



# IxD Thomas Owens

Lecture at the SAE Institute

# Debugging UX

Overview

Understanding the problems

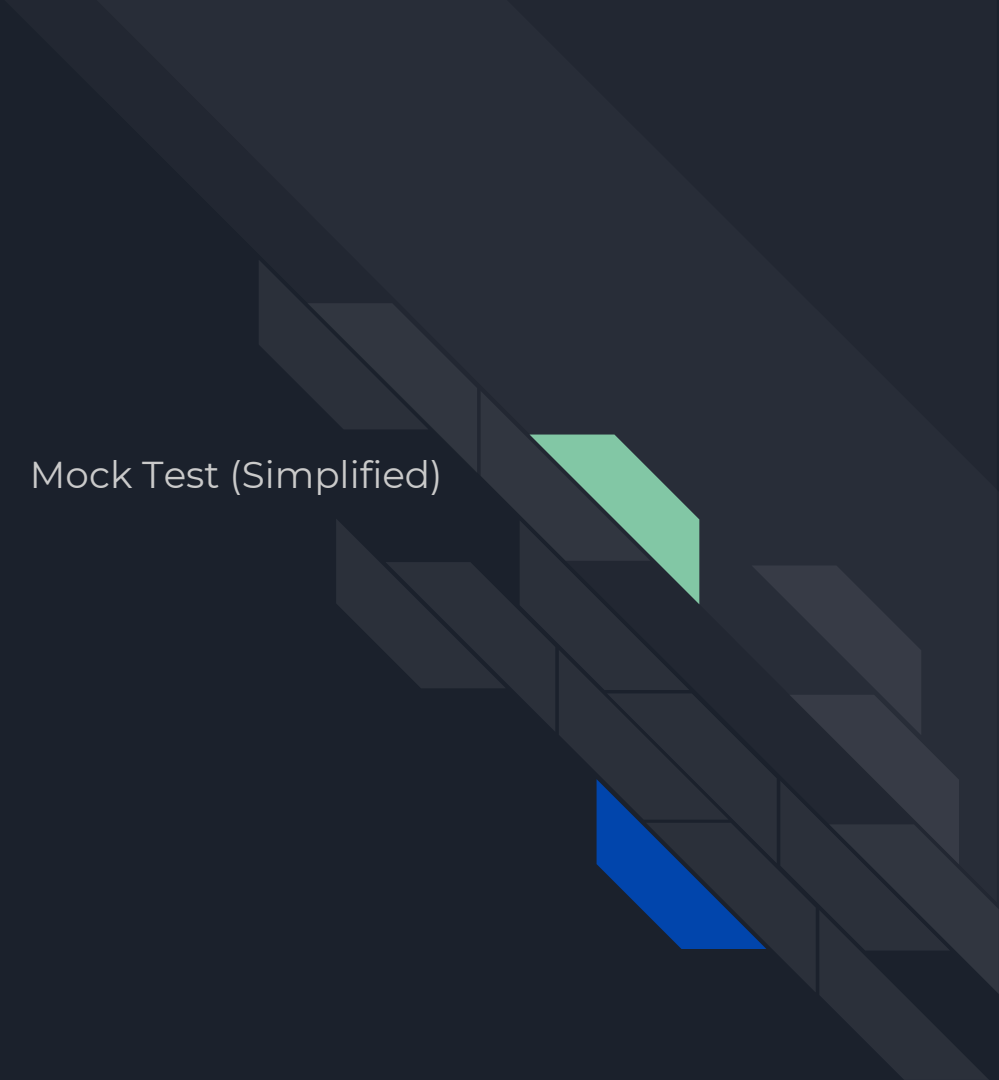
Debugging HTML

Debugging CSS

Imagery

Debugging Tools

Mock Test (Simplified)

An abstract graphic on the right side of the slide. It features a series of dark gray, three-dimensional rectangular blocks arranged in a descending staircase pattern from the top right towards the bottom left. Two blocks are highlighted: one is a light green color and the other is a bright blue color, both positioned within the sequence of gray blocks.

# Learning outcomes

At the end of this lesson you will know...

How to debug a website in terms of design principles and UX.

Debugging in HTML and css the best approach how to identify a fault and use appropriate tools.

How imagery should be debugged and how file structure plays a part.

You will also have experience debugging in a test environment.





# Overview

Debugging a website based on UX heuristics and design principles

Can be tricky in the sense that it will require a full understanding of these principles and how to apply them.

The faults may not be obvious and previously overlooked which is why the keen eye of an expert is required.

It will also require some html and css coding experience as well as an understanding of website structure the same tools one uses for web design projects will be needed.



# Understanding the problems

- 01 Heuristic analysis in terms of such things as standards, consistency, user journey, goals, pathways, content hinting, stickiness, layout or wire frame structure. Placement of content to utilise the benefits of these design methods.
- 02 Design principles which have more to do with content such clutter, line, symmetry, consistency, copy structure, etc.
- 03 Problems can often be the result of coding errors such as poor responsiveness. Similarly coding may be the best way to alter the website to resolve heuristic or design principals problems. General errors are also a consideration.



# Understanding the problems

1. Visibility of status. The user should know what is going on.
2. Match with Real World: The system should speak the user's 'language' and be natural for them.
3. User Control and Freedom: Navigation etc.
4. Consistency, Standards and Error Prevention.
5. Recognition not recall, intuitive.
6. Flexibility: Can be used by experts and novices efficiently.
7. Minimalist design, form, line symmetry, clutter free. Do not swamp the user.
8. Help diagnose and recover from errors, help and documentation.



# Understanding the problem

Nielsen heuristics appear outdated (from 1993) but have huge relevance today and are endorsed industry wide.

There are other sources of usability heuristics such as Dr. Ian Connel and Nadine Kintscher.

You should also research the types of heuristics there are such as research or theory based to better understand the concept.



# Debugging HTML

Many issues with UX can be solved using nothing more than HTML.

The placements of content within the wire frame, the structure of the website and what elements are used such as menu icons.

Can we think of more?





# Debugging CSS

Much of the the time responsive design issues such as cluttered content and overlapping elements might be easily solved using css.

Other potential issues could be

Z indexes, fixed navigation, and table cell styles

Can we think of others?

Inspect element and console on mac is useful this way. This tool permits editing live websites from your view.





# Imagery

Use of imagery incorrectly can cause design issues.

Use of misleading icons

Overly busy content

This might include videos

Image sharpening or compression.





## Debugging Tools

Dreamweaver

Inspect element

Javascript console



The difference between errors and warnings

Sometimes spell checker get it wrong as we know and code checker are the same.

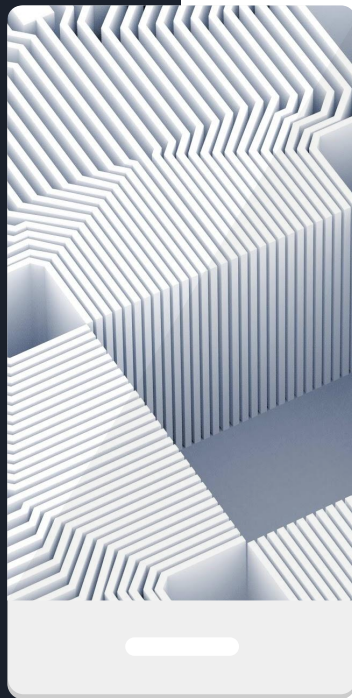
Auto complete.

Can we think of any other issues?

## Spotlight on mobile

It could be a good idea to have a mobile device ready for debugging but you can also use

Responsive device testing in chrome.



Ah Chrome where would we be without it.. Firefox land probably.

But it may be beat good idea to cross browser check.

Using .....



# Recap

So we know how to debug. The best approach when it comes to ux.

The best tools to use and the best process to go through in order solve common UX problems.



# Pop quiz

1. When debugging CSS what browser inspection tool is commonly used?
2. Theory based and research based are types of which UX methodology?
3. Who is Jakob Nielsen?
4. Who is a Flexible system designed for?
5. Who is Dr. Ian Connel?



# Pop quiz

## Answers

1. Chrome, inspect element or console.
2. Heuristics
3. Founder of UX and author of Usability Heuristics most commonly used today.
4. Both Experts and Novices
5. A Modern Usability Expert.



# Pop quiz

Extra Credit for the Win!

1. Can we name all 10 Nielsen Heuristics?
2. Can we name any other modern ones?





## Mock test

I'm going to show you a simplified mock test.

It won't be a full website just a script I would like you youth debug