

**Universal and Intersectional
Design: Exploring Web
Navigation and Accessibility**

Garrett Massey

**Universal and Intersectional
Design: Exploring Web
Navigation and Accessibility**

*“it’s already hard to find
websites I can even
access, and I don’t need
to have something
tedious added to it”*

About Me

Boston Terrier Enthusiast

Hobby Pianist

```
<?php
```

```
    $like_to_code = TRUE;
```

```
?>
```

Cold Brew Coffee Connoisseur

About Me

Web Designer for New Mexico Tech and
University of New Mexico

B.S. in Technical Communication (focus in
Computer Science)

7 Years Experience in Web Design

Thesis on Web Navigation and Information
Architecture

Thesis

Background

4 Navigation Structures for Websites:

Thesis

Background

4 Navigation Structures for Websites:

Linear

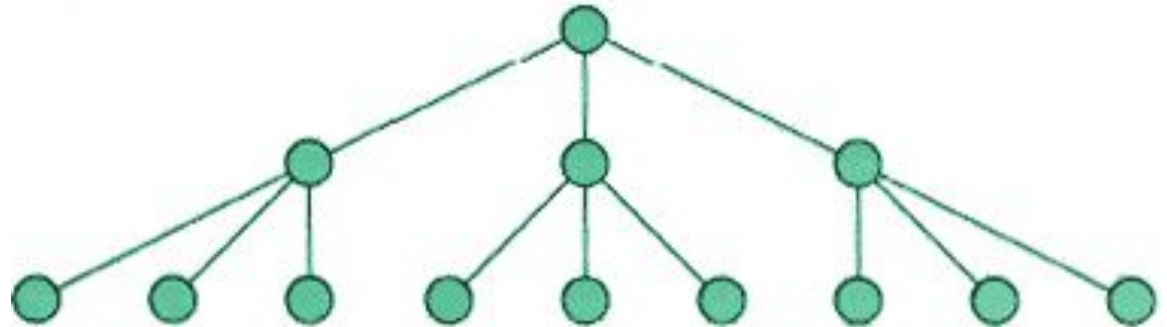


Thesis

Background

4 Navigation Structures for Websites:

Hierarchical

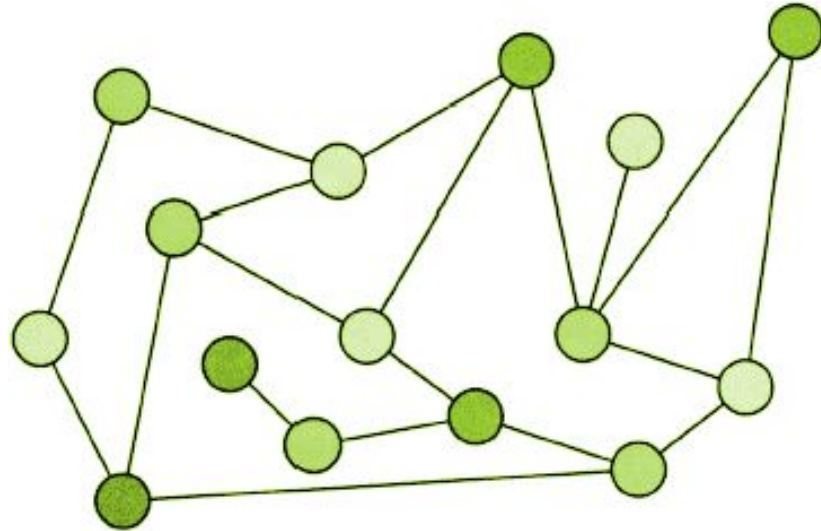


Thesis

Background

4 Navigation Structures for Websites:

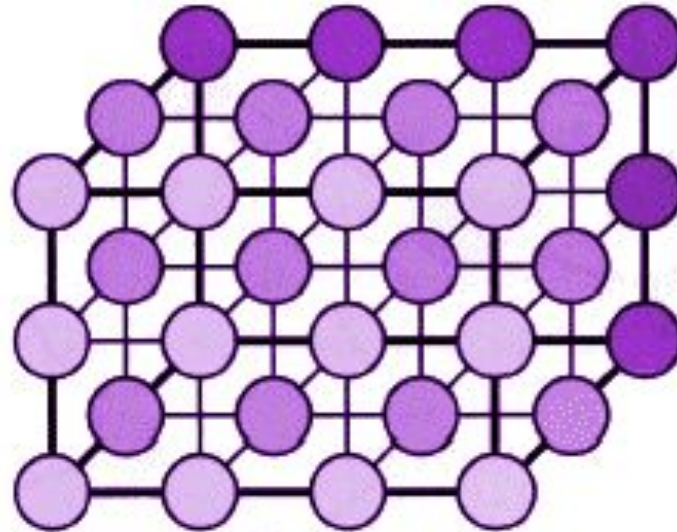
Organic / Web



Thesis Background

4 Navigation Structures for Websites:

Matrix



Thesis

Background

Research Objective

Find out if one navigation structures was better suited for visually impaired users

Thesis

Background

Research Objective

Find out if one navigation structures was better suited for visually impaired users

Find out *why* a particular navigation structure worked better than others, if it did.

Thesis

Background

Research Objective

Find out if one navigation structures was better suited for visually impaired users

Find out *why* a particular navigation structure worked better than others, if it did.

Develop guidelines for improving accessible web development

Thesis Background

Websites

This is an alphabetical list of users. Use the navigation tools below to find Loretta Burns's profile.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



Alex Owens

[View Profile](#)



Alice French

[View Profile](#)



Alice Morin

[View Profile](#)



Thesis

Background

Results

Generally speaking, web navigation relies on context and depends on user preferences, needs, and abilities.



Moving Forward?

How do you design web navigation to benefit the majority of users?

Moving Forward?

How do you design web navigation to benefit the majority of users?

Things to remember:

Users need context

Moving Forward?

How do you design web navigation to benefit the majority of users?

Things to remember:

Users need context

Information architecture should inform navigation structure

Moving Forward?

How do you design web navigation to benefit the majority of users?

Things to remember:

Users need context

Information architecture should inform navigation structure

Usability surveys provide development context

Accessibility and Universal Design

“Accessibility starts with inclusion”

Accessibility and Universal Design

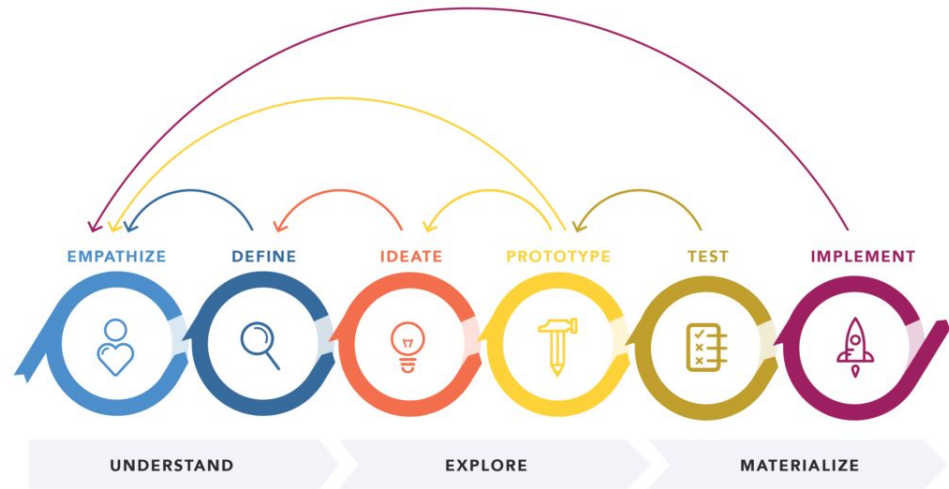
“Accessibility starts with inclusion”

- Garrett Massey, a white cisgender male

Accessibility and Universal Design

“Accessibility starts with inclusion”

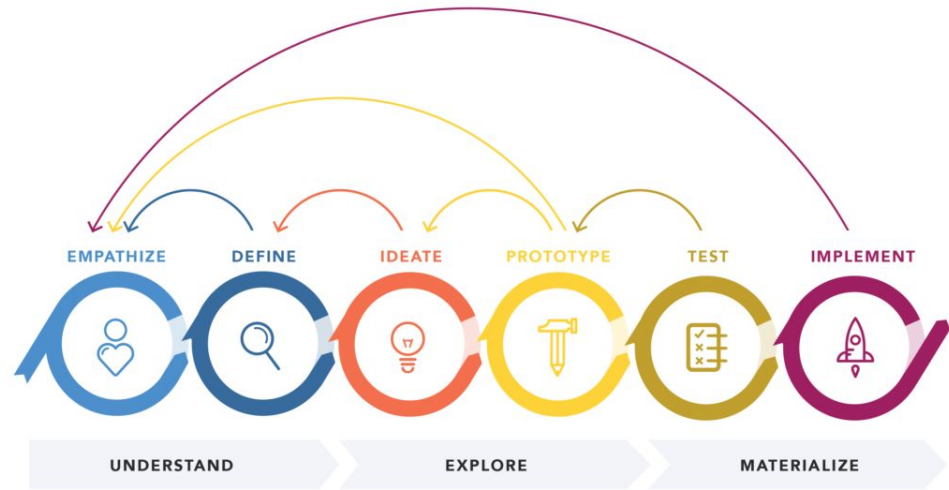
Universal and accessible design start with empathizing and understanding your users.



Accessibility and Universal Design

“Accessibility starts with inclusion”

The design process should constantly defer to people with diverse experiences.



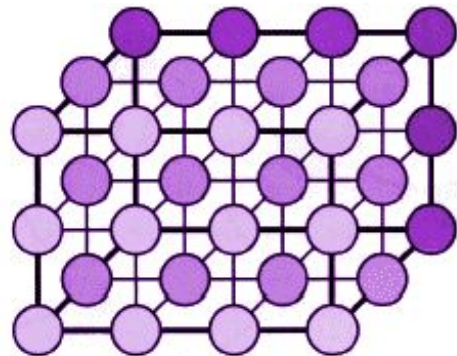
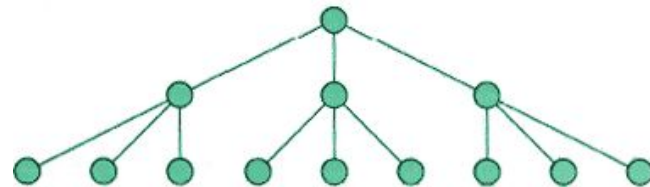
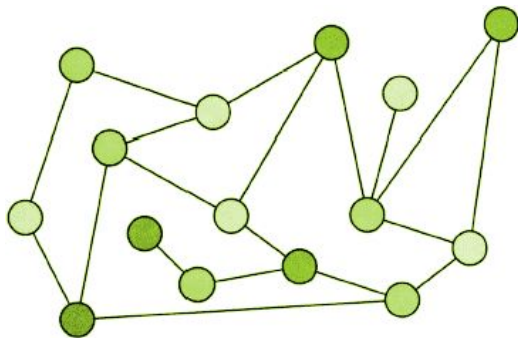
Accessibility and Universal Design

Principles of Universal Design

- Equitable Use
- Flexibility in Use
- Simple and Intuitive Use
- Perceptible Information
- Tolerance for Error
- Low Physical Effort
- Size and Space for Approach and Use

Designing Accessible Web Navigation

Given this, how should you structure your web navigation?

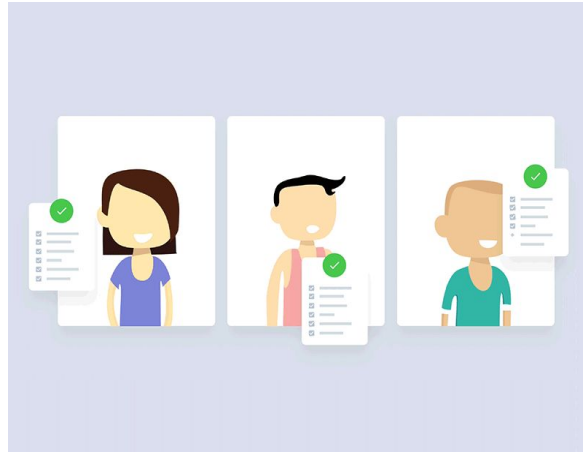


Designing Accessible Web Navigation

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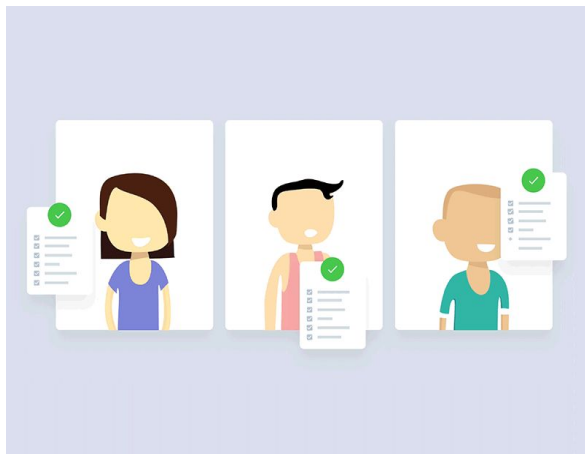


User Feedback and Input

dribbble.com

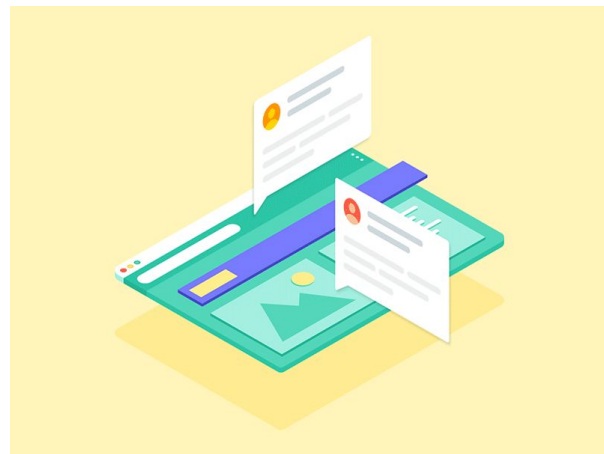
Designing Accessible Web Navigation

Given this, how should you structure your web navigation?



User Feedback and Input

dribbble.com



Information Context

dribbble.com

Designing Accessible Web Navigation

Exercise:

You are designing a website for a restaurant. How do you structure the online menu such that information is accessible, findable, and understandable?

Designing Accessible Web Navigation

Exercise:

Talk to the existing customers.

Designing Accessible Web Navigation

Exercise:

Check how the physical equivalent is organized.

Designing Accessible Web Navigation

Exercise:

Ask people outside of your team what they expect to see in a similar system.

Designing Accessible Web Navigation

Exercise:

Prototype different mockups using different navigation structures. Which works best for you? Which works best for others?

Designing Accessible Web Navigation

Exercise:

Iterate!

Designing Accessible Web Navigation

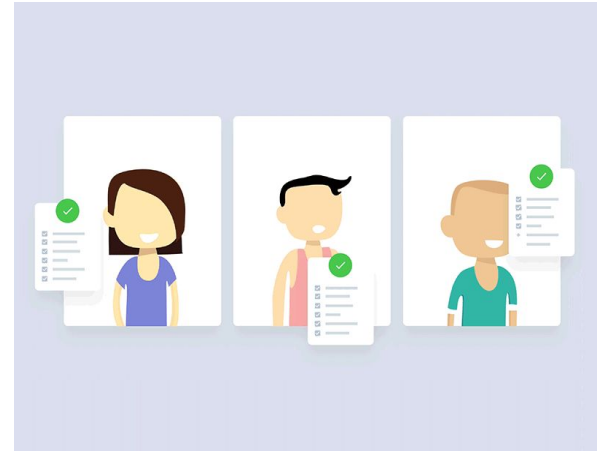
Exercise:

Continue deferring to users, especially ones who have different backgrounds and experiences from you.

Final Thoughts

No single designer or developer will be able to implicitly understand the needs of all users.

This is why we need to include users IN the design process



Final Thoughts

Diversity of people on your team leads to diverse and new ideas for design and information architecture.

**“Diversity of Thought”
should be achieved as a
*result of diverse
representation***

- [Michelle Kim](#)



Final Thoughts

Creating accessible platforms, websites,
and systems increases usability for
everyone

Thank you!



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