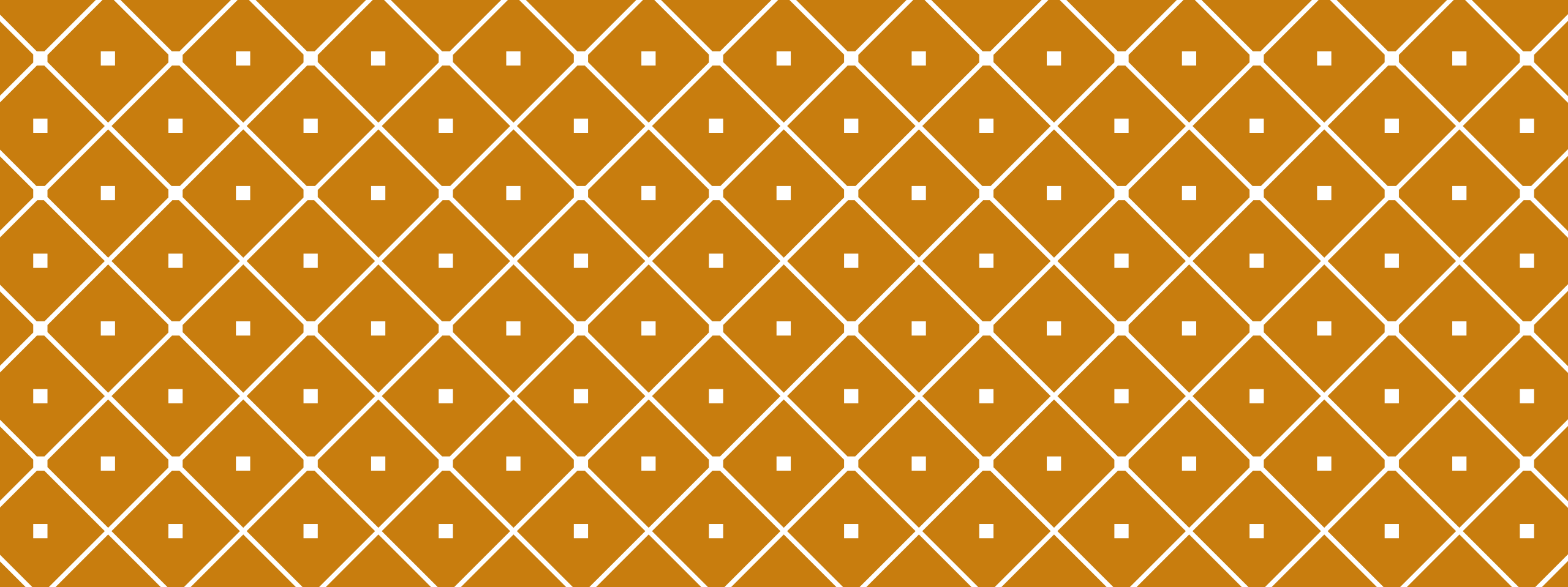




RESPONSIVE WEB DESIGN

Lecturer: Mark Gillan

RESPONSIVE WEB DESIGN MEANING

Responsive Web Design helps make a web page appear well upon all devices, including and especially mobile devices taking into consideration the screen size in comparison to a PC or laptop.

Making a web page responsive uses only HTML and CSS within this tutorial.

Web pages should not have to remove information to fit smaller devices, it should just adapt to fit any device, using CSS and HTML to resize, shrink, hide, enlarge or move content to help the appearance to be neat for any size screen.



THE VIEWPORT

The viewport is the visible area of a web page as seen by a user, varying with each device and will appear smaller on a mobile phone than on a PC screen.

Prior to the uprising of mobile technologies, web pages were commonly designed to be static with a fixed size. Many designers just scaled down their previous designs to accommodate smaller screens, not ideal at all.

HTML5 introduced a means to control the viewport, through the `<meta>` tag.

The `<meta>` viewport element is required on all web pages for viewing at different sizes for mobile technologies.

`<meta name="viewport" content="width=device-width", initial-scale="1.0">`



```
<meta name="viewport" content="width=device-width", initial-scale=1.0">
```

THE META VIEWPORT ELEMENT CODE

EXPLANATION

The **<meta>** viewport element instructs the web browser how to control the dimensions and scaling of the page.

The **width=device-width** part of the code sets the page to follow the screen width of the device itself to which it is currently being viewed.

The **initial-scale=1.0** part of the code sets the initial zoom level when the page is first loaded into the web browser.

Care:

Do NOT use large fixed width elements, for example, displaying an image larger than the viewport because it will cause the user to require horizontal scrolling.

Do NOT let the content rely on a particular viewport width to render well, because the screen dimensions and width in CSS pixels vary greatly between devices.

Use CSS media queries to apply different styling for small and large screens. Consider using relative width values, such as width: 80% and be careful of using large absolute positioning values.



RESPONSIVE WEB DESIGN: IMAGES

CSS Responsive Web Design

The **width** property should be set using a percentage and the height can be set to “auto” to enable the image to be responsive and scale up / down.

Using the **max-width** property set to 100% means the image will scale down if it has to on smaller screens but will never scale up to be larger than its original size.

The use of **max-width** property is also useful for video as well. See opposite for example.

Example CSS code

```
img {  
    max-width: 100%;  
    height: auto;  
}
```

```
video {  
    max-width: 100%;  
    height: auto;  
}
```

