MODULE TWO - CSS & INTERFACE DESIGN FOUNDATIONS

IMAGES, BACKGROUND & MEDIA

TODAY'S SCHEDULE

1. Box Model Challenge

2. Cool Things

3. Share Your Stuff

4. #BADA55 Background

5. All About Borders

6. Interesting Images & Media

7. Quiz Two

OBJECTIVES

- review the box model

- explore overflow

- learn about CSS backgrounds, borders &

  optimizing images

PART ONE – BOX MODEL & OVERFLOW CHALLENGE

WEEKLY LEARNING >
MODULE 2 > WEEK 4 >
BOX MODEL & OVERFLOW CHALLENGE

THE BOX MODEL REVIEW

- all HTML elements displayed in the browser are drawn in a box shape

- has a top, right, bottom and left, a central content area surrounded by an area of padding, then a border, then an outer margin area

BOX MODEL REVIEW

- CSS can target these sides to manipulate elements in various ways (adding padding, margins, borders, images and colours inside the content)

- padding and border properties actually add to your element's visual width & height!

BOX-SIZING

- CSS property box-sizing allows the element width to stay as it is and causes the width to include the border & padding

WIDTH, HEIGHT & OVERFLOW

- if the child element's width property is not set, it takes on the parents width

- if the parent element's height is not specifically set, it will always extend with it's child element

WHAT HAPPENS IF YOU SET A FIXED HEIGHT ON THE PARENT?

- content will overflow the boundaries of the box

- normally best to not set a fixed height and let the box naturally extend

- can use overflow property - auto, hidden, scroll or visible

PART TWO – COOL THINGS

COOL THINGS…

▸ https://www.creativebloq.com/inspiration/css-animation-examples

▸ https://unused-css.com/

▸ https://css-doodle.com/

▸ https://dailycssdesign.com/

▸ https://codepen.io/AngelaVelasquez/pen/JBufx

▸ https://theuselessweb.com/

PART THREE- SHARE YOUR STUFF

HTTPS://DOCS.GOOGLE.COM/DOCUMENT/D/1DRD8ZHD5ZYU2KKA6EC6AYD8YONA4WBMURSPRAPWJB1Q/EDIT?USP=SHARING

WHAT MAKES AN EFFECTIVE USER INTERFACE ?

ACCESSIBILITY
VISUAL DESIGN
USER EXPERIENCE

INTERFACE SCAVENGER HUNT:

1.) AN EFFECTIVE USER INTERFACE
2.) NOT SO EFFECTIVE USER INTERFACE

SHARE YOUR EXAMPLES HERE :

HTTPS://DOCS.GOOGLE.COM/DOCUMENT/D/19IL8MJMKIPJHGL1QCWKGAQMQOTBY54DO0YVHC8S1N3A/EDIT?USP=SHARING

#BADA55 BACKGROUNDS

▶ we can create visual interest through adding different backgrounds to our applications

▶ can manipulate and change colour, add gradients, add images, modify position of the images, change the background attachment & much more - all with the power of CSS
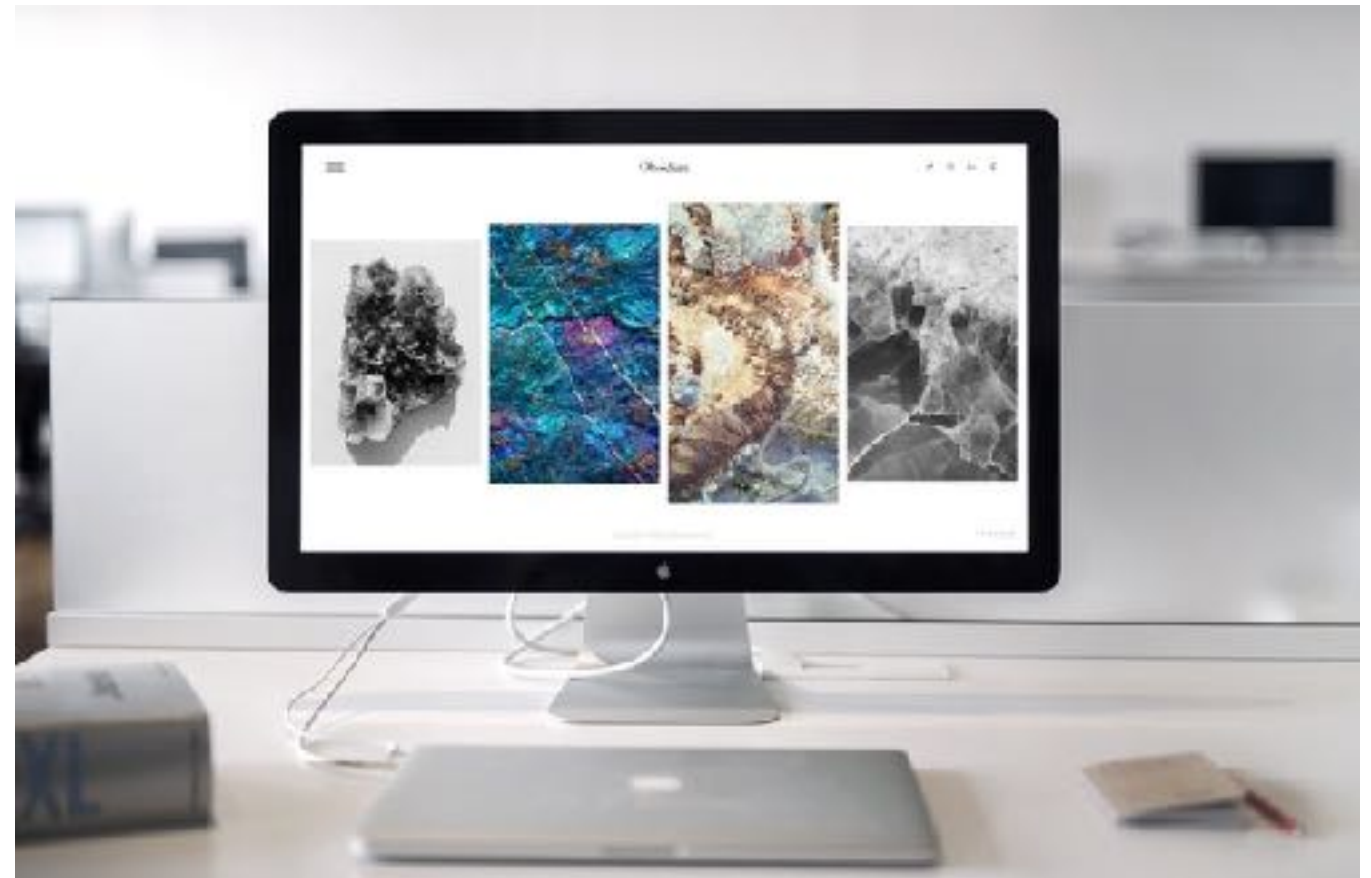
BACKGROUND COLOURS

▶   the background-colour property defines the background colour on any element in CSS.

▶   you can use any valid colour (hex, rgb etc.)

▶   background colours extend underneath the content and padding box of the element

BACKGROUND IMAGES

▸ The background-image property enables the display of an image in the background of an element

▸ background-size property, which can take length or percentage values, to size the image to fit inside the background

COVER VS. CONTAIN

▶ cover — the browser will make the image just large enough so that it completely covers the box area while still retaining its aspect ratio. In this case some of the image is likely to end up outside the box.

▶ contain — the browser will make the image the right size to fit inside the box. In this case you may end up with gaps on either side or on the top and bottom of the image, if the aspect ratio of the image is different to that of the box.

BACKGROUND POSITIONING

▸ allows you to choose the position in which the background image appears on the box it is applied to.

▸ uses a coordinate system in which the top left hand corder of the cox id 0, 0 and the box is positioned along the horizontal and vertical axes.

▸ You can also mix keyword values with lengths or percentages

BACKGROUND GRADIENTS

▸ when used for a background - acts just like an image and is also set up using the background image property

MULTIPLE BACKGROUND IMAGES

▸ it's also possible to have multiple background images - you specify multiple background image values in a single property value, separating each one with a comma

▸When you do this you may end up with background images overlapping each other.

▸you can mix gradients with regular background images

BACKGROUND ATTACHMENT

▶ how the background scrolls when the content scrolls

▶ background attachment property (scroll, fixed, local)

▶ only has an effect when there is content to scroll

LET'S EXPERIMENT

!IMPORTANT IMAGES

▶ images and media are described as 'replaced elements.'

▶ CSS cannot affect the internal layout of these elements - only their position on the page amongst other elements
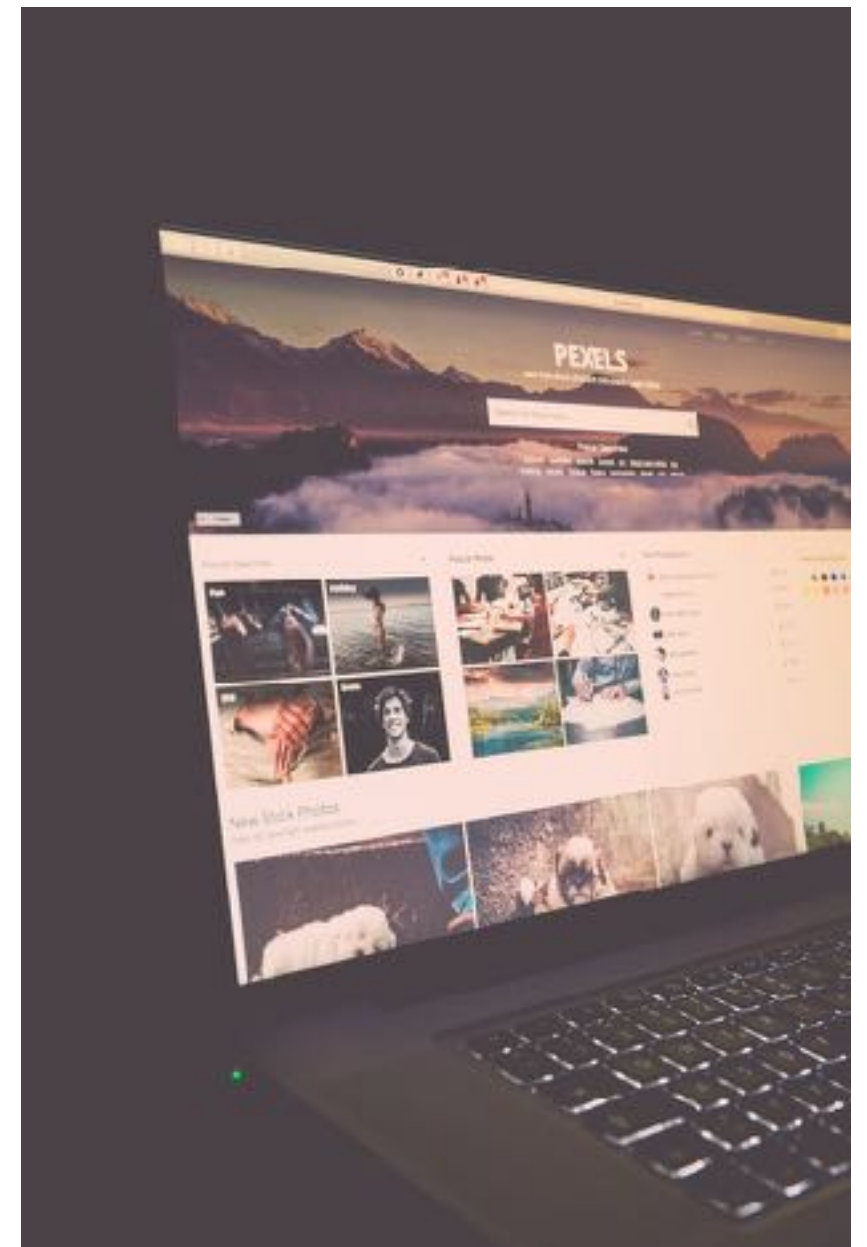
!IMPORTANT IMAGES

▶ certain replaced elements, such as images and video, are described as having an aspect ratio.

▶ This means that it has a size in both the horizontal and vertical dimensions and will be displayed using the intrinsic dimensions of the file by default.

WHAT'S AN ASPECT RATIO ANYWAY?

https://www.youtube.com/watch?v=idb1E_11o_I

SIZING IMAGES

▸ if you place an image inside a box that is smaller or larger than the dimensions of the image file in either direction, it will appear small than the box or overflow the box

SIZING IMAGES

▶ common technique to set max-width of an image inside of a container to 100%

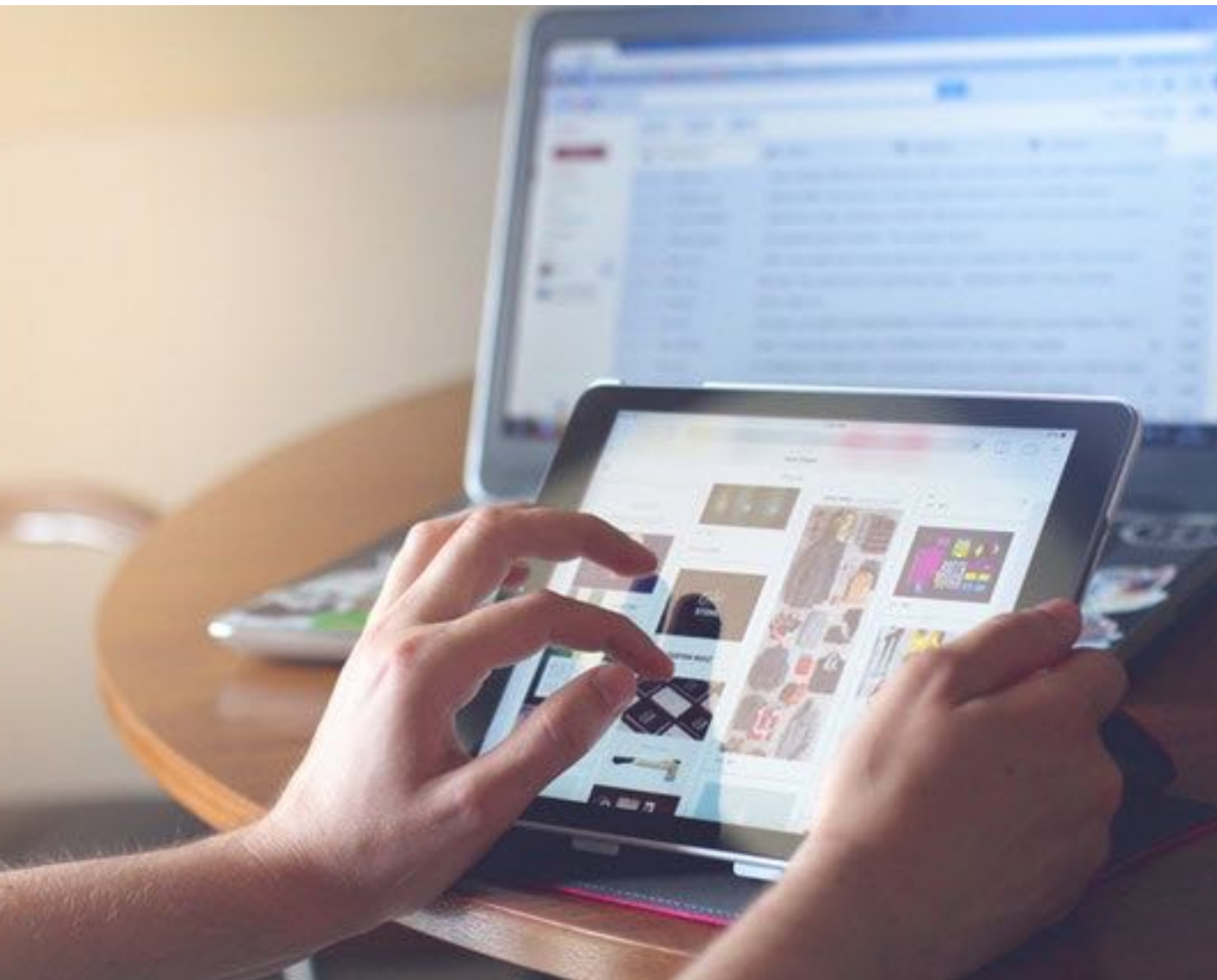▶ This means it will be 100% of the parent element's (container element) width

SIZING IMAGES

▶ we can also use the object-fit property

▶ cover - maintains aspect ratio so that it neatly fits in the box, although some parts of the image may be cropped

SIZING IMAGES

▶ can also use contain - image will be scaled down until it is small enough to fit inside the box

▶ can also use fill which will fill the box but not keep the aspect ratio

OBJECT- FIT EXPLAINED

https://www.youtube.com/watch?v=gj4zoaigSqI

IMAGE FORMATS

▶ JPG, SVG, PNG

▶ some are more lossy than others (JPG) which means you will lose some the of the original clarity

IMAGE FORMATS

▸ PNG is a loseless format, meaning you can compress without losing quality

▸ PNG supports for transparency, best for not photographic images

IMAGE FORMATS

▸ SVG is a vector graphic format—based on XML and is used to display a variety of graphics on the Web and other environment

WHERE TO GET?

▸ be careful with image licenses

▸ can purchase from places like shutterstock, istock, adobe etc.

▸ https://www.pexels.com/

▸ https://unsplash.com/

IMAGE SIZES

▸ the larger the file size, the slower the webpage will load

▸ choosing image sizes is about finding balance between clarity & size

IMAGE SIZES EXPLAINED

https://www.youtube.com/watch?v=jp2Q2g0A5wc

LET'S CHECK IT OUT

WHAT ABOUT ACCESSIBILITY ?

ACCESSIBILITY BEST PRACTICES

▸ When placing text on top of a background image or color, make sure there is enough contrast and that text is legible

▸ good ideas to also specify a background-colour that will allow the text to be legible if the image does not load.

ACCESSIBILITY BEST PRACTICES

▸ Screen readers can't parse background images

▸ any important content should be part of the HTML page and not contained in a background.

▸ Images need alt tags that are descriptive

LET'S TEST IT

COOL BEANS?

QUIZ TWO TIME

SOURCES

▸ https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks/Backgrounds_and_borders

▸ https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks/Overflowing_content

▸ HTML and CSS: Visual QuickStart Guide (8th Edition) 2013 - Elizabeth Castro & Bruce Hyslop

PART FOUR— QUIZ TWO

LEARNING ACTIVITIES

For next week, please complete the following:

▸ Please read: https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks/Images_media_form_elements

▸ Please read: https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks/Styling_tables

NEXT WEEK

STYLING TABLES AND FORMS

LAB TWO