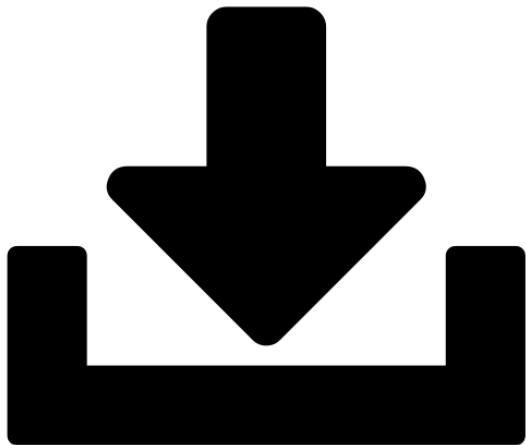# ITP 104 Web Publishing

Lecture 08
Meta Tags, Responsive
Web Design

Sponsored by BATMAN LOREM IPSUM GENERATOR

# Download/Extract Lecture 08 ZIP



&

# `<meta>` tag

Specifies additional information about the document.

Metadata will not be displayed on the page.

**<meta>** tags must be within **<head>** tag!!!

```
<head>
 <meta charset="UTF-8">

 <meta name="description" content="ITP 104
Rocks">

 <meta name="keywords" content="HTML,CSS,ITP
104">

 <meta name="author" content="Students">

 <meta name="viewport" content="width=device-
width, initial-scale=1.0">
</head>
```
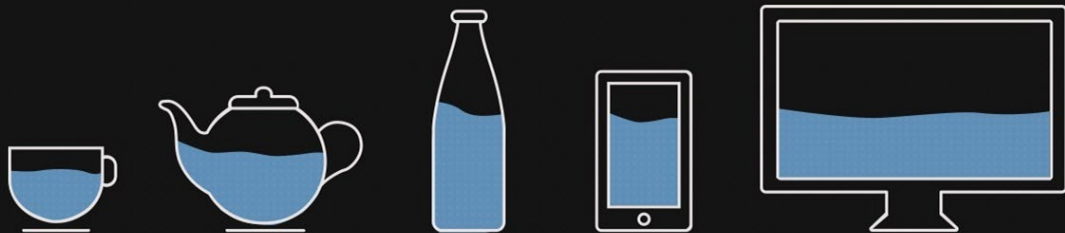
# Responsive Web Design

# Example of a Responsive Web Site

# Video - Responsive Web Design - Introduction



https://youtu.be/snQp757_Rr0

# Video – Responsive Web Design – Made Simple



https://youtu.be/t526Lt_O7zo

# Viewport `<meta>` tag

Specifies how viewport should behave.

Must be included in `<head>` tag of every responsive site.

The viewport is the user's visible area of a web page and varies with the device.

```
<head>
  <meta charset="UTF-8">
  <meta name="description" content="ITP 104
Rocks">
  <meta name="keywords" content="HTML,CSS,ITP
104">
  <meta name="author" content="Students">
  <meta name="viewport" content="width=device-
width, initial-scale=1.0">
</head>
```
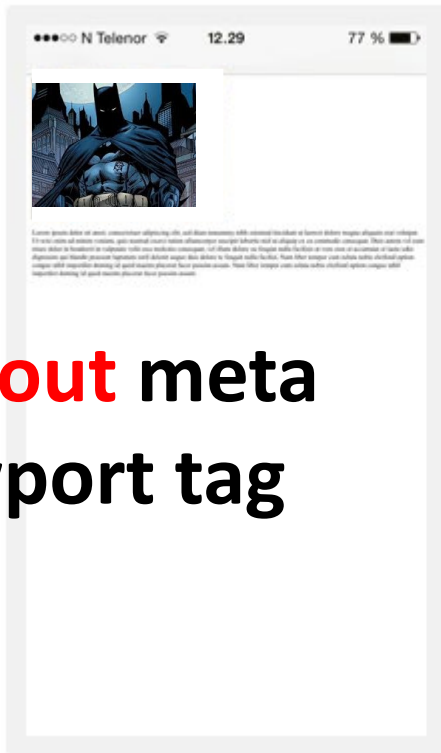
Initial zoom on the page.
1 means no zoom.

Page width should be same
as device/screen width.

# Viewport `<meta>` tag



**without** meta viewport tag

**with** meta viewport tag

# What is my Viewport

## Your viewport size is:

### 1280px × 860px

https://whatismyviewport.com/

# CSS `@media`

Also called **media query**.

Specifies different CSS rules for different devices.

No set rules or standard breakpoints.

Example (used by Bootstrap):

| | |
|---|---|
| ≥ 1200px | Large Desktops |
| 1199px - 992px | Desktops / Laptops |
| 991px - 768px | Tablets |
| 767px - 576px | Landscape Phones |
| ≤ 575px | Portrait Phones |

Viewports 800px or smaller

```
@media (max-width: 800px) {
    /* CSS here */
}
```

```
@media (min-width: 800px) {
    /* CSS here */
}
```

Viewports 800px or larger

@media rule is used to define different CSS for different media types and devices, example below:

```
@media (max-width: 600px) {
  body {
    background-color: lightblue;
  }
}
```

# @media query

**@media** queries can be used to check many things, such as:

- width and height of the viewport
- width and height of the device
- orientation (landscape or portrait mode)
- resolution

# `@media` query types

| Type | Description | Example |
|---|---|---|
| all | All devices. | @media all |
| print | Print preview mode & printing. | @media print |
| screen | Computer screens. | @media screen |
| speech | Speech synthesizers. | @media speech |

# Common `@media` query breakpoints

Desktops & Laptops:
min-width: 1224px

iPhone X:

min-width: 375px and max-height: 812px and orientation : landscape
min--width: 375px and max-height: 812px and orientation : portrait

Samsung Galaxy S5

min-width: 360px and  max-height: 640px and orientation : landscape
min-width: 360px and max-height: 640px  and orientation : portrait

https://responsivedesign.is/develop/browser-feature-support/media-queries-for-common-device-breakpoints/

# Desktop First

**Extra Large Devices**

*(Large Desktops)*

**Large Devices**

*(Desktops/Laptops)*

**Medium Devices**

*(Tablets)*

**Small Devices**

*(Mobile Phones)*

Default CSS.

No media query.

```
@media (max-width: 1223px) {
  /* CSS Here */
}
```

```
@media (max-width: 1023px) {
  /* CSS Here */
}
```

```
@media (max-width: 767px) {
  /* CSS Here */
}
```

# Mobile First

**Small Devices**

*(Mobile  Phones)*

**Medium Devices**

*(Tablets)*

**Large Devices**

*(Desktops/Laptops)*

**Extra Large Devices**

*(Large Desktops)*

Default CSS.
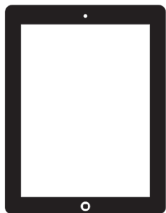
No media query.

```
@media (min-width: 768px) {
  /* CSS Here */
}
```

```
@media (min-width: 1024px) {
  /* CSS Here */
}
```

```
@media (min-width: 1224px) {
  /* CSS Here */
}
```

# Both are necessary….

**Media queries** are used to have different css for different devices its like the if condition for different devices.

**Viewport** meta tag is to set tell the device to take the width according to this tag. Its like a reset for devices if its not used device will adjust the layout according to its default settings.
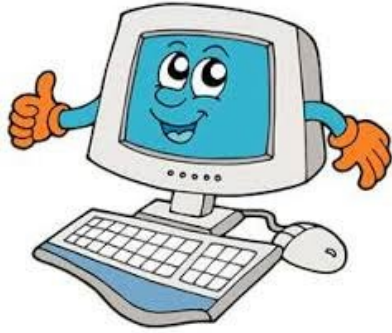
# **Lab 8:** Responsive Student Page

- Make your student page responsive
- Upload completed lab to server to *lab08* folder
- Link it on your Student Page