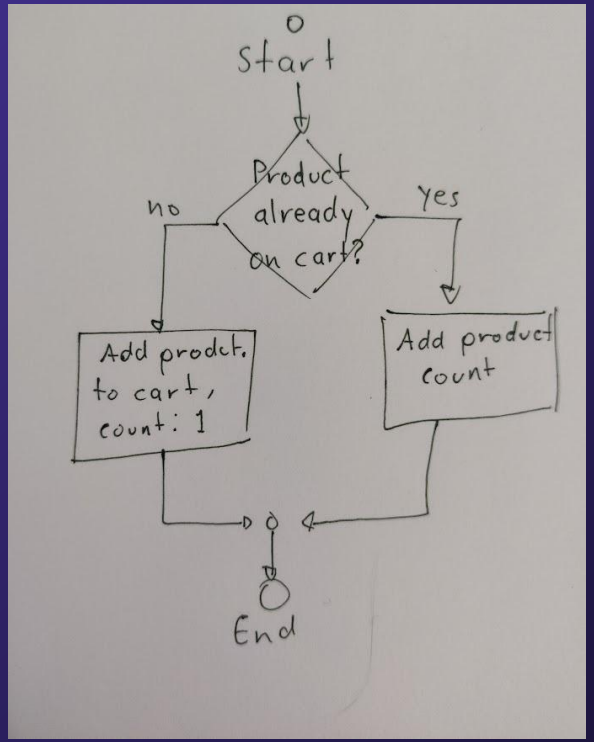
A (so-so) flowchart for the Bicycle Coffee Co. website shop “Select products” window



A flowchart is not always the best way to represent a non-sequential flow such as that in a website.

- The user does not actually get asked “do you want to add more products?” , it’s just a decision that they choose to do.
- We are also missing functionality (buttons) such as “change number of products” or “remove from cart”.

A (better) flowchart for the Bicycle Coffee Co. website “add to cart” button



However, flowcharts are great to represent sequences of events, for example, what happens when clicking a particular button.

(tip: handwritten notes and charts are totally okay, as long as they’re correct and understandable!)

The page mockup

Once you know how the website is distributed, now you need to plan for the pages.

You do that through **mockups.**

These are just drawings of how the page will look like.

Two kinds:

- **Low fidelity:** simple schemes; could be even crude drawings in a page
- **High fidelity:** highly accurate drawings, sometimes interactive

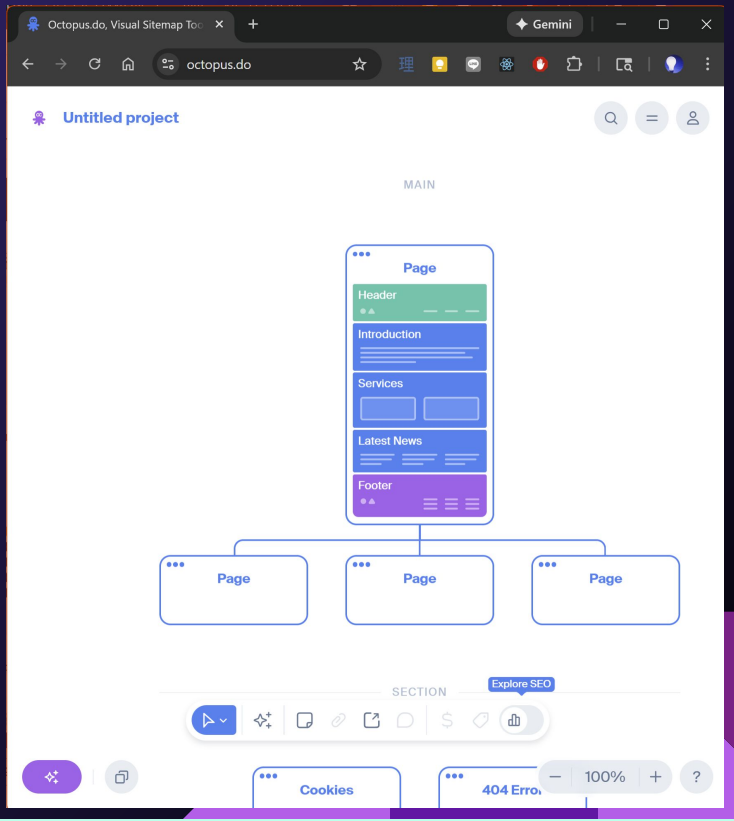
We'll talk about these in the next lessons.

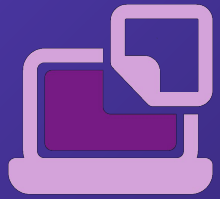
Mockups vs. website maps: Can you do them at the same time?

You could, if that helps you think of what goes in each page.

This is an alternative to writing notes along a box.

However, you don’t have to. We will study how to do mockups in the next lesson.





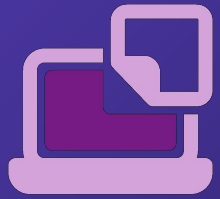
Created by HideMaru from Noun Project

Information Architecture of a website

The owner of a restaurant chain has asked you to create a website for their business.

- **What questions will you ask? What do you need to know?** (This is called **requirements gathering**).
  - Create **personas** and use cases.
  - Create a list of information and functionalities.
    - What information will be challenging to organize, if anything? How can we organize it?

Icon by HideMaru for Noun Project



Created by HideMaru
from Noun Project

Information Architecture of a website

The owner of a restaurant chain has asked you to create a website for their business.

- **Understand the problem:**
  - Do discovery. Think of personas and what they would do. Create at least one user journey to uncover hidden opportunities.
- **Propose a solution:**
  - Create a website map.
  - For any dynamic sections (app-like), create box diagrams.
    - You may create flow charts at this point, but it’s not required.

Icon by HideMaru for Noun Project

SEO and Semantic HTML

Why SEO matters

An essential part of online marketing.

Search Engine Optimization: to make content more findable, relevant and popular in search queries. Raises **organic** search results (as opposed to ad-based).

This applies both to websites and to social media.

- Some principles of SEO in social media:
  - Caring for content length
  - Use of hashtags (less relevant now, but still useful)
  - Linking to related content
  - Cross-collaboration with related authors

https://blog.hubspot.com/marketing/seo

Search Engine Optimization in websites

What it used to be:

“Trick Google into thinking our website is important”; “discover the algorithm”

What it is (or should be) now:

“Be a good citizen and build a good website”; “customize search results”. Make good content that the users and the indexing bots will understand.

Search Engine Optimization in websites

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What it is (or should be) now:

“Be a good citizen and build a good website”; “customize search results”. Make good content that the users and the indexing bots will understand.

- Content semantics - through semantic HTML
- Page speed and performance
- Internal linking and backlinks
- Optimization of appearance in search results
- XML sitemaps; robots.txt files
- Avoid duplicating content (eg. copying it from elsewhere in the web)
- etc.

Search Engine Optimization in websites

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What it is (or should be) now:

“Be a good citizen and build a good website”; “customize search results”. Make good content that the users and the indexing bots will understand.

- **Content semantics - through semantic HTML**
- For everything else, there are free and paid tools
  - Google Search Console: https://search.google.com/search-console/about
  - Free tools by Ahrefs: https://ahrefs.com/free-seo-tools
  - And many others. Here is a list of AI-driven SEO tools to research topics, generate creative content, index pages, etc. while supporting good practices

Has SEO changed in the AI age?

Yes, but not as much as one would think.

The most important change has been:

Before:

- People who have a question go to search engines to find related information in websites

After:

- People ask their questions directly to LLMs and get a researched answer

Has SEO changed in the AI age?

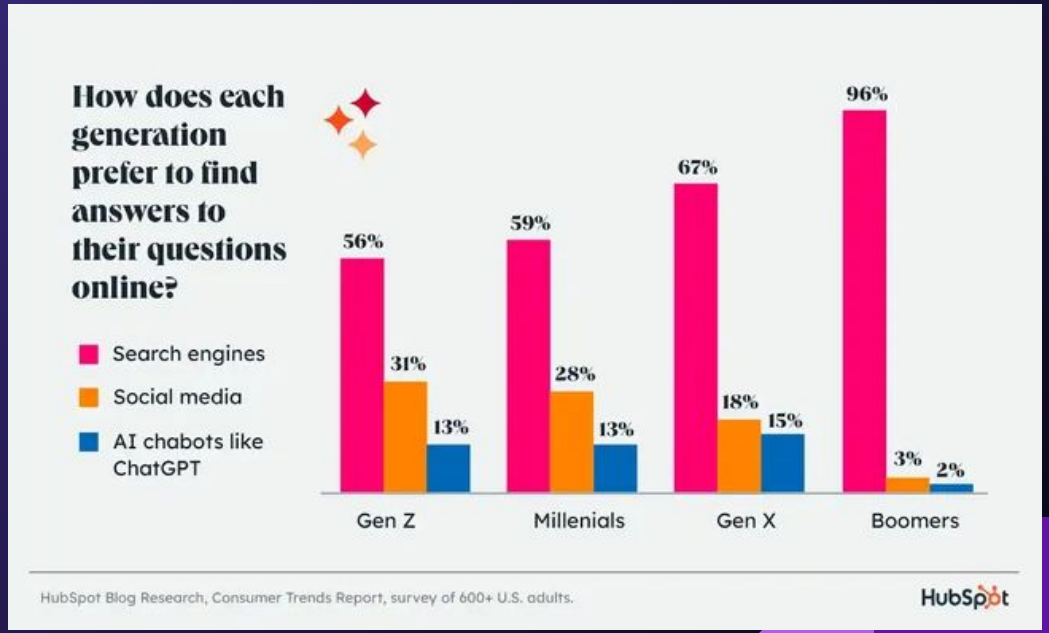
LLMs (AI chatbots) consume information in two ways:

- A web spider gathers data from the web; this is then used during model training.
- Realtime search done by the AI directly (through a “tool” called RAG, Retrieval-Augmented Generation)

In both cases, whether the AI finds information depends on the SEO of the pages containing the info. In many cases, this means, SEO for AIs is SEO for the web.

Has SEO changed in the AI age?

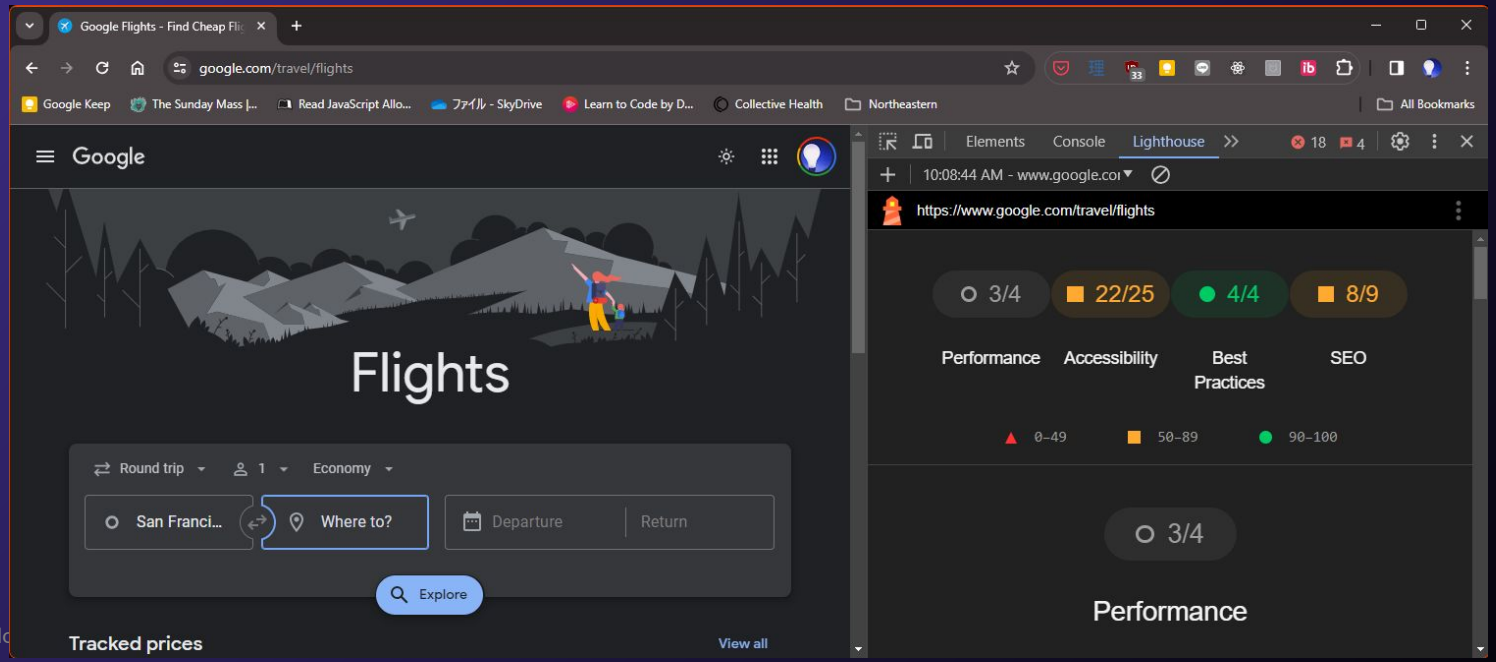
Also: Adoption of AI chatbots to respond to questions differs between age groups.



https://blog.hubspot.com/marketing/seo

Search Engine Optimization in websites

- Generate a “snapshot” report of any website using the Searchlight panel of the Chrome Developer Tools.
  - What are the SEO observations? How can this website improve?



Search Engine Optimization and Semantic HTML

We want the computer and the **spiders** to understand our website's information too.

- Indexing bots (aka s**piders**, **crawlers)**: programs used by Google and other agents to explore the web.
- Their results will power information searches for search engines, RAGs, etc.

The different parts of the website and page have **meaning.**

- Within a website: homepage, internal pages… (XML sitemaps, robots.txt)
- Within a page: Header, footer, sidebars, navigation… (Semantic HTML)

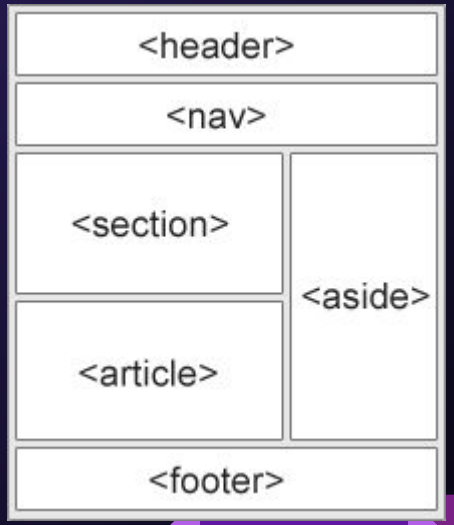
Semantic HTML

In programming, “Semantics” refers to the **meaning** of a piece of code (MDN); for example, what is the purpose of an HTML element.

- Choose the elements that represent the meaning of the contents.
- Important for more than SEO:
  - Helps screen readers narrate the page better
  - Creates code that is much simpler to read
- Around 100 semantic elements available.

Structuring a page with Semantic HTML

Some elements create blocks for the parts of the page.



From w3schools

Semantic tag examples

- Blocks for page parts: `<header>`, `<footer>`, `<main>`, `<sidebar>`, `<section>`, `<article>`, `<aside>`
- Semantic content: `<time>`, `<meter>`
- Blocks to give semantic context to non-semantic content: `<figure>`, `<figcaption>`, `<mark>`, `<em>`, `<cite>`

Common non-semantic tags

These tags have specific usages, but do not transmit structural meaning (semantic content) the same way the semantic tags do.

- Tags for structure without semantic context: `<img>`
- Tags for generic text styling (do not use): `<i>`, `<b>`, `<pre>`
- The generic block: `<div>`
- The generic text: `<span>`

WAI-ARIA roles and accessibility

- WAI-ARIA roles (or simply “ARIA roles”, or “roles”) are what actually provides meaning to tags.
- “Semantic” tags have predefined ARIA roles.
- With a role, **assistive technologies** know how to interpret the content (example: screen readers).
  - Browsers create an “accessibility tree” based on the DOM.
  - The role can determine how screen readers announce each text, enable navigation commands, etc.
- You can add a role to a non-semantic tag using the `role` attribute.
  - Not needed most of the times; use the appropriate semantic tag instead.
  - Sometimes there is no other way; for example: `<span role="math">2 + 3 = 5</span>`

A note on images

Images are an integral part of the content in HTML. Use the `<img>` tag to display the image, then wrap it in `<figure>` for semantics.

Use good quality images as base, then optimize them. (We will talk about image loading techniques in the Usability and Accessibility lesson.)

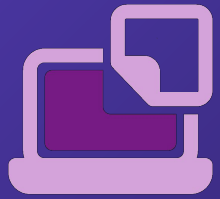
There are two main kinds of image formats; choose the one that is best for your case:

- Lossy: The file can be compressed easily, but the image will lose quality.
- Lossless: The file may not compress as much but it will never lose quality.

Image formats

Common image formats for the web:

JPG	Lossy	Default for photos. Compressed. Can adjust compression % for a smaller file size
PNG	Lossless	Used for illustrations with transparency. Big file sizes.
GIF	Lossless	Traditional format for animations and transparency. Big files.
SVG	Lossless	Used for illustrations. Small file sizes. Vectorial: contains instructions to draw, rather than an image itself.
WebP	Can be either	New-ish format; better compression than JPG and PNG. Supports animations and transparency.
APNG	Lossless	New format. PNG with animation capabilities.
AVIF	Can be either	New format, supports both images and animations, transparency. Better compression than WebP but browser support still not strong.



Exploring semantic tags

- Explore the source code of the HTML files provided here: https://github.com/sgenius/semantic-html
  - What do the tags do?
  - How do we know a tag is semantic or not?

Icon by HideMaru for Noun Project

Putting it all together: An example

Let’s create a new website!

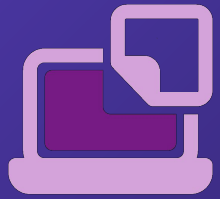
It’s a great day! You’ve been hired to create the web presence for The Orange Grove, a new restaurant in downtown Oakland.

Riccardo, the owner, has heard great things about you and trusts you to create something great.

Generated with Gemini 2.5 Flash.

Okay… what do we do now?

Image by Freepik



Created by HideMaru from Noun Project

First things first: What's this about?

"Something great" doesn't really work well as a description. Let's get **requirements** instead.

What would you ask?

Photo by Priscilla Du Preez 🇨🇦 on Unsplash

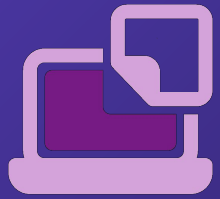
Icon by HideMaru for Noun Project

First things first: What's this about?

This is what we got from Riccardo:

- This is an italian restaurant.
- It needs a webpage and managing its social media presence.
    - We only work with websites, so we'll ignore the other request.

Photo by Priscilla Du Preez 🇨🇦 on Unsplash



Created by HideMaru from Noun Project

What information do we want in the website?

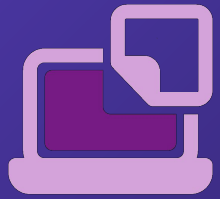
In no particular order, Riccardo talks about:

- History
- A link to buy his upcoming book, “Memoirs of a Totally Not AI-Generated Italian Chef”
- His motivation as a chef
- Beautiful photos of the food, and also of the Italian countryside

Who will use this webpage? What might they be looking for? What is missing? Let’s figure it out.

Photo by Priscilla Du Preez 🇨🇦 on Unsplash

Icon by HideMaru for Noun Project



Created by HideMaru from Noun Project

Who will use this website?

Let’s create a few light **personas**:

- John, a 65 year old lover of Italian food and wine; has heard about The Orange Grove and is curious
- Wanda, a 18 year old woman who is looking for a restaurant to go this weekend with friends, and is open to whatever as long as it’s within her price range
- Peter, a 25 year old man that is planning a romantic date

What do they need? Are we providing everything they need to know, and enabling everything they need to do, about The Orange Grove?

Photo by Priscilla Du Preez 🇨🇦 on Unsplash

Icon by HideMaru for Noun Project

Who will use this website?

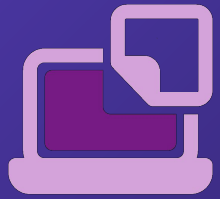
What they could be needing:

- John may want to know what is the general vibe and what they serve. **Probably show the menus?**
- Wanda needs to know prices for sure; also, **location and opening hours.**
- Peter needs to **make a reservation** and **enable to request something special for the date**.
    - The reservation could be made **by phone** or we could provide a link to a third-party reservation system, or create the system ourselves.

Photo by Priscilla Du Preez 🇨🇦 on Unsplash

A new list of contents

- History
- A link to buy his upcoming book, “Memoirs of a Totally Not AI-Generated Italian Chef”
- His motivation as a chef
- Beautiful photos of the food, and also of the Italian countryside
- **Menus**
- **Location**
- **Opening hours**
- **Phone number**
- **Link to a reservation system?** *(We’re not sure about this one, but we’ll include it and ask for it.)*



Created by HideMaru
from Noun Project

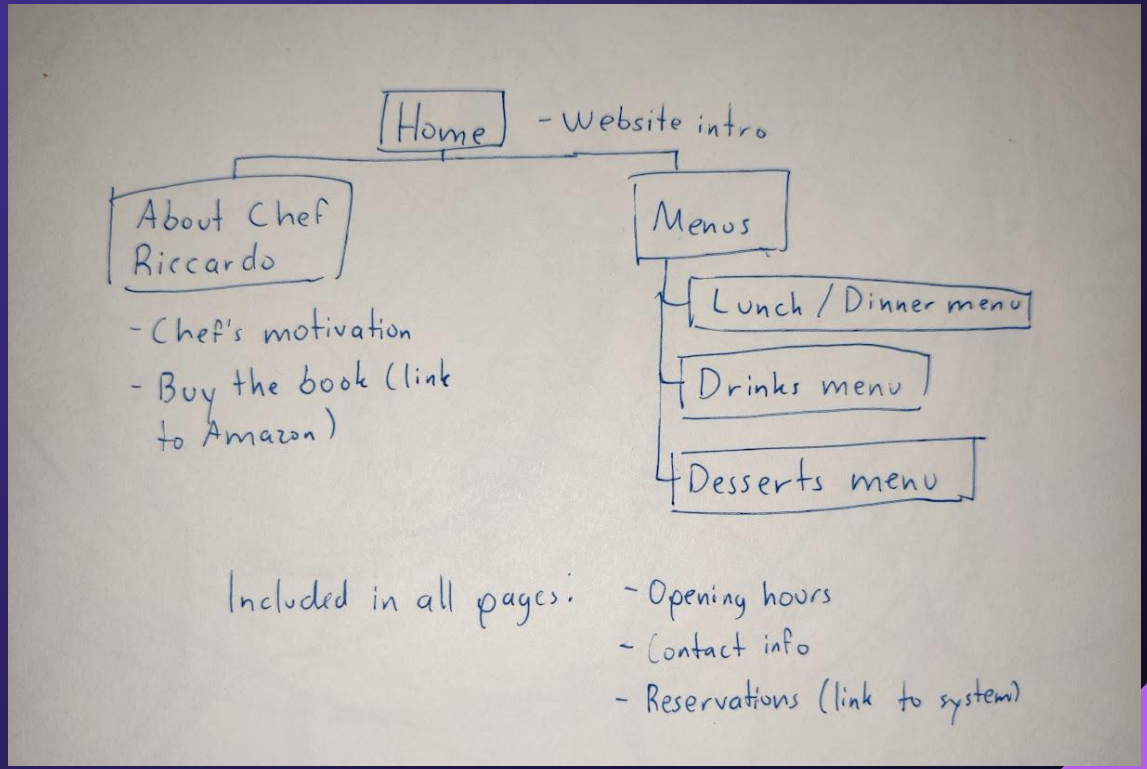
How do we organize this?

How would you organize the contents in a few pages?

- Some content deserves their own pages
- Some content may be part of headers or footers (eg. contact info)

Try this out first!

A sample website map



Note: in practice, the website map may already include low-fidelity mockups. We will talk about this in the next lessons.

Appendix: Organizing complex information

Understanding complex information

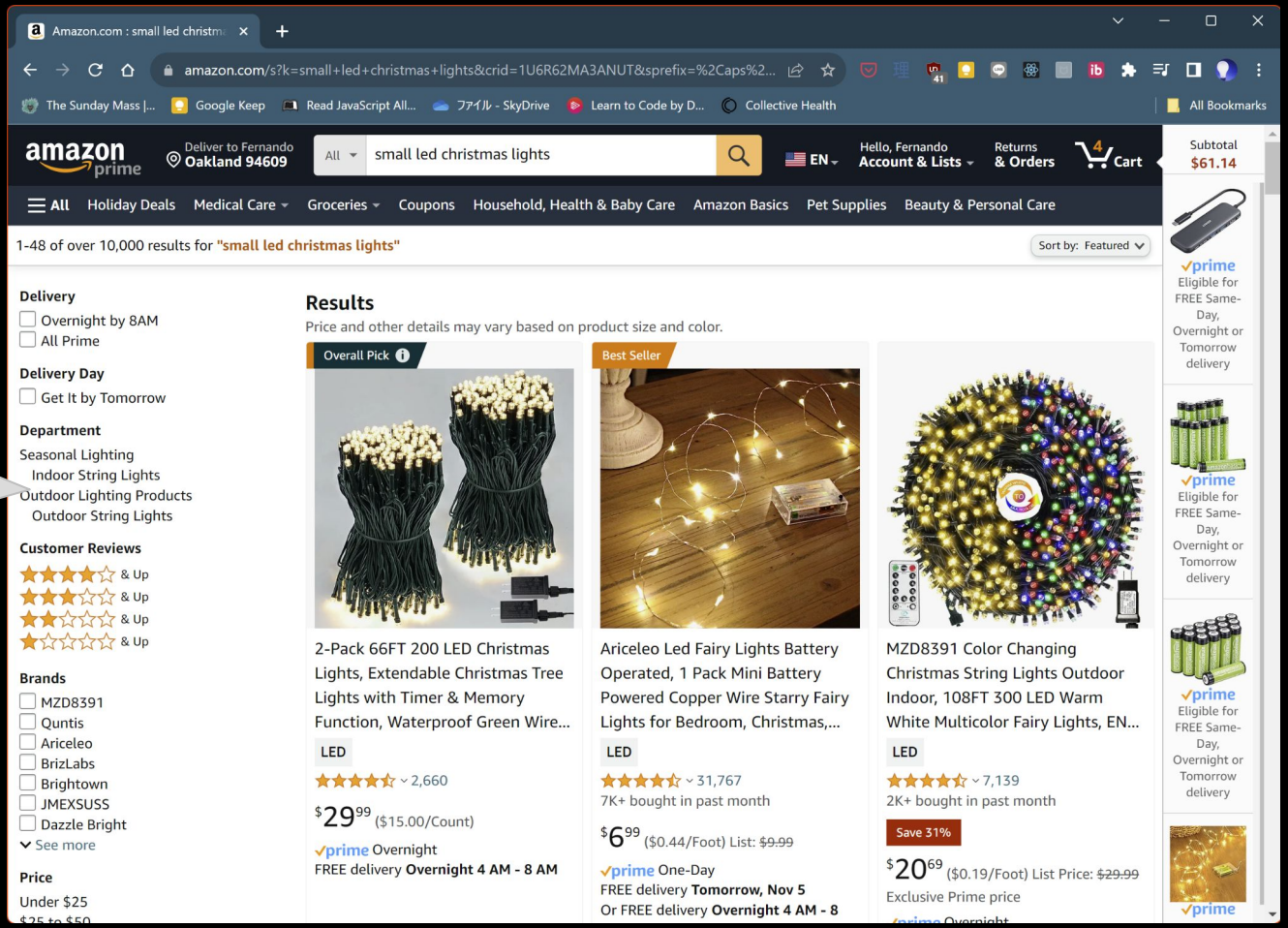
- Think of how the following is categorized:
  - A restaurant menu
  - A library
  - An e-commerce website such as Amazon

Understanding complex information

In many cases, there is more than one way to organize things.

- Is an affogato a drink or a dessert?
  - How do you usually think about it?
- Should a book of japanese poetry translated to Spanish be in the Japanese Literature or the Spanish section?
  - What if the library is in Japan? What if it is in Argentina?

Seasonal lighting?
Outdoor lighting?
It's both.



Some information organization types

- By category
  - Example: sections in a store, a library, or a website. Put everything related together

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  - Example: selecting a state, then a city

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  - Example: a flow that is organized in steps, such as the process to buy something in Amazon

Some information organization types

- By category
  - Example: sections in a store, a library, or a website. Put everything related together
- Hierarchical
  - Example: selecting a state, then a city
- Sequential
  - Example: a flow that is organized in steps, such as the process to buy something in Amazon
- By access restriction
  - “Public” and “private” pages; think of a website for a hospital. Info on your exam results is separate from the hospital’s “latest news”
  - More complex schemes exist

These are all used at the same time.

“Solving” complex content

- Think of your content in terms of **objects** with
  - A consistent “shape” or structure
  - A series of “behaviors”:
    - How they react
    - How they interact
    - How they change over time

“Solving” complex content

- Think of your content in terms of **objects** with
  - A consistent “shape” or structure
  - A series of “behaviors”:
    - How they react
    - How they interact
    - How they change over time
- Example: a recipe
  - Shape: it has **ingredients** and **steps.** It can also be **seasonal**, and it’s usually **cultural** (eg. tied to a kind of cuisine)
  - Behaviors: people can **follow it**, or **store** it
    - It can be **more relevant to the user** if they’re looking at a similar recipe, or if they’re buying one of the ingredients
- Imagine: how can we organize recipes in a recipe sharing website? What can we do with them?

How to find information: examples

- Hierarchical navigation (we’ve been talking about it)
  - A hierarchical menu is standard

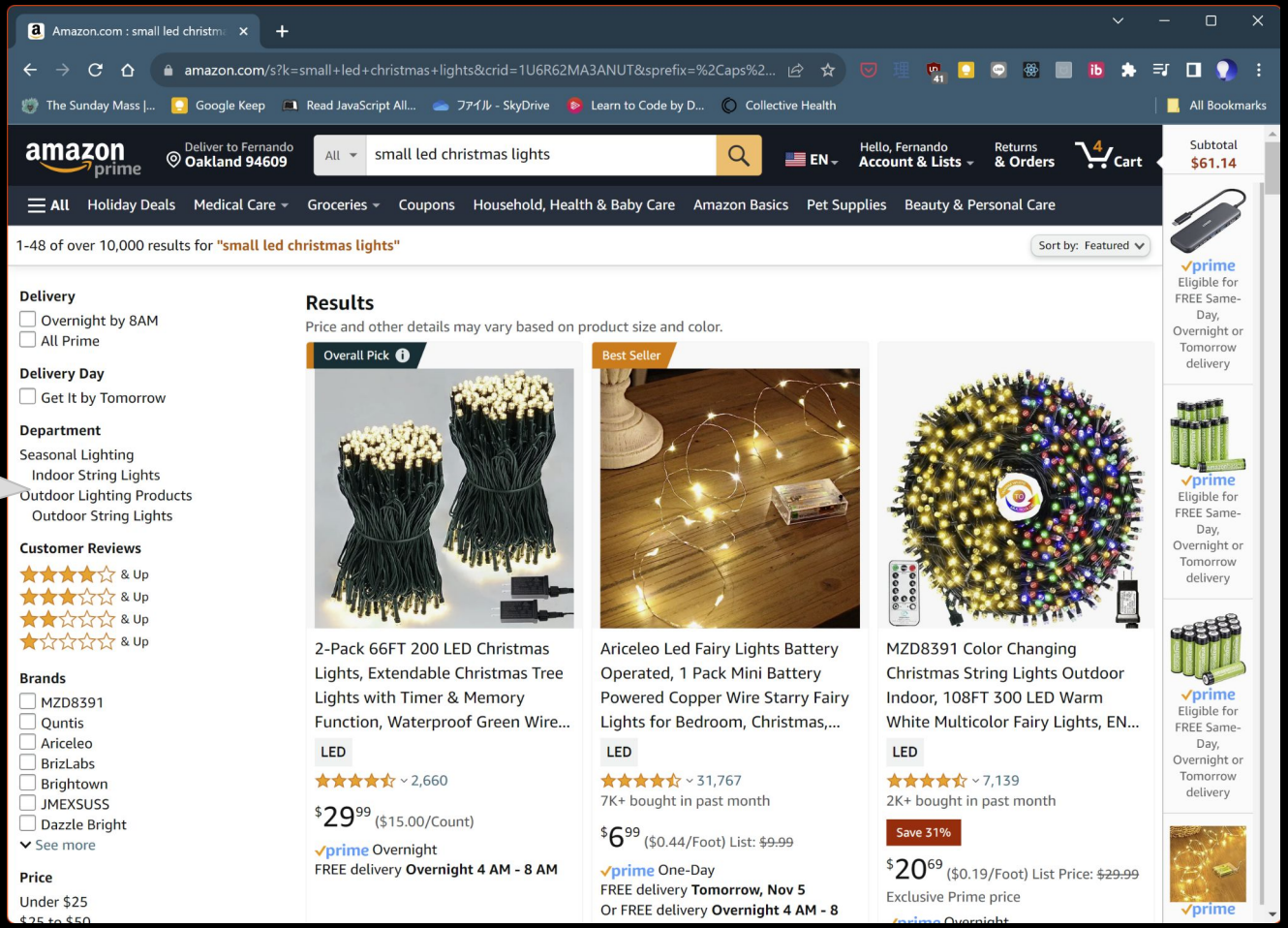
How to find information: examples

- Hierarchical navigation (we've been talking about it)
  - A hierarchical menu is standard
- Search functionality
  - Can have "helpers" such as autocompletion
  - Always nice to have, not needed for smaller websites, and a must for bigger ones

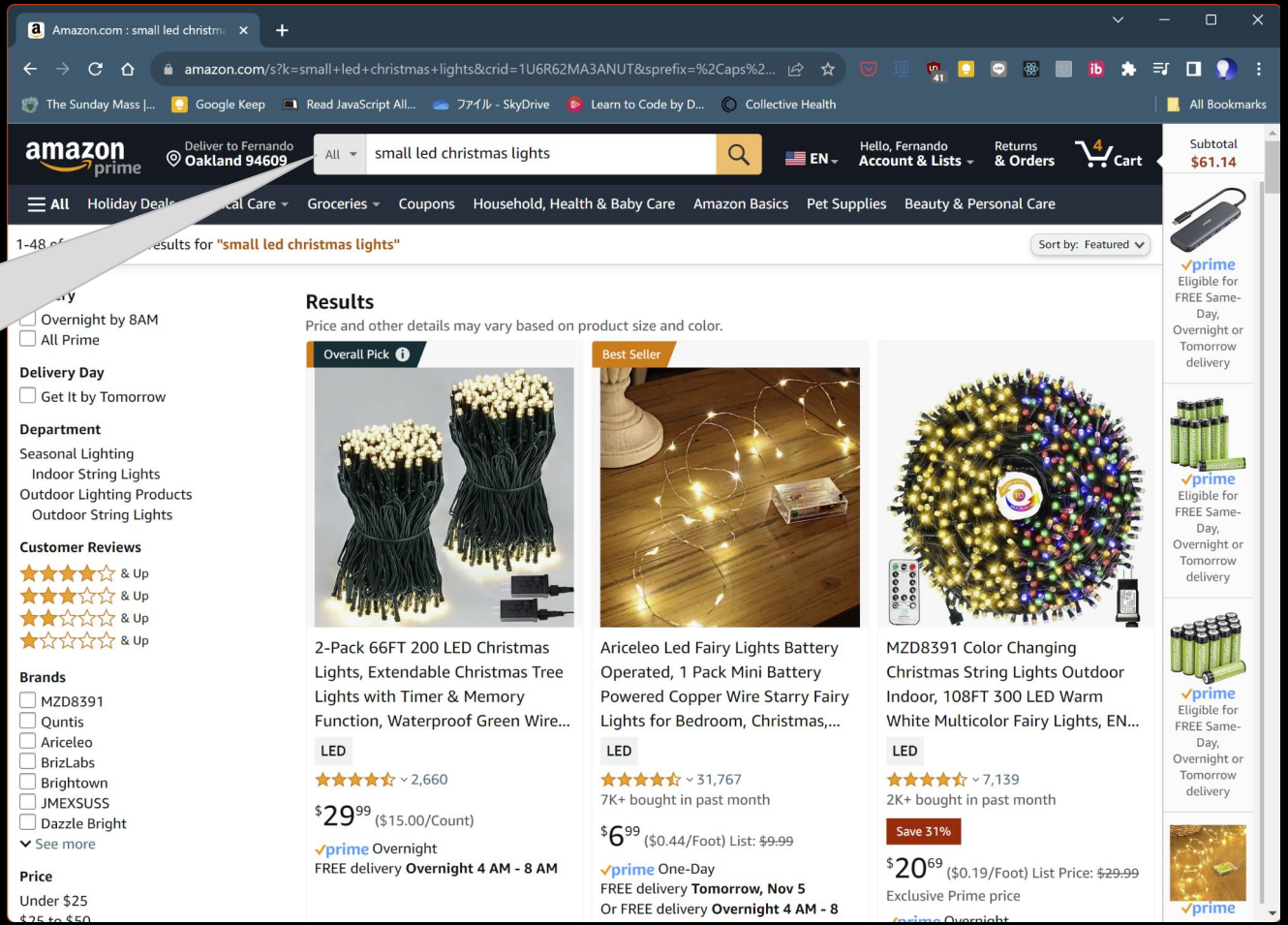
How to find information: examples

- Hierarchical navigation (we've been talking about it)
  - A hierarchical menu is standard
- Search functionality
  - Can have "helpers" such as autocompletion
  - Always nice to have, not needed for smaller websites, and a must for bigger ones
- Tags
  - Add free-form "tags" to content to relate it with each other outside of the context of a hierarchy.
  - For example: articles in a blog
  - You could then search by tag

Seasonal lighting?
Outdoor lighting?
It's both.

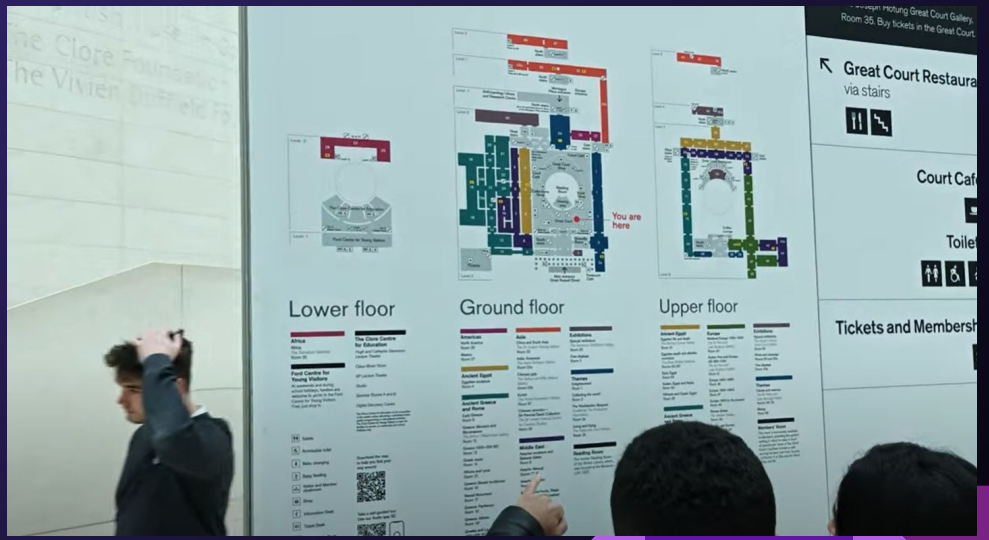


But it does not matter: I searched for it and got a **results page**



Following the “information scent”

- “Information scent”: an intuition that you’re going the right way to find what you need
- To make a specific item easy to find in a big structure (website, dictionary, library, airport…), all of the features we talked about must collaborate and be easy to use.
- Go from general to specific (hierarchies; groupings) in an index or map



Map of the British Museum in the main concourse. Still from video by Fernando López, November 2024

Following the “information scent”

- Go from general to specific (hierarchies; groupings) in an index or map
- When the user finds what section or place to go to, leave “breadcrumbs” to guide them
    - That is: signs that they are in the right direction
    - Imagine yourself trying to find a particular exit in a big train station or airport: you want constant arrows telling you “the exit is that way”
    - In a website, this can be done through design: page titles, breadcrumb navigation