



UNIVERSITY OF LINCOLN

School of Computer Science

CMP1130M WEB AUTHORING - ASSESSMENT ITEM 1

Taylor Threader | ID:17645110 Web Authoring | 11th January 2018

Website URL:

<https://website-17645110.azurewebsites.net>

Video URL:

<https://youtu.be/GvfdSrBUx3U>

Critical Log

Web Standards:

Web standards were created by the World Wide Web Consortium (W3C). The W3C had published a set of recommendations which all web developers should aim to follow in order to achieve a site that has the best user experience and that will remain useable for the future.

The current most popular web standards are the HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). HTML is used to define the structure and the contents of any webpage. Whereas CSS is used to define the appearance of a web page.

HTML5 is compatible with most popular browsers to date. The advantage to using HTML5 allows developers to increase their possible target audience. However the disadvantage to HTML5 is the difficulty in browsers adoption, as HTML5 is a modern program older browsers do not support the program as well.

The reasoning for CSS3 being the predominant language for describing the presentation of web pages is a developer ability to change a large scale of the websites presentation based on one line of CSS. CSS documents are also stored externally which is only accessed when a visitor requests your website, this dramatically decreases file transfer size and results in faster load time. However a disadvantage of CSS is the compatibility of CSS across other browsers as what might work in one browser may not work in another.

The website created met this standard by being developed using HTML5 and CSS3:



The W3C have also implemented other standards based on implementing user accessibility. This allows the web to be accessible to people with a diverse range of hearing, movement, sight and cognitive ability. When websites do not follow the standards and specifications they can create a barrier that excludes people from using the web in order to communicate with others and interact with sites. "The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect." (Tim Berners Lee) (1)

For this to be achieved W3C has recommended a number of examples as referenced here (2) for web developers to implement. One of the more basic implementation is the Alternative text for images this can be used for people who are visually impaired or have a low bandwidth and have to turn images off.

Adhering to this standard allows an increase in the designated target audience due to the vast amount of disabled people. Developers that follow all accessibility standards can prevent themselves against legal issues. However accessible websites can take a large amount of time to develop. This is due to the multiple implementations that need to be interoperable across all browsers.

My website has met this standard by using alt tags with images:

```
<a href = "#">
  <div class = "store-item">
    <a>
      
    </a>
    <!-- Data that is passed when 'draggable' event listened is
    triggered -->
    <p class="title" data="25">Top Hat Sketch Skull Muscle Tank</p>
    <p>Price : £25.00</p>
  </div>
```

The W3C also provides standards for the Document Object Model (DOM). The DOM is an interface that allows scripts to alter the content and structure of a webpage. This is useful for providing dynamic content that responds to the user. The W3C DOM defines the list of properties that should be used within scripts. These properties are supported by all modern browsers, aiming to provide maximum cross-browser support.

The W3C also provides standards for the Document Object Model (DOM). The Dom defines a standard for accessing documents. The DOM comprises of an interface that allows scripts to alter the contents and structure of a webpage. The advantages of using the standard allows a developer to build their program on a structured hierarchy. As a result of this the developer is able to navigate around the hierarchy to look for specific information.

Using this standards increases the websites interoperability due to the hierarchy structure of the program. As a results this decreases code redundancies and improves efficiency. However in particular cases DOM as specified by the W3C might not be the best way to open certain documents with. In particular when opening an XML document, the entire document is read in at once. A large document will require a large amount of memory to represent it.

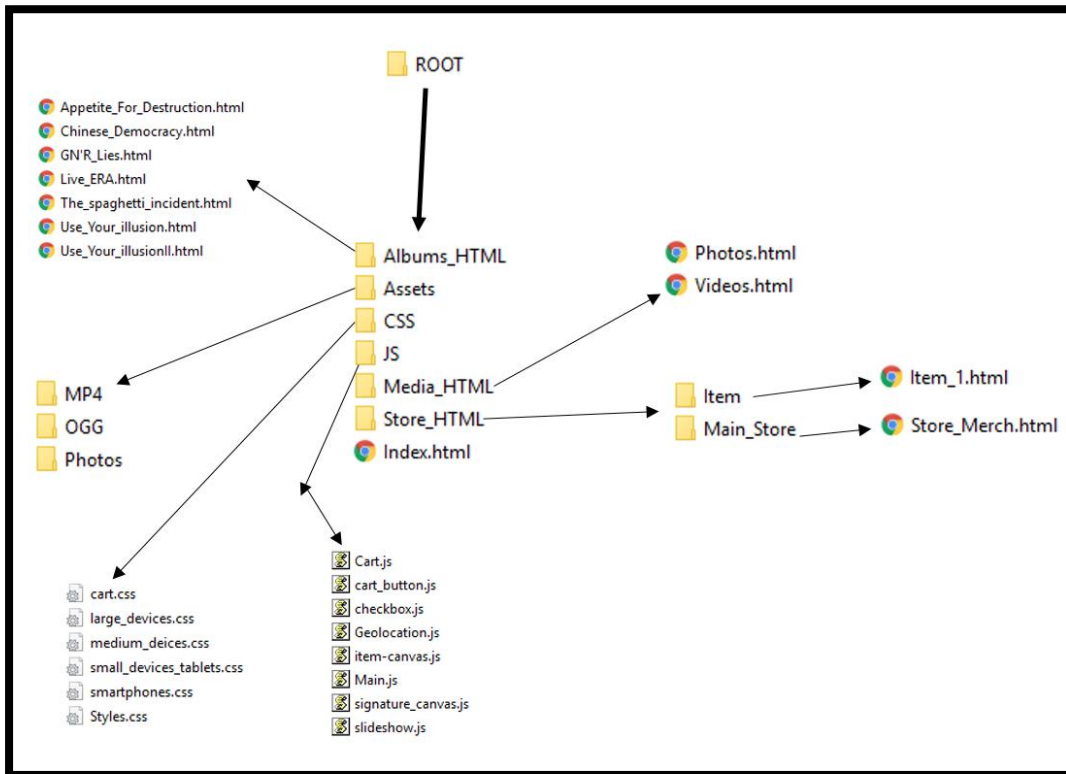
My website has met this standard by using elements of the W3C DOM:

```
<!DOCTYPE html>
<html>
  <head>
    <link rel = "stylesheet" type="text/css" href="/CSS/smartphones.css" />
    <link rel = "stylesheet" type="text/css" href="/CSS/small_devices_tablets.css" />
    <link rel = "stylesheet" type="text/css" href="/CSS/medium_deices.css" />
    <link rel = "stylesheet" type="text/css" href="/CSS/large_devices.css" />

    <script src="/JS/Main.js"></script>
    <script src="/JS/signature_canvas.js"></script>
    <link href="https://fonts.googleapis.com/css?family=Cinzel" rel="stylesheet" />
    <script src="jquery-3.2.1.min.js"></script>
  </head>
  <body>
    <header>
      <div>
        <h2>Guns N' Roses</h2>
        <nav>
          <ul class="menu">
            <li><a href="#Home">Home</a></li>
            <li><a href="#Music">Music</a></li>
            <li><a href="#About">About</a></li>
            <li><a href="#Media">Media</a></li>
            <li><a href="#Store">Store</a></li>
            <li><a href="#Contact">Contact</a></li>
          </ul>
        </nav>
      </div>
    </header>
```

Report

During the initial design stage of the website, I had considered what structure I would use to organise the files related to the site. I had decided on a hierarchal structured approach within a root folder as shown below:



This resulted in easy navigation of the files and increased manageability.

For my project I had decided to use Camel case for my naming conventions and variable identifiers, I had decided to use these conventions throughout the assignment as I was already use to using them. This allowed for a clean and well-structured code base.

W3C has completely changed the foundation for web standards. They have created a base set of rules and technical specifications to govern web development. These standards and specifications have to lead to a great advancement in the creation of websites and decreased most of the tedious labour involved in web development.

The main advantages to using W3C standards is

- easier to maintain
- Cross browser compatible
- Accessible from different devices
- Faster loading of sites.

Within this assignment I had chosen to create all Js/Jquery files with a functional approach in order to maintain readability and make developing easier for myself.

```
// Draw function (to draw on canvas)
▶ function draw(x, y, isDown){...}

// Make canvas base
function make_base()
▶ {...}

// Get the canvas image data
▶ function getImageData(img){...}

// Show updated canvas to cart (used to show real time update in cart)
▶ function ShowCanvas(){...}
```

W3C Validator

Nu Html Checker

This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change

Showing results for https://website-17645110.azurewebsites.net/Store_HTML/Main_Store/Store_Merch.html

Checker Input

Show ☐ source ☐ outline ☐ image report

Check by

https://website-17645110.azurewebsites.net/Store_HTML/Main_Store/Store_Merch.html

Use the Message Filtering button below to hide/show particular messages, and to see total counts of errors and warnings.

1. **Error** The character encoding was not declared. Proceeding using `[windows-1252]`.
https://website-17645110.azurewebsites.net/Store_HTML/Main_Store/Store_Merch.html
2. **Warning** The `[type]` attribute is unnecessary for JavaScript resources.
From line 20, column 9; to line 20, column 88

```
<script type="text/javascript" src="http://code.jquery.com/jquery-1.6.1.min.js"></script>
```
3. **Warning** The `[type]` attribute is unnecessary for JavaScript resources.
From line 21, column 9; to line 21, column 98

```
<script type="text/javascript" src="http://www.jeasyui.com/easyui/jquery.easyui.min.js"></script>
```
4. **Error** Element `[head]` is missing a required instance of child element `[title]`.
From line 29, column 5; to line 29, column 11

```
</head>
```


Content model for element `[head]`:
If the document is an `iframe srcdoc document` or if title information is available from a higher-level protocol: Zero or more elements of `[metadata content]`, of which no more than one is a `[title]` element and no more than one is a `[base]` element.
Otherwise: One or more elements of `[metadata content]`, of which exactly one is a `[title]` element and no more than one is a `[base]` element.
5. **Error** Element `[ul]` not allowed as child of element `[ul]` in this context. (Suppressing further errors from this subtree.)
From line 40, column 25; to line 40, column 52

```
<ul class = "menu dropdown"> <!--
```


Contexts in which element `[ul]` may be used:
Where `[flow content]` is expected.
Content model for element `[ul]`:
Zero or more `[li]` and `[script-supporting elements]`.
6. **Error** Element `[ul]` not allowed as child of element `[ul]` in this context. (Suppressing further errors from this subtree.)
From line 47, column 25; to line 47, column 52

```
<ul class = "menu dropdown">--
```


Contexts in which element `[ul]` may be used:
Where `[flow content]` is expected.
Content model for element `[ul]`:
Zero or more `[li]` and `[script-supporting elements]`.
7. **Error** An `[img]` element must have an `[alt]` attribute, except under certain conditions. For details, consult [guidance on providing text alternatives for images](#).
From line 58, column 17; to line 58, column 80

```
 <!--
```


Attributes for element `[table]`:
[Global attributes](#)
`border`
9. **Error** Start tag `[h2]` seen in `[table]`.
From line 87, column 29; to line 88, column 32

```
<tr> <h2>Drop h;
```
10. **Fatal Error** Cannot recover after last error. Any further errors will be ignored.
From line 87, column 29; to line 88, column 32

```
<tr> <h2>Drop h;
```

Document checking completed.

Used the HTML parser.

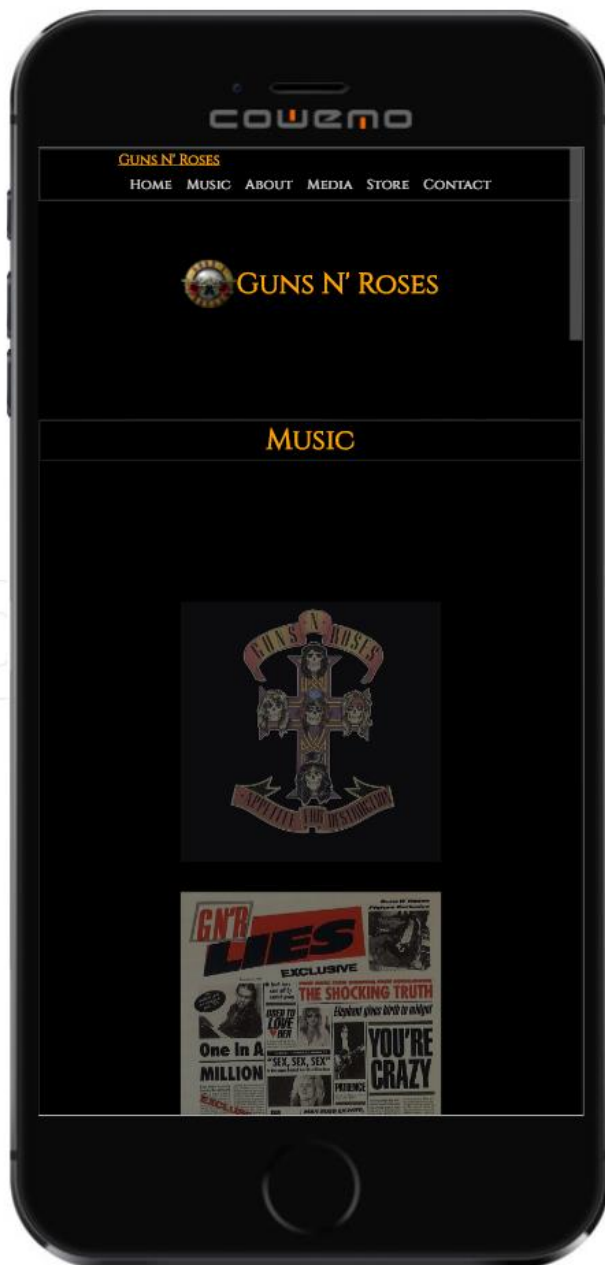
Total execution time 231 milliseconds.

Phone Emulators

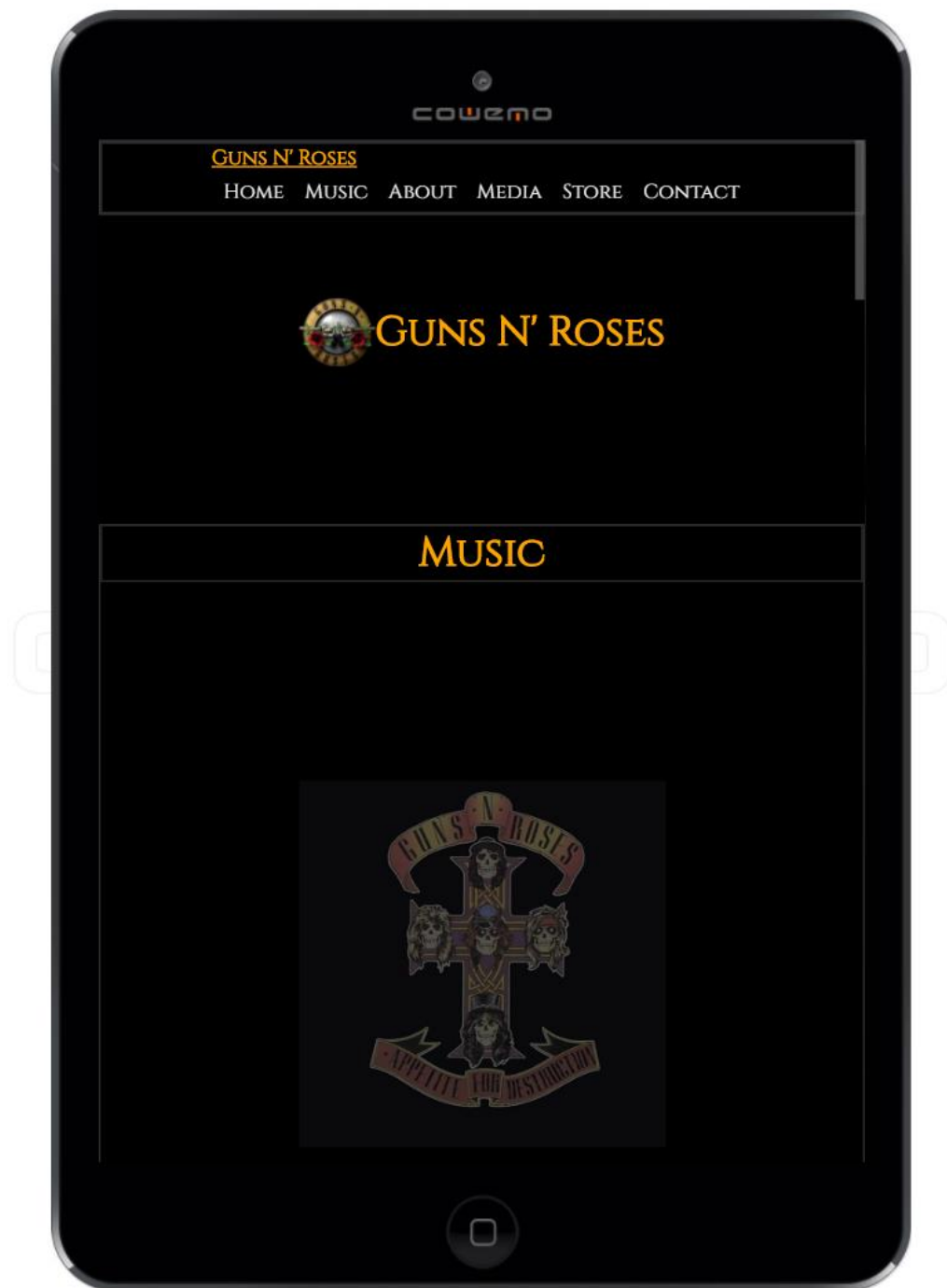
LG U970 240X320



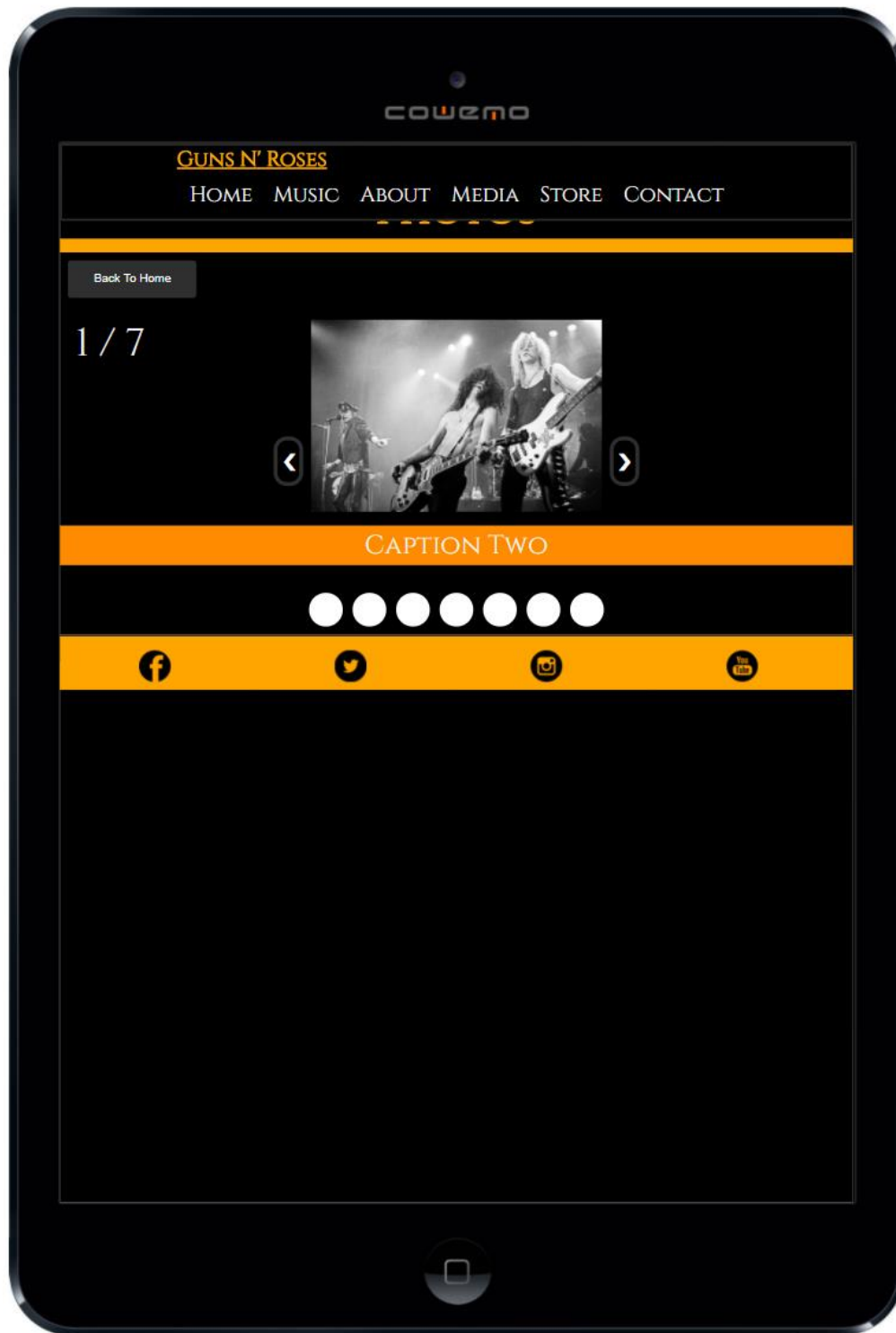
IPhone 6 640X1136

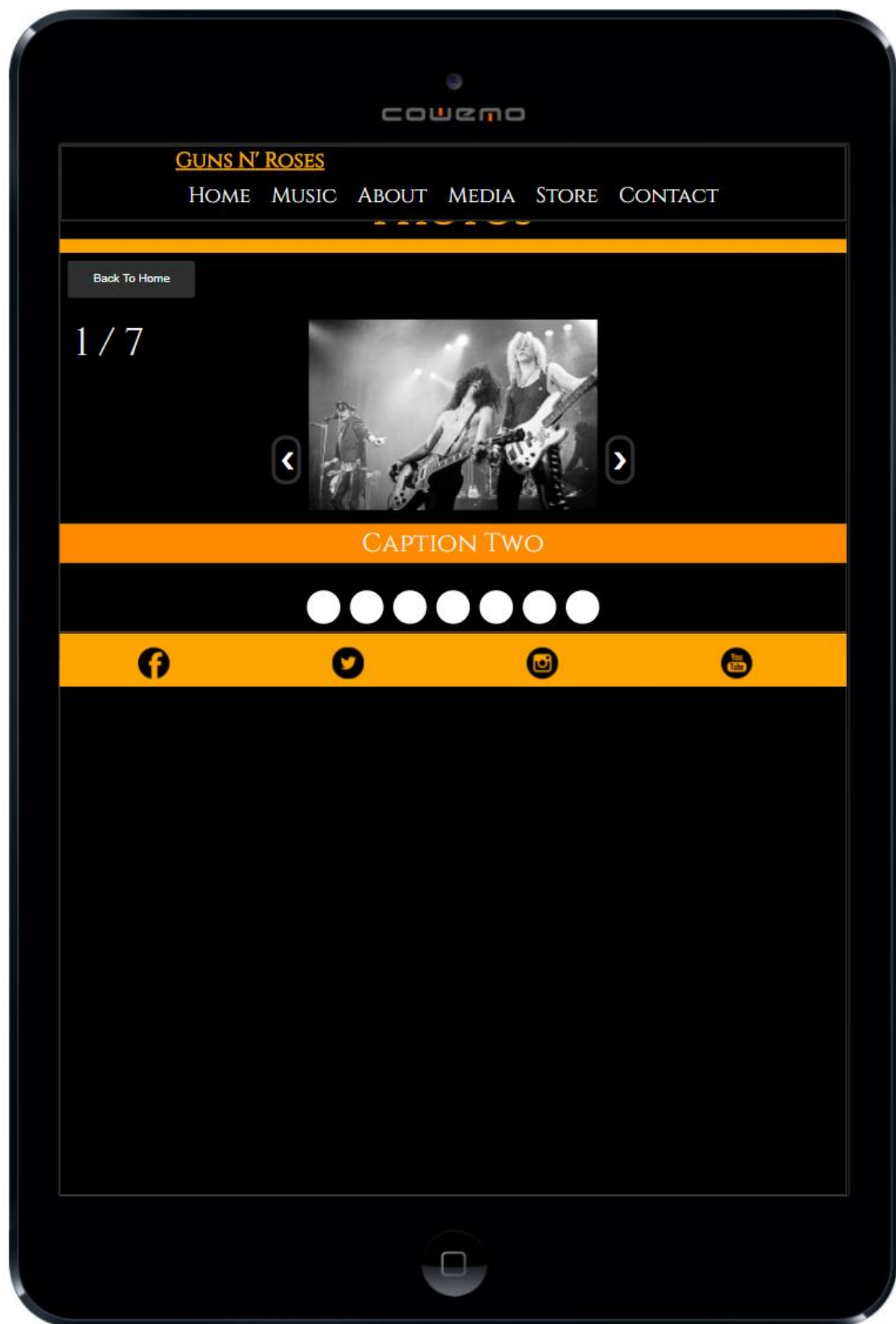


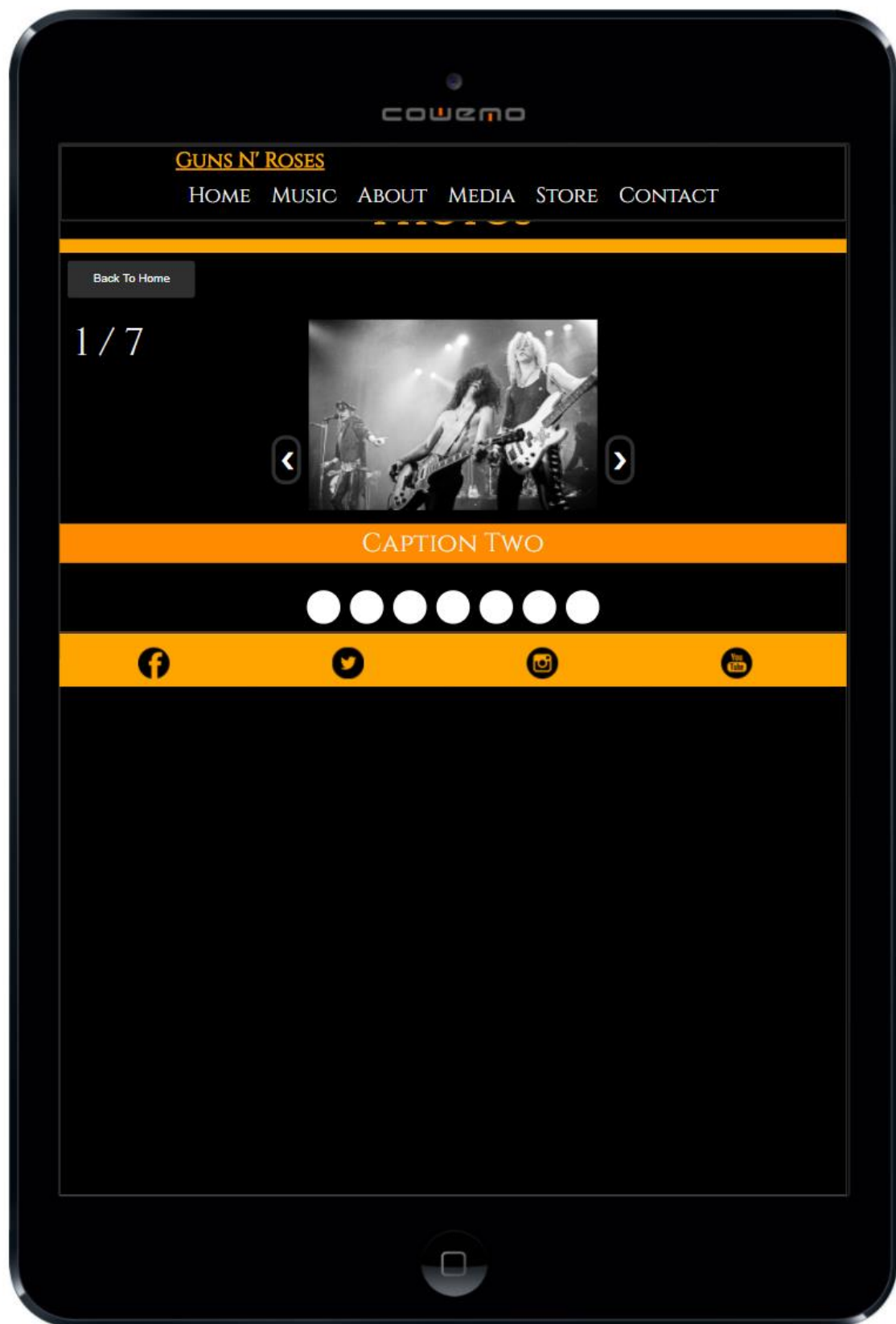
IPad Mini 768X1024

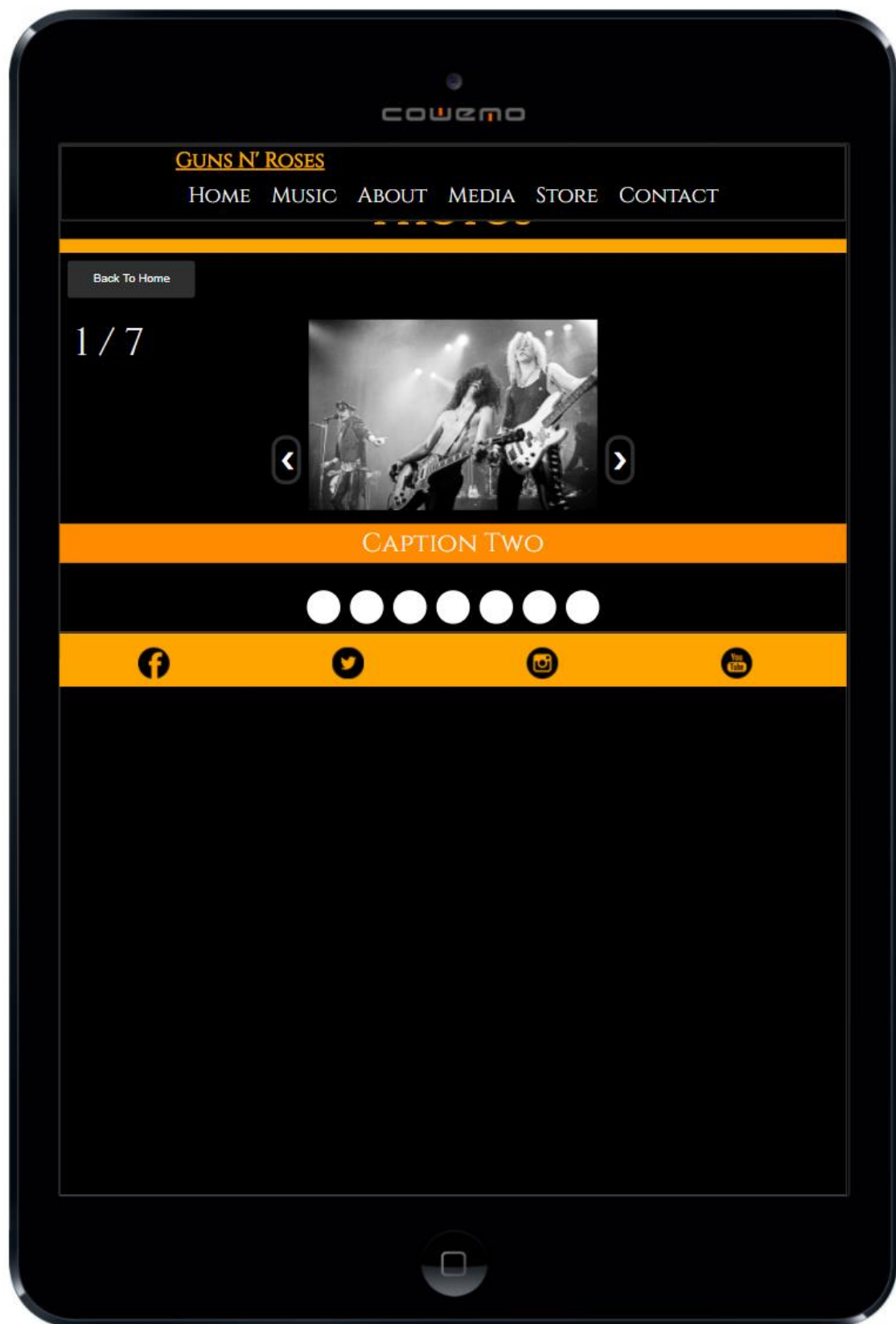


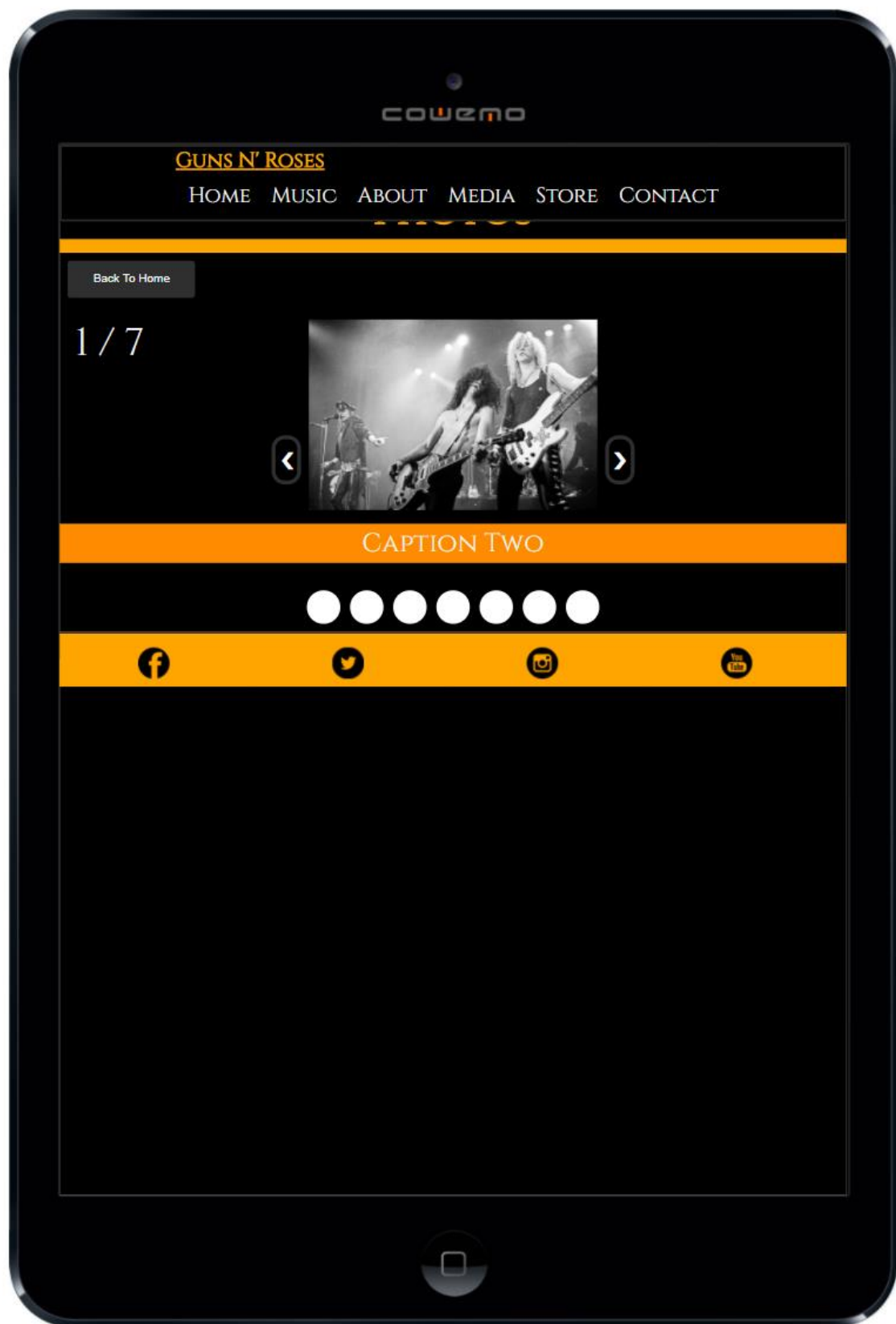
IPad Air 1536X2048

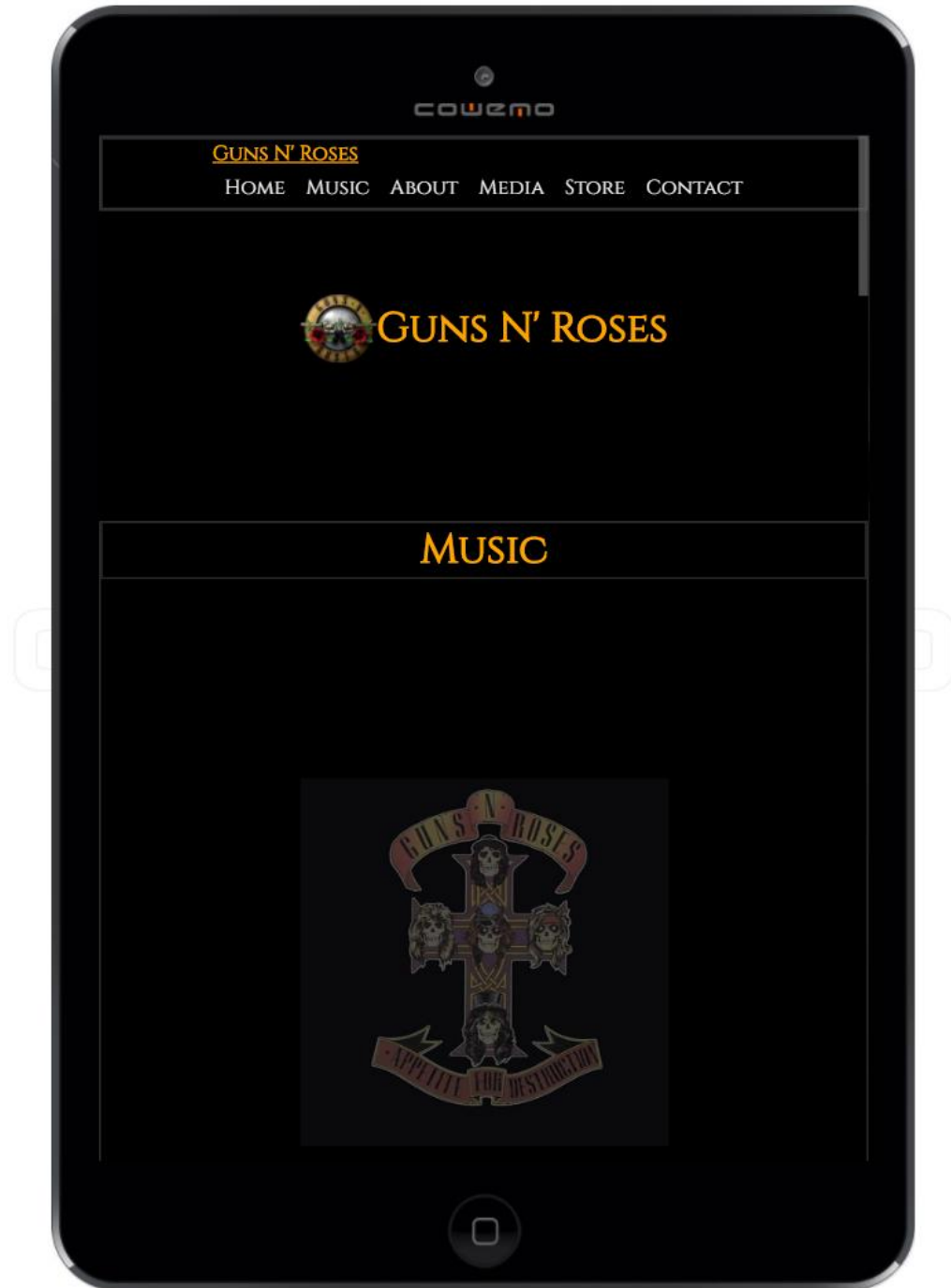












References:

(1)

<https://www.w3.org/standards/webdesign/accessibility>

(Tim Berners Lee, W3C Director and inventor of the World Wide Web)

(2)

W3C Accessibility

<https://www.w3.org/standards/webdesign/accessibility>