



Prifysgol Cymru
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University of Wales
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200
1822 - 2022

GETTING STARTED IN WEB DESIGN

Man Geni Addysg Uwch yng Nghymru
Where Higher Education Began in Wales

www.uwtsd.ac.uk

OVERVIEW

- Website creation roles
- Equipment
- Software

- What makes a design ‘bad’ in your opinion?
- Why should developers learn basic design principles too?
- How does design affect users with disabilities?

Join at:
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Website Creation Roles

Content

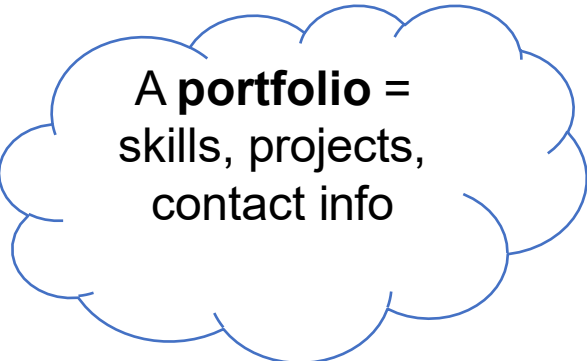
Design

Coding: Frontend

Coding: Backend

Content-The Message and Meaning

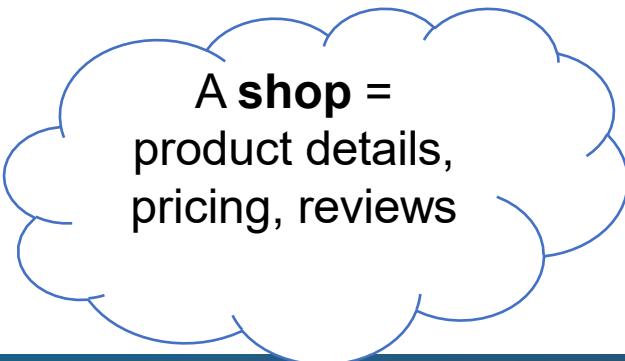
- Essential for engaging visitors and conveying the website's message, purpose, or services.
- Text, images, videos, links, any downloadable files that populate the website.
- Good content answers the user's questions



A **portfolio** =
skills, projects,
contact info



A **news site** =
informative
articles



A **shop** =
product details,
pricing, reviews

CONTENT

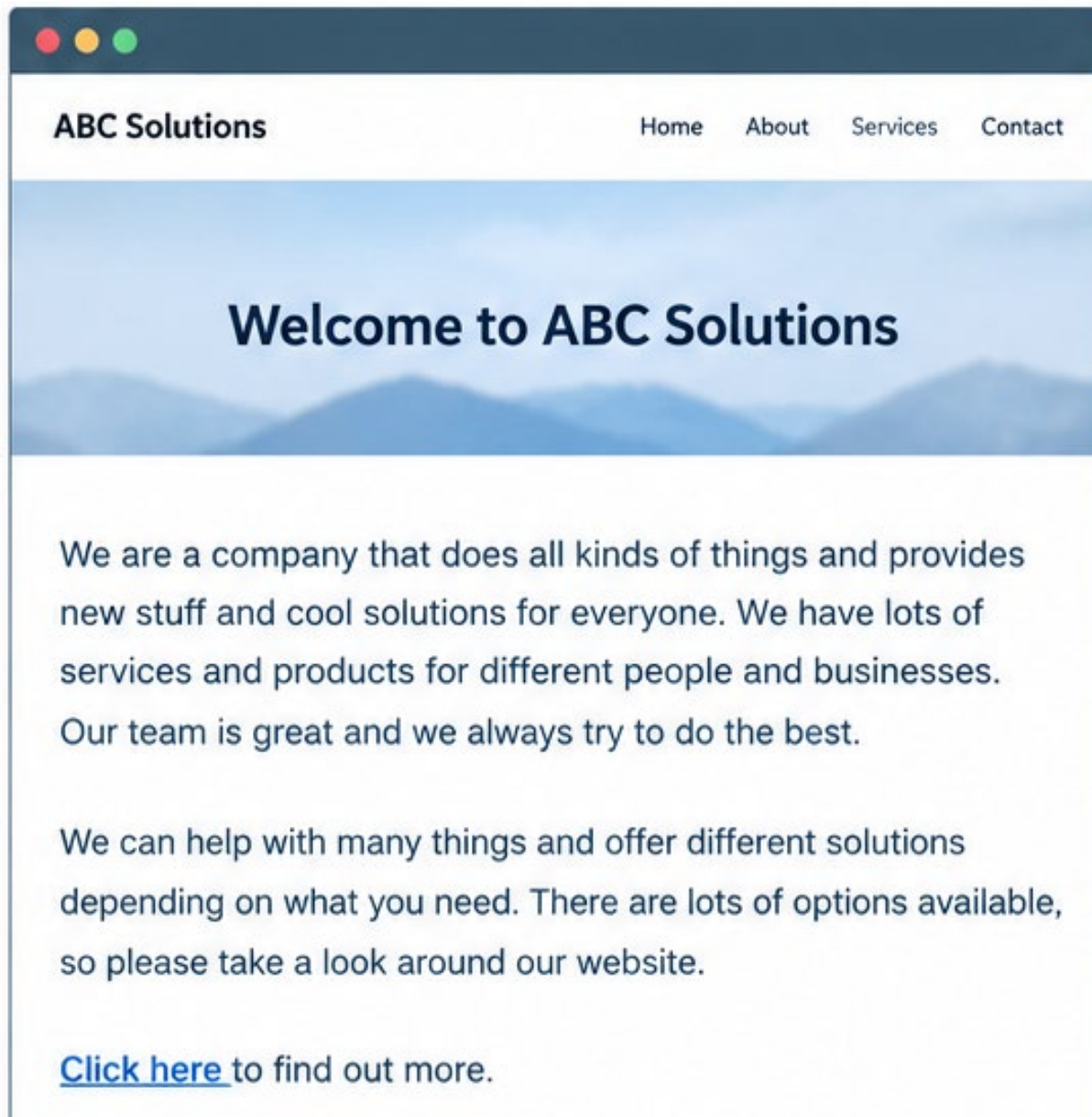
The screenshot shows the National Emerald Club website. On the left is a navigation menu with links: Sign In / Enrol, About Emerald Club, Reserve, View / Modify, For Business, Locations, Vehicles, and National Mobile App. The main header features the National logo, Emerald Club logo, and a Sign In button. The background image shows three cars (two dark, one white) parked on a road with trees in the background. The main heading is 'CAR HIRE AT THE SPEED OF BUSINESS' followed by 'Start a Reservation'. Below this is a form with the following fields: LOCATION* (with a subtext 'Enter a City, Postcode, Airport Code' and a 'DIFFERENT RETURN' link), PICK UP* (Date and 12:00), RETURN* (Date and 12:00), and RENTER'S AGE* (30+). A 'CHECK AVAILABILITY' button is to the right of the age field. At the bottom of the form is a link for 'ACCOUNT NUMBER / COUPONS'. A small note at the top of the form says '*Required to complete your reservation'. The footer of the page shows 'GBR (EN)'.

Information architecture

Organizes content logically for ease of findability

Content strategy

Ensures that text supports the brand/marketing goals; may include data modelling and updating schedules as well as extending brand voice to social media



Problems in this Webpage:

Issue	Explanation
Vague language	"All kinds of things", "new stuff", "cool" – lacks details
No clear structure	One long paragraph, no headings or scannable points
Lack of keywords	Doesn't explain what the company actually does
Missing tone and voice	Unprofessional and generic
Weak call to action	"Click here" is unclear – click for what?
Not accessible	Link text should be descriptive (e.g., "View our services")

Website Creation Roles

- ✓ Content
- ✓ Design
- ✓ Coding: Frontend
- ✓ Coding: Backend

Design – The Look, Feel & Experience

- First impressions happen in milliseconds – design builds trust.
- Good design helps users understand and navigate the site easily.
- Poor design = confusion, frustration, and high bounce rates.

Design

*feeling you get
when using a
website or product*

User Experience (UX)

Makes sure whole experience with the site is favourable based on user testing

*designing the actions and
interactions—how the website
behaves when you use it.*

Interaction Design (IxD)

Focuses on how to use the site, including its User Interface (UI)

*designing the visual
aspects like buttons,
colors, fonts, layout and
much more*

Visual Design

Creates the “look and feel” of the site

- **Visual Hierarchy**
 - Important elements (e.g., headings, CTAs) should stand out.
 - Use size, colour, and position to guide attention.
 - Users scan from top left – design should follow a logical flow.
 - [Good design](#)
 - [Poor Design](#)
- **Colour and Contrast**
 - Colours create emotion (blue = trust, red = urgency, etc.)
 - Must ensure contrast for readability and accessibility.
 - Avoid using colour alone to convey meaning (e.g., red/green buttons without labels).
 - [WebAIM Contrast Checker](#)

- **Typography**

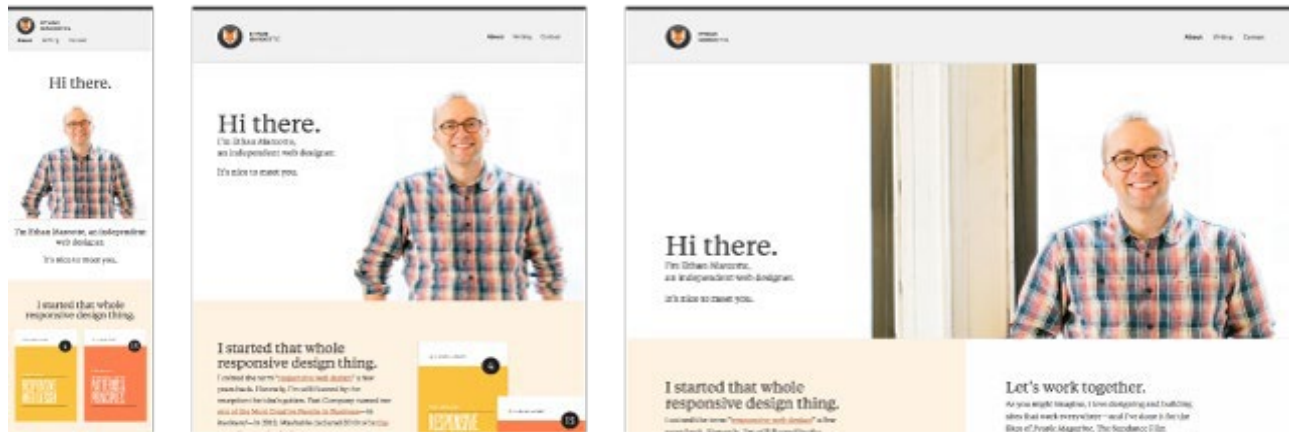
- Use readable fonts (not too fancy or too small).
- Stick to 2–3 font styles across the site.
- Use headings properly (<h1> to <h6>) for structure and screen readers.

- **Spacing and Layout**

- White space improves clarity and focus.
- Use Grid or Flexbox for clean layouts.
- Group related items (e.g., menus, cards, navbars, or toolbars).

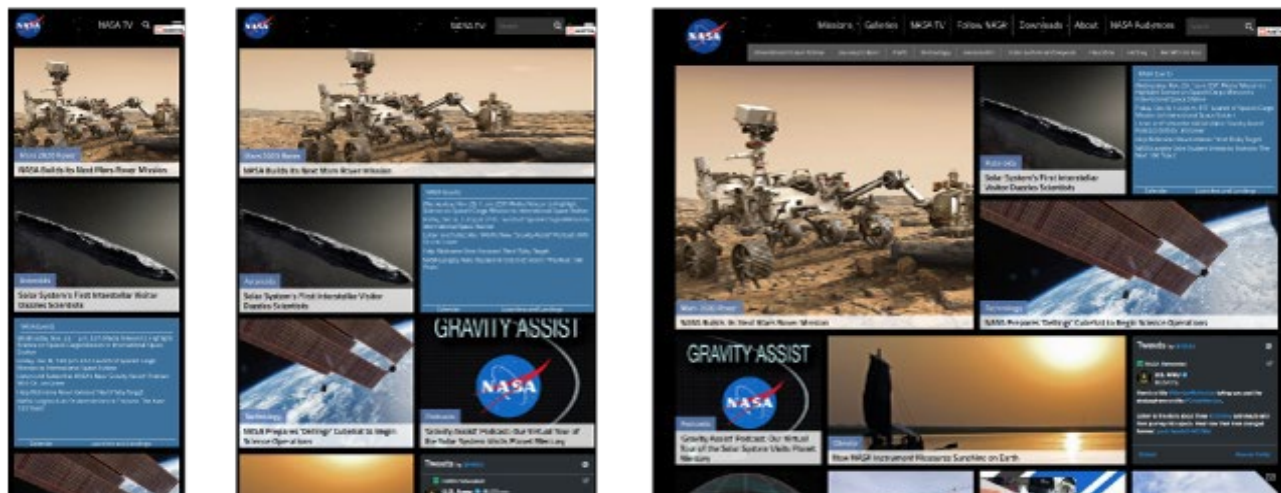
- **Consistency**
 - Colours, buttons, spacing, and layout should follow a pattern.
- **Responsive Design**
 - Your site should look good on **phones, tablets, and desktops**.
 - Use fluid layouts (percentages instead of fixed pixels)
 - Resizing a webpage and how it adapts.

Ethan Marcotte personal site *ethanmarcotte.com*



Page layout
changes
based on the
width of the
screen.

NASA *nasa.gov*



- **Accessibility in Design**

- Use alternate text for images
- Avoid flashing content or relying on mouse only
- Use proper heading order and landmarks
- <https://wave.webaim.org>
- Highlights missing alt text, contrast problems, missing labels, etc.

Four broad categories of disabilities affect how people interact with computers:

Vision impairment

Mobility impairment

Auditory impairment

Cognitive impairment

- **Emotional Design**

Design influences how users feel:

- is your site playful, formal, friendly?
- Think about tone (colours, shapes, icons) depending on the audience (e.g., kids vs. professionals).

Website Creation Roles

- ✓ Content
- ✓ Design
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- ✓ Coding: Backend

Coding: Frontend Development

- deals with the part of the website that users interact with directly.
- Authoring/Markup (HTML)
- Styling (CSS)
- JavaScript and DOM Scripting
 - *interactive and dynamic web pages.*
- Frameworks
 - *pre-made libraries or templates that help developers build websites faster*

Website Creation Roles

- ✓ Content
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- ✓ Coding: Backend

Coding: Backend Development

- Server software (ex: Apache, MS IIS)
- Web application languages (ex: PHP, Ruby, .NET)
- Database Software (ex: MySQL, Oracle)

What Makes a Website Work?

User (*you search for shoes*)



Web Browser (Chrome, Firefox, etc.) (*sends request*)



Server Software (Apache / IIS) (*passes request to web application*)



Web Application (PHP / .NET / Ruby) (*decides which database table to check*)



Database (MySQL / Oracle) (*sends the data back*)

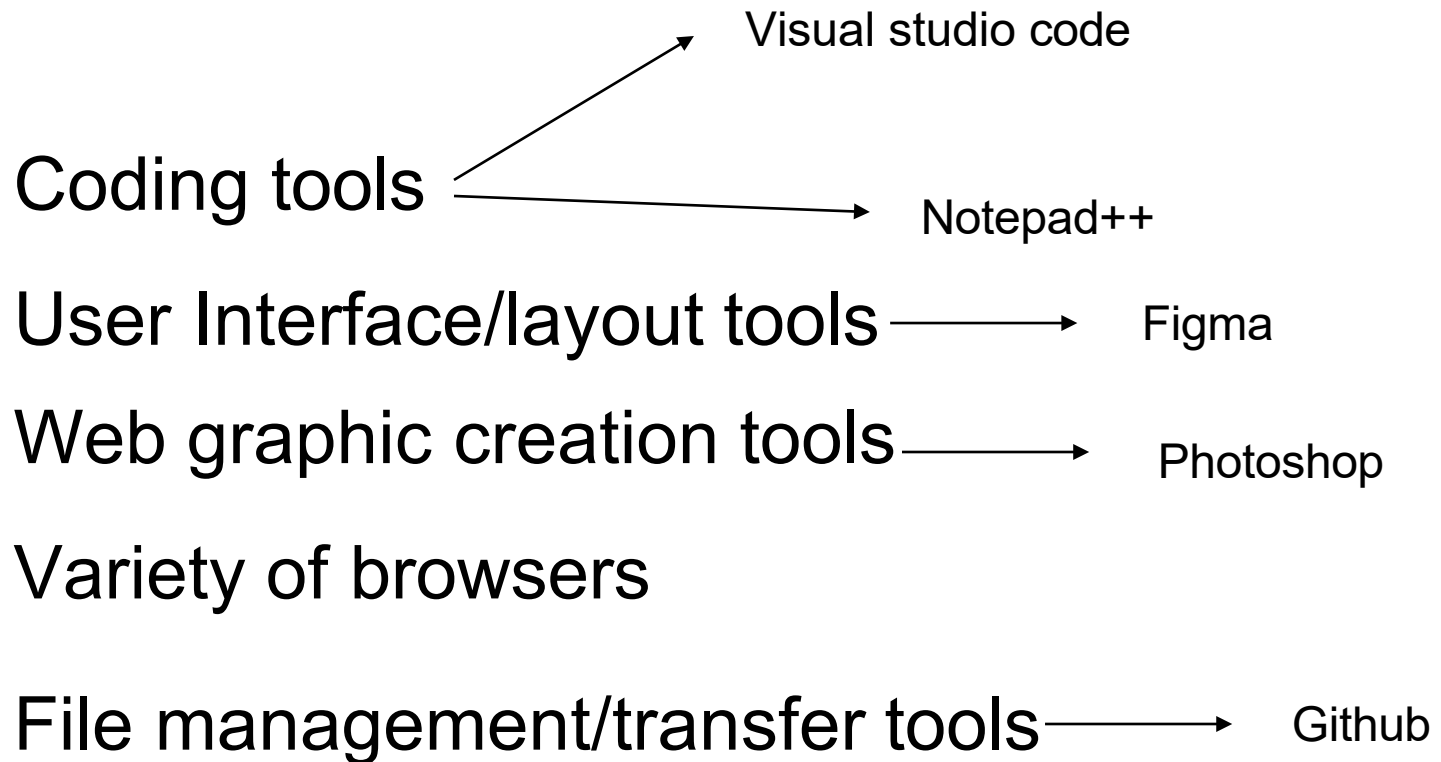


Back through the same path



Website shown to user (*A page full of shoes on your screen*)

Software Typically Used



Module Aim

- provide you with an understanding of the underlying concepts and principles necessary for the implementation of web technologies.
- Web Development using:

