CMPS-319
Spring 2021
Project: Final
Due Date: 05/18/21
First and Last Name id:21
First and Last Name id:22

Title of the Final Project

Project is Published at
http://students.laverne.edu/~your Login/CMPS319/PROJ_FINAL/index.html

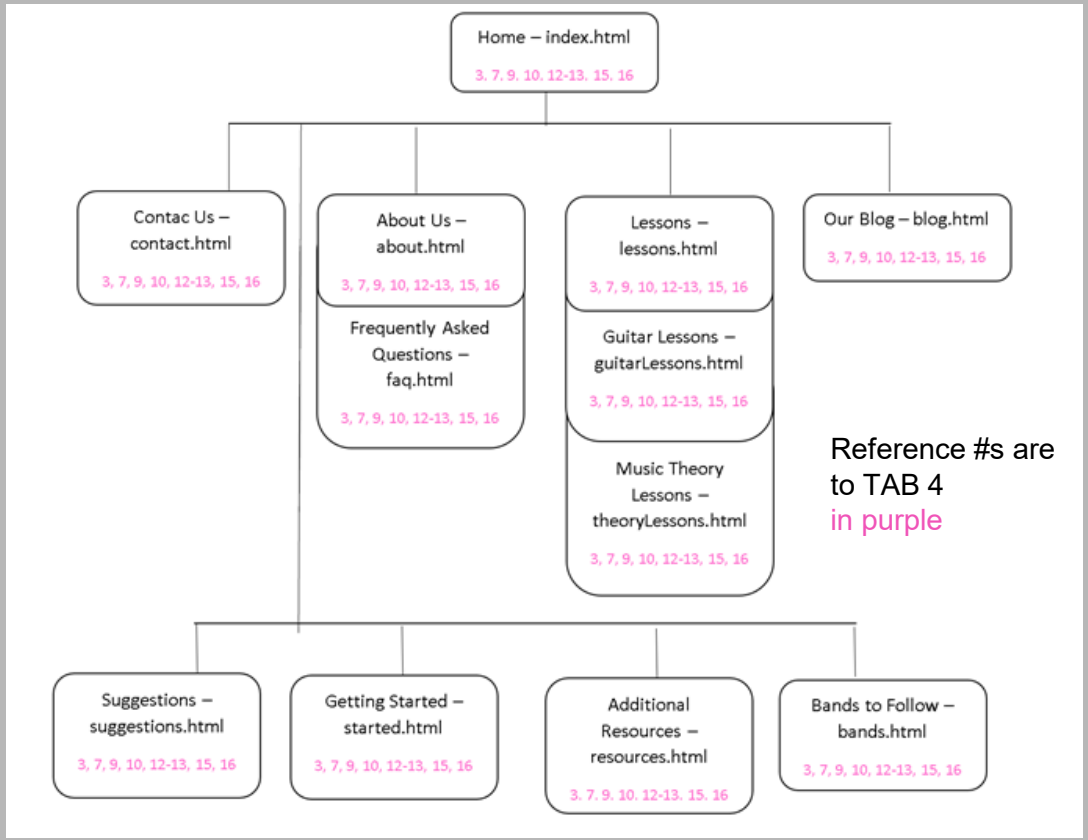
CSS FILES PUBLISHED AT:
http://students.laverne.edu/~..../StyleSheet.css
http://students.laverne.edu/..... /PROJ_FINAL/styleprint.css

Submitted to Prof. Jozef Goetz
University of La Verne, La Verne

Overview

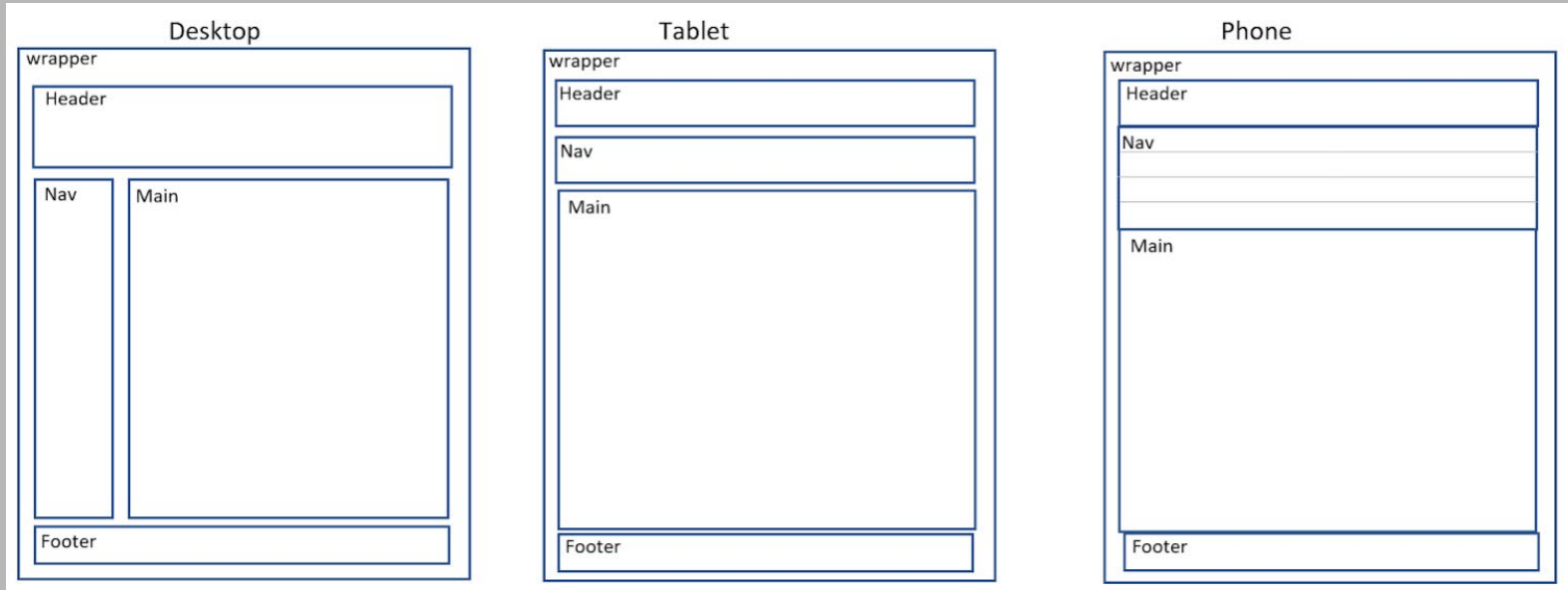
- Site Map
- Wireframe
- Best Practices –Navigation
- Design Principles – CARP
- Best Practices –Web Page Design
- Layout Design Techniques
- HTML/Javascript Table 0 & 4
- Test Results
- DEMO
- Conclusion

Website Navigation

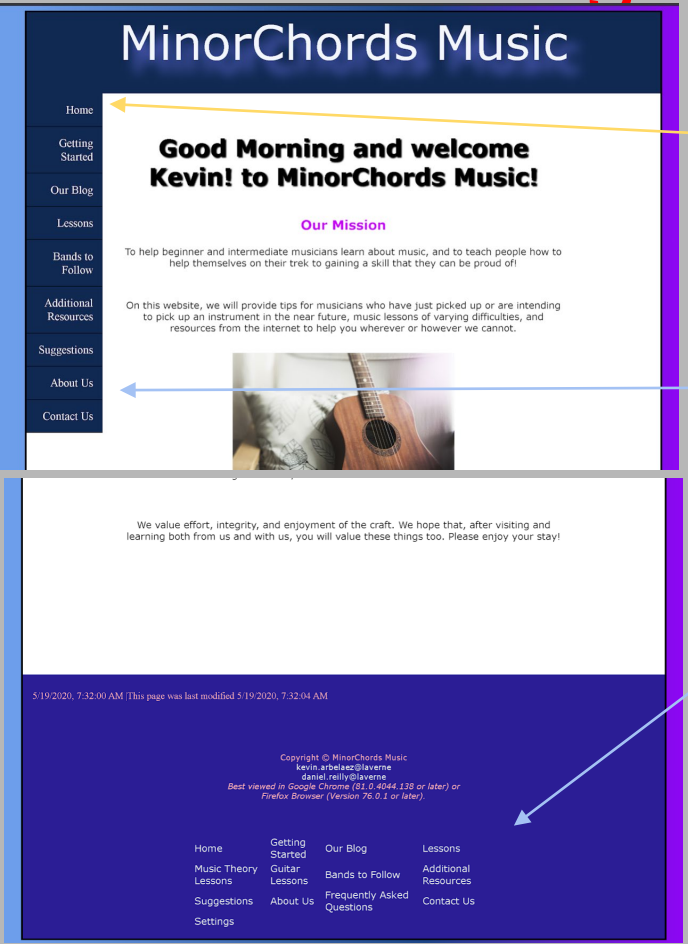


Website Navigation - Wire Frame

- Wrapper
- Two -Column layout
- Header
- Nav (float: left)
- Main
- Footer



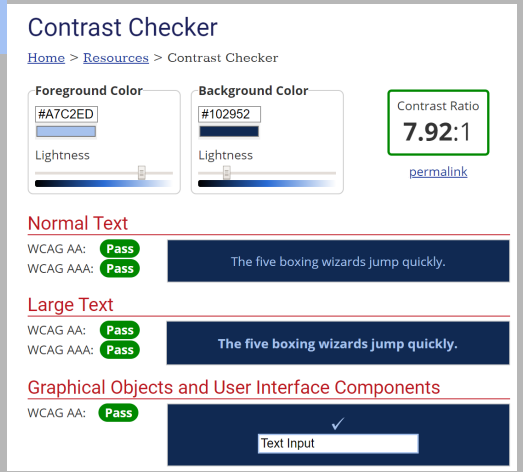
Website Navigation - Best Practices

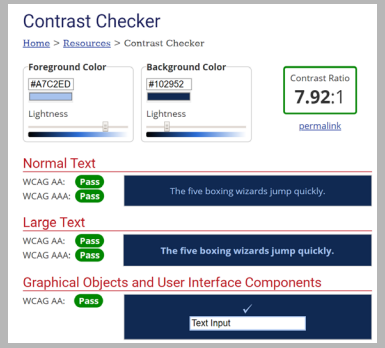


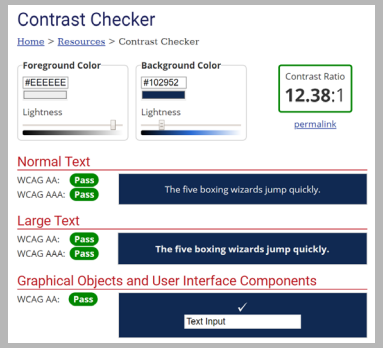
Clearly Labeled Navigation

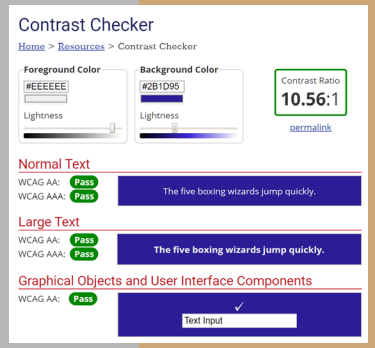
Text Based Navigation included in the **Footer**

Contrast

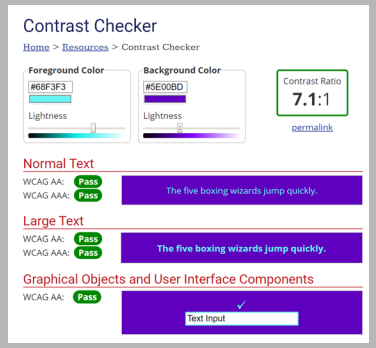


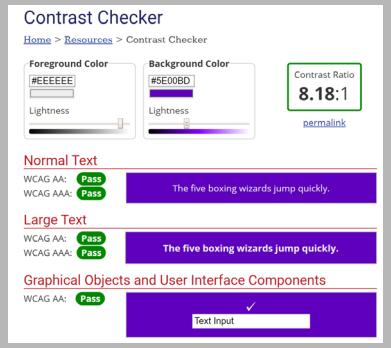


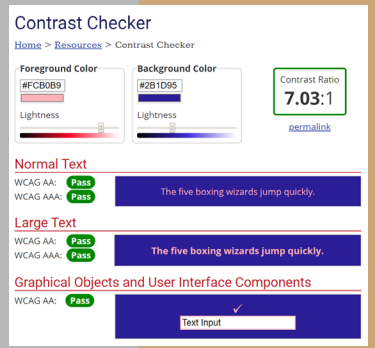




Colors used throughout web pages



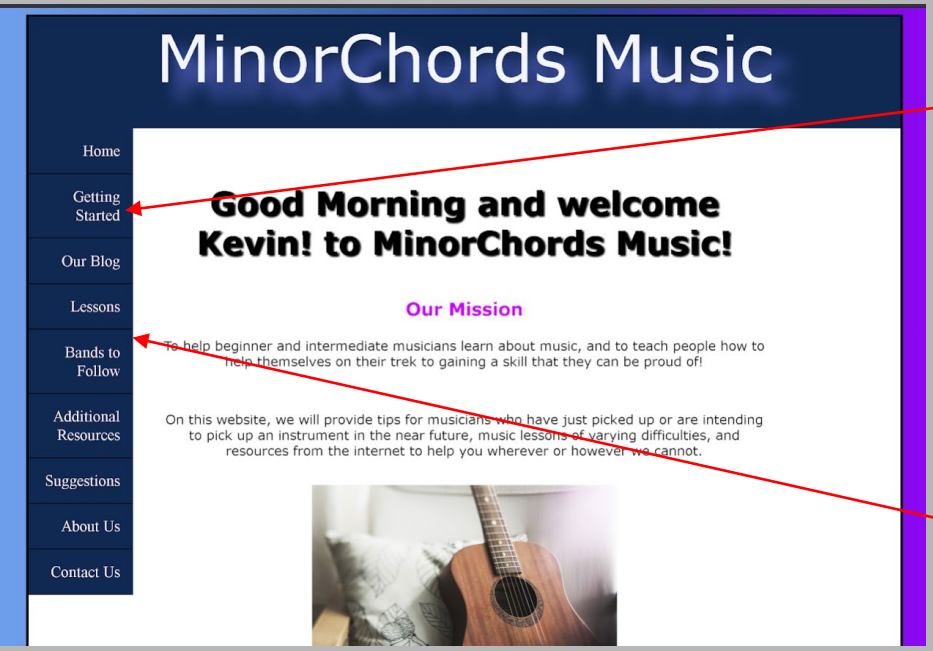




Colors Used:

- Main Scheme:
  - #EEEEEE
  - #A7C2ED
  - #102952
  - #5E00BD
- Other Colors Used:
  - #68F3F3
  - #FCB0B9

Website Navigation - Best Practices



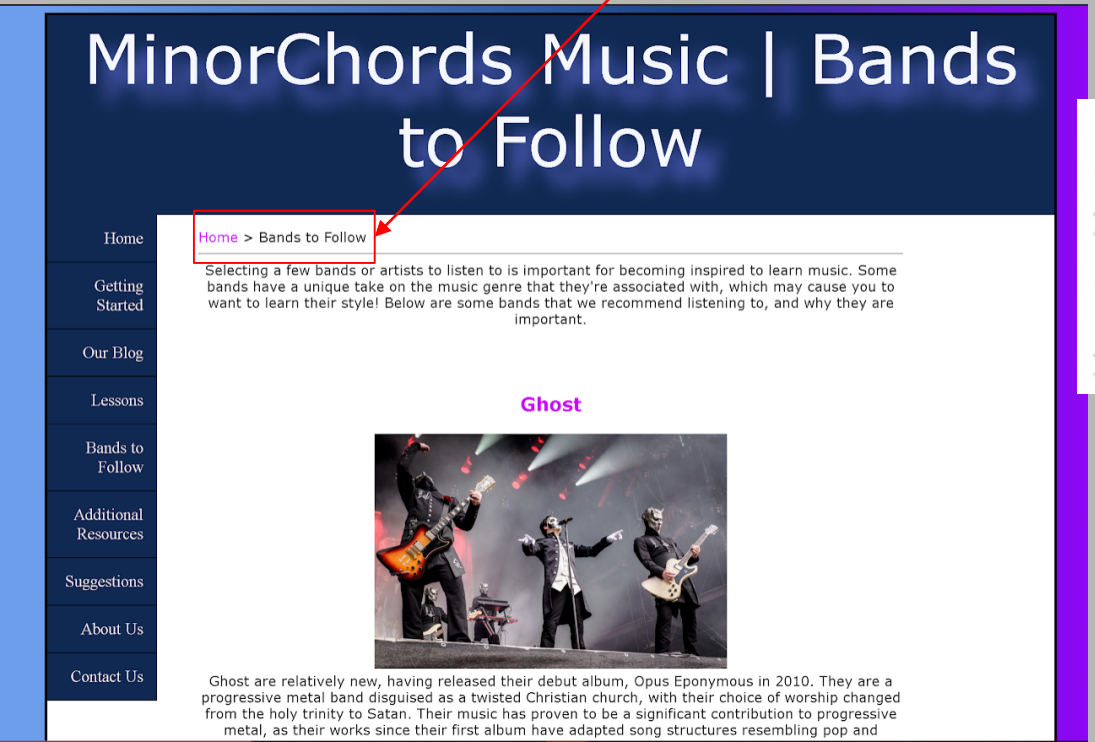

```
/* 05/10/20 DReilly NEW 54L -
nav {
    float: left;
    background-color: #102952;
    width: 8em;
    height: auto;
}
```

```
41          <nav>
42              <ul>
43                  <li><a href="index.html">Home</a></li>
44                  <li>
45                      <a href="started.html">Getting Started</a>
46                      <ul>
47                          <li><a href="settings.html">Settings</a></li>
48                      </ul>
49                  </li>
50                  <li><a href="blog.html">Our Blog</a></li>
51                  <li>
52                      <a href="lesson.html">Lessons</a>
53                      <ul>
54                          <li><a href="theoryLessons.html">Music Theory Lessons</a></li>
55                          <li><a href="guitarLessons.html">Guitar Lessons</a></li>
56                      </ul>
57                  </li>
58                  <li><a href="bands.html">Bands to Follow</a></li>
59                  <li><a href="resources.html">Additional Resources</a></li>
60                  <li><a href="suggestions.html">Suggestions</a></li>
61                  <li>
62                      <a href="about.html">About Us</a>
63                      <ul>
64                          <li><a href="faq.html">Frequently Asked Questions</a></li>
65                      </ul>
66                  </li>
67                  <li><a href="contact.html">Contact Us</a></li>
68              </ul>
69          </nav>
```

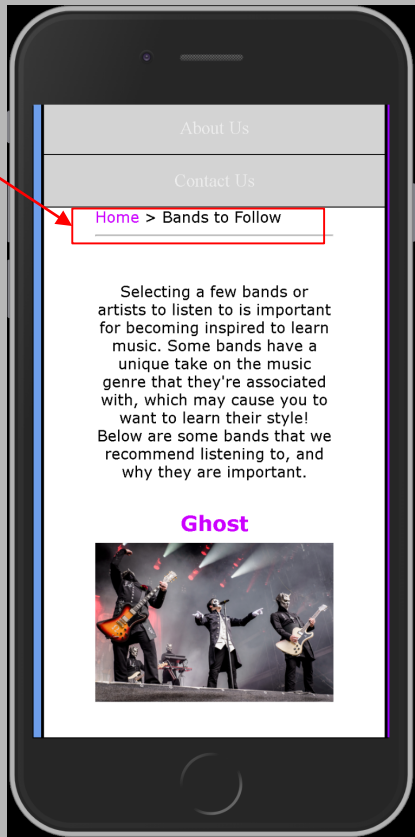
Website Navigation - Best Practices

Breadcrumb

```
<main>
    <span class="breadcrumb"><a href="index.html">Home</a> &gt; Bands to Follow</span> <br> <hr>
```



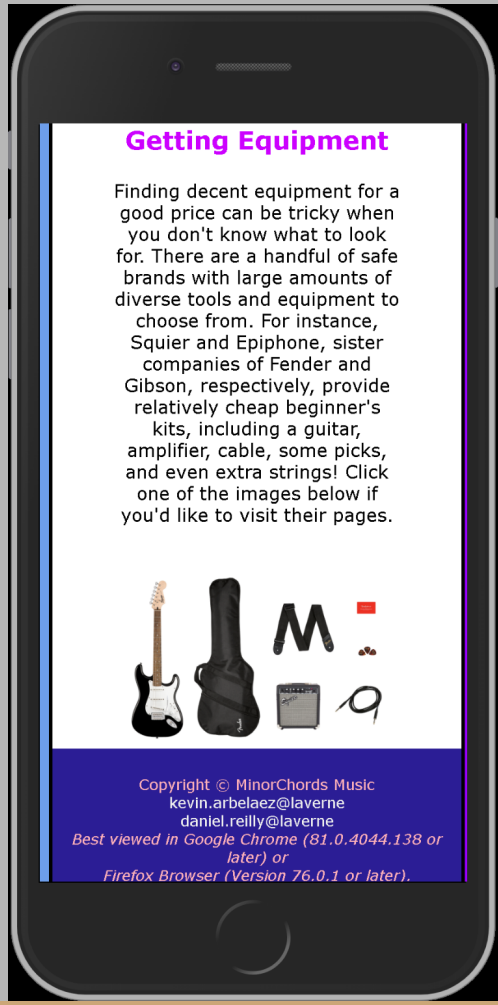

```
        /* 05/10/20 DReilly NEW
.breadcrumb {
        font-family: Verdana;
}

.breadcrumb a {
    text-decoration: none;
    color: #C0F;
}
```



Design Principles

We tried our best to follow the **design principles** outlined by CARP

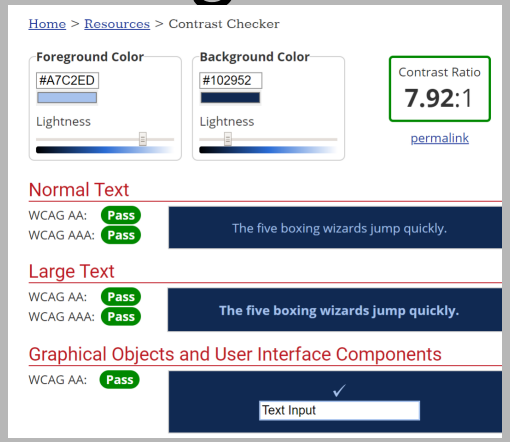
C- Contrast
A- Alignment
R- Repetition
P- Proximity

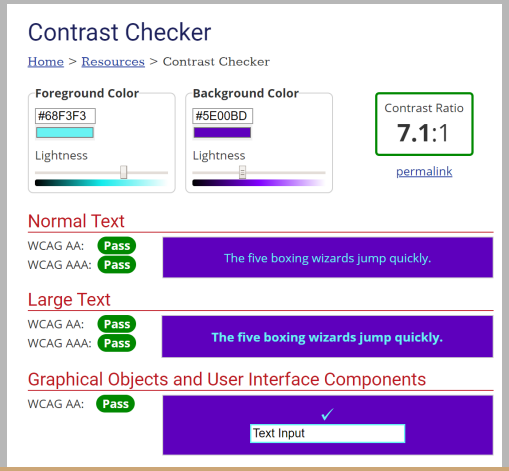


Design Principles - CARP

Contrast

- According to WebAIM





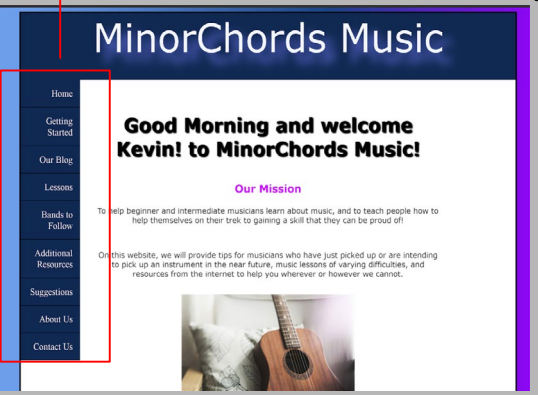
Our navigation **color contrast** is above **7.1:1** which is higher than the **minimum required** 5:1 ratio.

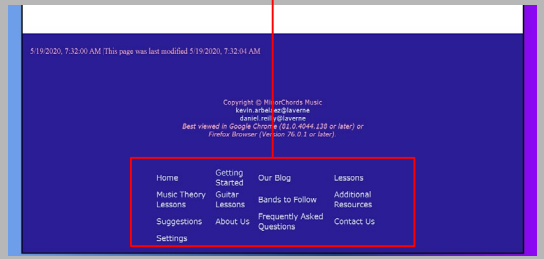
Design Principles - CARP

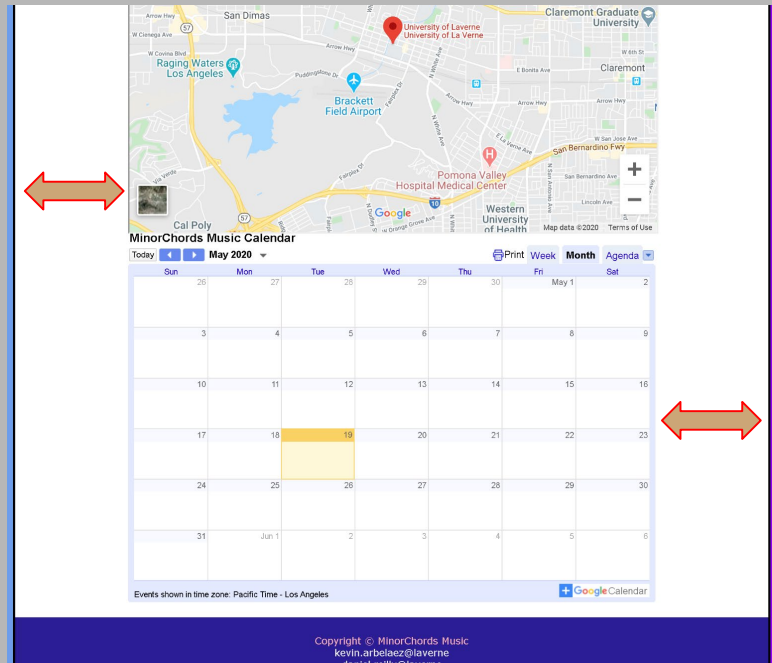
Alignment

Navigation is aligned to the **left vertically** and in the **footer horizontally** .

Images are spaced out **vertically** and **horizontally** , **equally** .







Design Principles - CARP Repetition

- There is **repetition** throughout the website in the **navigation, layout, headers** and **paragraphs**.
- **Colors** are **repeated**

Good Morning and welcome ! to MinorChords Music!

Our Mission

To help beginner and intermediate musicians learn about music, and to teach people how to help themselves on their trek to gaining a skill that they can be proud of!

On this website, we will provide tips for musicians who have just picked up or are intending to pick up an instrument in the near future, music lessons of varying difficulties, and resources from the internet to help you wherever or however we cannot.

Our Purpose

In events such as the COVID-19 Pandemic of 2020, people will still be able to receive help and learn about music. We believe that hobbies such as music creation should not be brought to a halt, even under these dire circumstances.

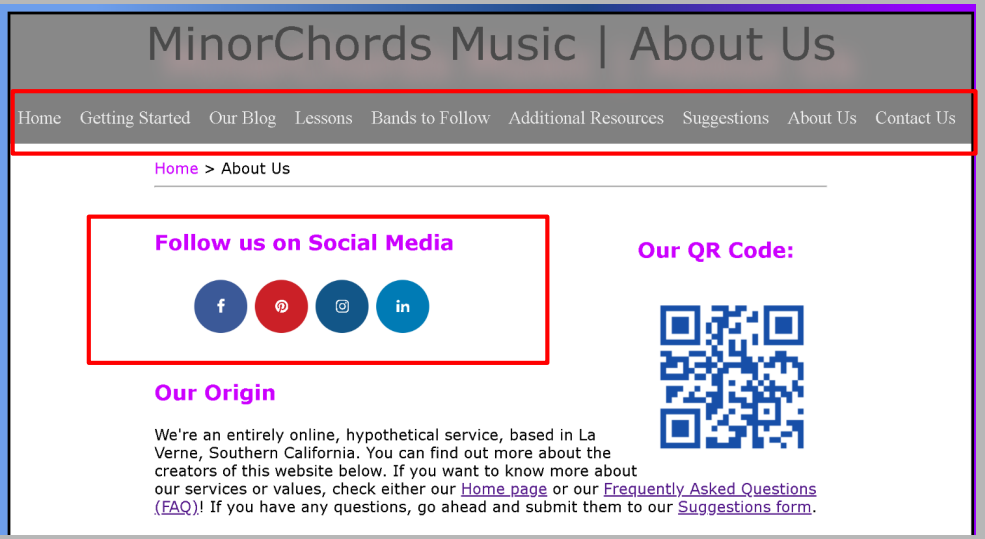
We value effort, integrity, and enjoyment of the craft. We hope that, after visiting and learning both from us and with us, you will value these things too. Please enjoy your

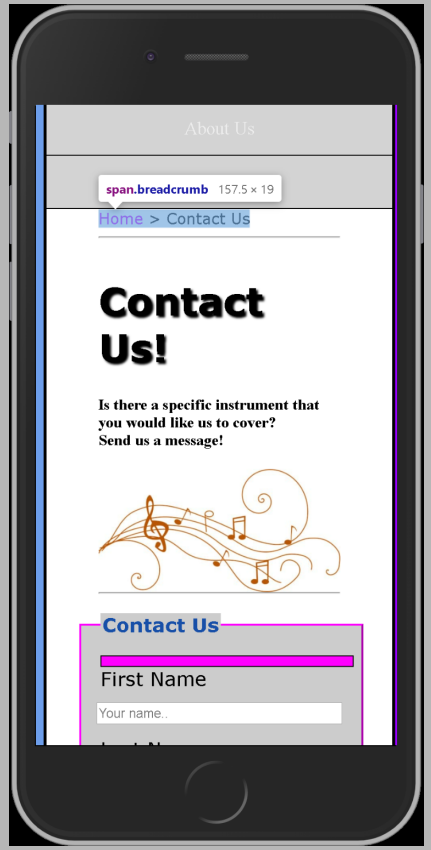
a significant contribution to progressive metal, as their works since their first album have adapted song structures resembling pop and psychedilic rock songs, while retaining heavy riffs and powerful rhythm.

Dinosaur Jr.

Dinosaur Jr was one of the big names of the alternative rock genre, even before Grunge emerged in the 90's. It's always been just three guys with a craving for some noise, and the talent to make noise, and although they've had lineup changes in the past, today they are what they started out as; three buddies from Amherst, Massachusetts. Their sound is easily identifiable, with lead singer J Mascis' raggedy, somber vocals and guitar playing described as a 'flamethrower', bassist Lou Barlow's rhythmic beating of the bass guitar, and drummer Murph's relentless, technical drumming.

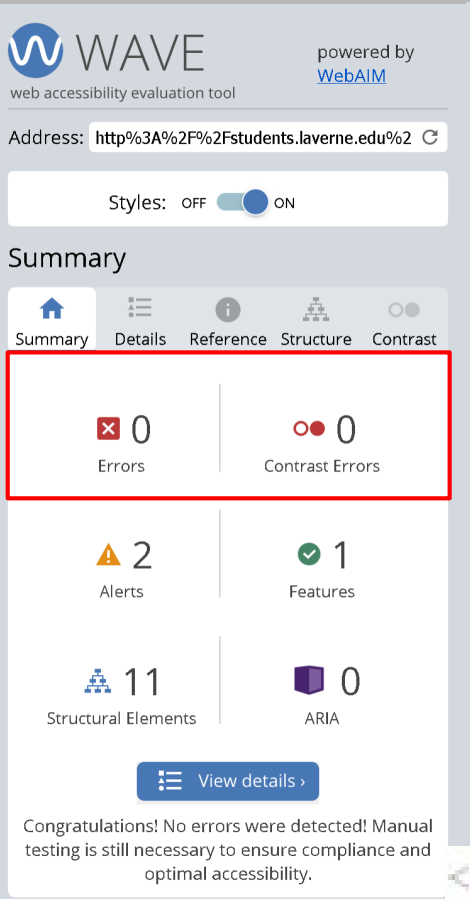
Design Principles - CARP Proximity

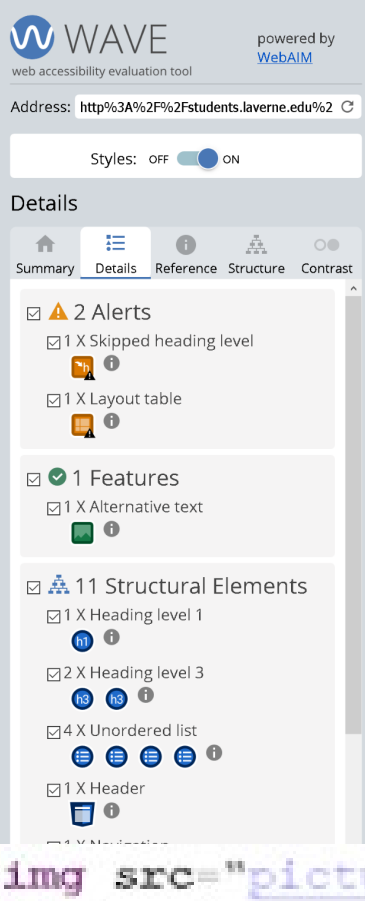




- **Images** and **navigation links** are all within a proper **proximity** for easy navigation on desktop and mobile view.

Web Page Design: Accessibility



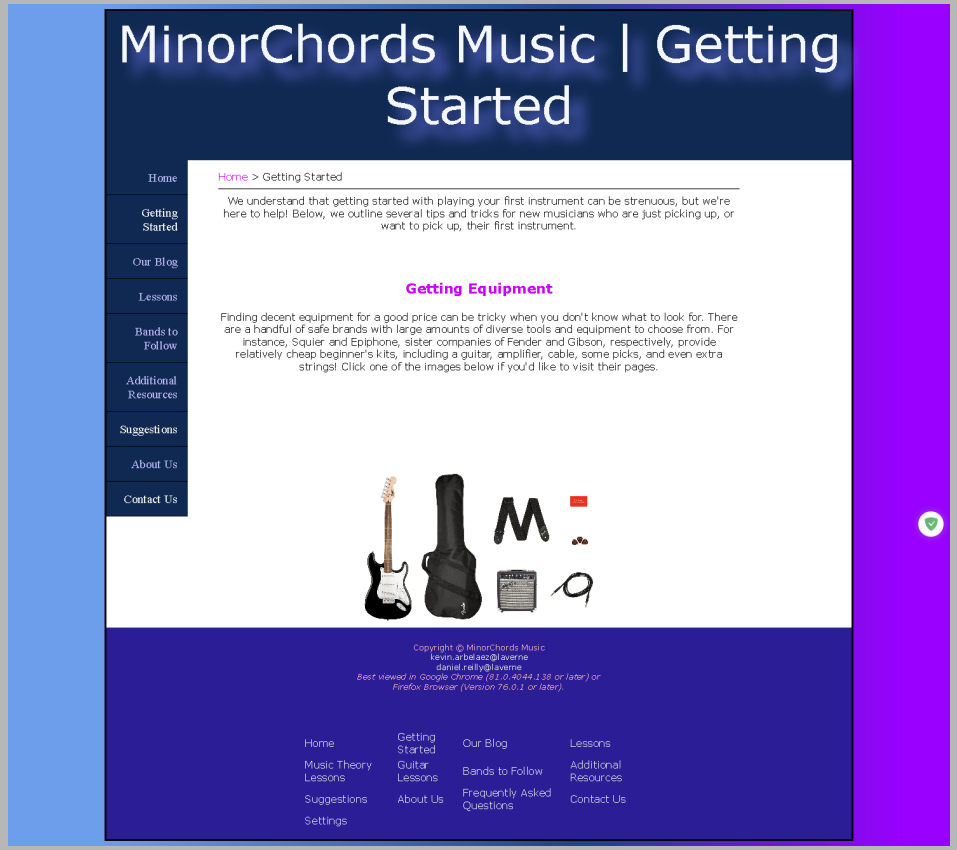


```
<label for="mySalutation">*Salutation:</label>
<input type="text" name="mySalutation" accesskey="S" tabindex="1" id="mySalutation" required="required" placeholder="Mr., Mrs., Miss"
<datalist id="Salutations">
    <option value="Mr." label="Mr.">
    <option value="Mrs." label="Mrs.">
    <option value="Miss" label="Miss">
</datalist>
<label for="myFirstName">*First Name:</label>
<input type="text" name="myFirstName" accesskey="F" tabindex="2" id="myFirstName" required="required" placeholder="First Name" />
<label for="myLastName">*Last Name:</label>
<input type="text" name="myLastName" accesskey="L" tabindex="3" id="myLastName" required="required" placeholder="Last Name" />
<label for="myEmail">*E-Mail:</label>
<input type="email" name="myEmail" accesskey="E" tabindex="4" id="myEmail" required="required" placeholder="youremail@domain.com" />
<label for="myPhone">*Phone Number:</label>
<input type="tel" name="myPhone" accesskey="P" tabindex="5" id="myPhone" required="required" placeholder="(xxx) xxx-xxxx" />
<label for="myDate">*Date:</label>
<input type="date" name="myDate" accesskey="A" tabindex="6" id="myDate" required="required" />
<label for="myCity">*City</label>
<input type="text" name="myCity" accesskey="Y" tabindex="7" id="myCity" required="required" />
<label for="myZip">*Zip Code:</label>
<input type="text" name="myZip" accesskey="Z" tabindex="8" id="myZip" required="required" />
<label for="myRating">*Rating:</label>
<input type="number" name="myRating" accesskey="R" tabindex="9" id="myRating" required="required" min="1" max="10" />
<label for="myComments">*Suggestion:</label>
<textarea name="myComments" accesskey="C" tabindex="10" id="myComments" required="required" rows="3" cols="40"></textarea>
<label for="myReply">Check here if you wish to receive an e-mail reply</label>
<input type="checkbox" name="myReply" accesskey="R" id="myReply" /> <br> <br>
<input id="mySubmit" type="submit" value="Send Now" accesskey="D">
<input id="myReset" type="reset" value="Reset" accesskey="">
</fieldset>
```

- **Alt** attribute for every picture on website
- Organized with **Headings** so it's easier to surf the web on a mobile device
- **Tab key** implemented on contact page

```
<img src="pictures/HomePageGuitar.jpg" alt="guitar" >
```

Web Page Design: Wide Pages



Horizontal scrolling was avoided by implementing a **Wrapper** .

- A **wrapper** is an element, commonly a div, that encloses one or more elements in the HTML markup.

```
<div id="wrapper">
    <header>
        MinorChords Music | Getting Started
    </header>
```

```
#wrapper {
    background-color: #FFF;
    width: 80%;
    margin-right: auto;
    margin-left: auto;
    border: 3px solid #000;
}
```

Web Page Design: Load Times

Index.html

started.html

Connection Rate	Download Time
14.4K	99.70 seconds
28.8K	50.05 seconds
33.6K	42.96 seconds
56K	25.93 seconds
ISDN 128K	8.22 seconds
T1 1.44Mbps	1.08 seconds

contact.html(slowest)

Connection Rate	Download Time
14.4K	2242.14 seconds
28.8K	1122.17 seconds
33.6K	962.18 seconds
56K	578.19 seconds
ISDN 128K	178.60 seconds
T1 1.44Mbps	17.51 seconds

Connection Rate	Download Time
14.4K	99.72 seconds
28.8K	50.16 seconds
33.6K	43.08 seconds
56K	26.09 seconds
ISDN 128K	8.41 seconds
T1 1.44Mbps	1.28 seconds

blog.html

bands.html

Connection Rate	Download Time
14.4K	98.40 seconds
28.8K	49.40 seconds
33.6K	42.40 seconds
56K	25.60 seconds
ISDN 128K	8.12 seconds
T1 1.44Mbps	1.07 seconds

lessons.html

Connection Rate	Download Time
14.4K	99.72 seconds
28.8K	50.16 seconds
33.6K	43.08 seconds
56K	26.09 seconds
ISDN 128K	8.41 seconds
T1 1.44Mbps	1.28 seconds

Connection Rate	Download Time
14.4K	358.87 seconds
28.8K	182.33 seconds
33.6K	157.12 seconds
56K	96.59 seconds
ISDN 128K	33.60 seconds
T1 1.44Mbps	8.21 seconds

Web Page Design: Load Times

resources.html

faq.html

Connection Rate	Download Time
14.4K	1750.52 seconds
28.8K	876.36 seconds
33.6K	751.48 seconds
56K	451.77 seconds
ISDN 128K	139.88 seconds
T1 1.44Mbps	14.15 seconds

suggestions.html

Connection Rate	Download Time
14.4K	97.82 seconds
28.8K	49.11 seconds
33.6K	42.15 seconds
56K	25.45 seconds
ISDN 128K	8.07 seconds
T1 1.44Mbps	1.07 seconds

Connection Rate	Download Time
14.4K	179.35 seconds
28.8K	90.27 seconds
33.6K	77.55 seconds
56K	47.01 seconds
ISDN 128K	15.23 seconds
T1 1.44Mbps	2.42 seconds

aboutus.html(fastest)

settings.html

Connection Rate	Download Time
14.4K	97.54 seconds
28.8K	48.97 seconds
33.6K	42.03 seconds
56K	25.38 seconds
ISDN 128K	8.05 seconds
T1 1.44Mbps	1.06 seconds

contact.html

Connection Rate	Download Time
14.4K	98.88 seconds
28.8K	49.64 seconds
33.6K	42.61 seconds
56K	25.72 seconds
ISDN 128K	8.16 seconds
T1 1.44Mbps	1.07 seconds

Connection Rate	Download Time
14.4K	258.82 seconds
28.8K	129.91 seconds
33.6K	111.50 seconds
56K	67.30 seconds
ISDN 128K	21.30 seconds
T1 1.44Mbps	2.76 seconds

Test Results Table 3

TABLE: 3 Test plan and results (example for Ch7 and so on) - Verification Matrix:

See my example for Ch2-Ch6 in 1_Project_Submittals-Test_Plan+with_screenshots_ch2P.docx

1. Page #/name – list all pages	2. Test item - list hyperlinks, fields,buttons, videos, images, GUI controls,web pages Schema: click action=> reaction Legend: => means/ land in (specify a hyperlink if a site is online)	3. Validation each web page using http://validator.w3.org and http://jigsaw.w3.org/css-validator/ - if applicable; attached screenshots with each page name	4. Outcome in Mobile Phone - specify a device model, version and source code web server location (specify your URL	5. Outcome in tablet Resolution 1920x1080 Outcome in Chrome or/and Firefox or Internet Explorer(Edge) - specify a browser version and source code web server location (specify your URL	6. Outcome in desktop Resolution 1440*900 Outcome in Chrome or/and Firefox or Internet Explorer(Edge) - specify a browser version and source code web server location (specify your URL
1. index.html	Home txt link=> homepage Getting Started txt link =>Getting start Our Blog txt link => Blog page Lessons txt link => lessonspage Bands to follow=> bandspage Add Resources txt link. =>Resourcespage Suggestions txt link => Suggestions page About us txt link. => About us page Contact us txt link => Contact us page	Page #[specify] in your report. Connect using http://validator.w3.org – attached a screenshot with a page name 	Page #[specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal left on the right or left. 	Page #[specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal left on the right or left. 	Page #[specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal left on the right or left. - Good display in Chrome - Good display in Mozilla

Test Results Table 3

Kevin Arbelaez Group#21 5/14/20

	E-mail => popup one-mail form				
started.html	Home txt link=> home page Getting Started txt link => Starting page Our Blog txt link => Blog page Lessons txt link => lessons page Bands to follow => band page Add Resources txt link => Resource page Suggestions txt link => Suggestions page About us txt link => About us page Contact us txt link => Contact us page E-mail => popup one-mail form	Page # [specify] in your report. Correct using http://validator.w3.org - attached a screenshot with a page name	Page # [specify] in your report. -Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. -Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. -Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla
settings.html	Home txt link=> home page Getting Started txt link => Starting page Our Blog txt link => Blog page Lessons txt link => lessons page Bands to follow => band page Add Resources txt link => Resource page Suggestions txt link => Suggestions page	Page # [specify] in your report. Correct using http://validator.w3.org - attached a screenshot with a page name	Page # [specify] in your report. -Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. -Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. -Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla

Kevin Arbelaez Group#21 5/14/20

	About us txt link => About us page Contact us txt link => Contact us page E-mail => popup one-mail form				
blog.html	Home txt link=> home page Getting Started txt link => Starting page Our Blog txt link => Blog page Lessons txt link => lessons page Bands to follow => band page Add Resources txt link => Resource page Suggestions txt link => Suggestions page About us txt link => About us page Contact us txt link => Contact us page E-mail => popup one-mail form	Page # [specify] in your report. Correct using http://validator.w3.org - attached a screenshot with a page name	Page # [specify] in your report. -Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. -Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla
lessons.html	Home txt link=> home page Getting Started txt link	Page # [specify] in your report. Correct using http://validator.w3.org - attached a	Page # [specify] in your report. -Attach a screenshot with a page name - Good display	Page # [specify] in your report. -Attach a screenshot with a page name - Good display	Page # [specify] in your report. -Attach a screenshot with a page name - Good display

Test Results Table 3

Kevin Arbelaez Group#21 5/14/20

	=>Starting page Our Blog txt link => Blog page Lessons txt link => lessonspage Bands to follow=> bandspage Add Resources txt link =>Resourcespage Suggestions txt link=> Suggestions page About us txt link => About uspage Contact us txt link => Contact uspage E-mail=> popup an e-mail form	screenshot with a page name	- All the buttons show without having to drag the horizontal lift on the right or left.	- All the buttons show without having to drag the horizontal lift on the right or left.	- All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla
theorylessons.html	Home txt link=> home page Getting Started txt link =>Starting page Our Blog txt link => Blog page Lessons txt link => lessonspage Bands to follow=> bandspage Add Resources txt link =>Resourcespage Suggestions txt link=> Suggestions page About us txt link => About uspage Contact us txt link => Contact uspage E-mail=> popup an e-mail form	Page # [specify] in your report. Correct using http://validator.w3.org – attached a screenshot with a page name	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla
gatedlessons.html	Home txt link=> home page Getting Started txt link =>Starting page Our Blog txt link => Blog page	Page # [specify] in your report. Correct using http://validator.w3.org – attached a screenshot with a page name	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome

Kevin Arbelaez Group#21 5/14/20

	Lessons txt link => lessonspage Bands to follow=> bandspage Add Resources txt link =>Resourcespage Suggestions txt link=> Suggestions page About us txt link => About uspage Contact us txt link => Contact uspage E-mail=> popup an e-mail form				- Good display in Mozilla
bands.html	Home txt link=> home page Getting Started txt link =>Starting page Our Blog txt link => Blog page Lessons txt link => lessonspage Bands to follow=> bandspage Add Resources txt link =>Resourcespage Suggestions txt link=> Suggestions page About us txt link => About uspage Contact us txt link => Contact uspage E-mail=> popup an e-mail form	Page # [specify] in your report. Correct using http://validator.w3.org – attached a screenshot with a page name	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla
resources.html	Home txt link=> home page Getting Started txt link =>Starting page Our Blog txt link => Blog page Lessons txt link => lessonspage	Page # [specify] in your report. Correct using http://validator.w3.org – attached a screenshot with a page name	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. Attach a screenshot with a page name - Good display - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome

Test Results Table 3

Kevin Arbelaez Group#2 5/14/20

	Bands to follow=> bandspage Add Resources txt link =>Resourcespage Suggestions txt link=> Suggestions page About us txt link => About us page Contact us txt link => Contact us page E-mail => popup an e-mail form				 - Good display in Mozilla
suggestions.html	Home txt link=> home page Getting Started txt link =>Starting page Our Blog txt link => Blog page Lessons txt link => lessonspage Bands to follow=> bandspage Add Resources txt link =>Resourcespage Suggestions txt link=> Suggestions page About us txt link => About us page Contact us txt link => Contact us page E-mail => popup an e-mail form	Page # [specify] in your report. Correct using http://validator.w3.org – attached a screenshot with a page name	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display. - All the buttons show without having to drag the horizontal lift on the right or left. 	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display. - All the buttons show without having to drag the horizontal lift on the right or left. 	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display. - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla
about.html	Home txt link=> home page Getting Started txt link	Page # [specify] in your report. Correct using http://validator.w3.org – attached a	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display.	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display.	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display.

Kevin Arbelaez Group#2 5/14/20

	=>Starting page Our Blog txt link => Blog page Lessons txt link => lessonspage Bands to follow=> bandspage Add Resources txt link =>Resourcespage Suggestions txt link=> Suggestions page About us txt link => About us page Contact us txt link => Contact us page E-mail => popup an e-mail form	screenshot with a page name 	- All the buttons show without having to drag the horizontal lift on the right or left. 	- All the buttons show without having to drag the horizontal lift on the right or left. 	- All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla
faq.html	Home txt link=> homepage Getting Started txt link =>Starting page Our Blog txt link => Blog page Lessons txt link => lessonspage Bands to follow=> bandspage Add Resources txt link =>Resourcespage Suggestions txt link=> Suggestions page About us txt link => About us page Contact us txt link => Contact us page E-mail => popup an e-mail form	Page # [specify] in your report. Correct using http://validator.w3.org – attached a screenshot with a page name 	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display. - All the buttons show without having to drag the horizontal lift on the right or left. 	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display. - All the buttons show without having to drag the horizontal lift on the right or left. 	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display. - All the buttons show without having to drag the horizontal lift on the right or left. - Good display in Chrome - Good display in Mozilla
contact.html	Home txt link=> homepage Getting Started txt link =>Starting page	Page # [specify] in your report. Correct using http://validator.w3.org – attached a screenshot with a page name	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display.	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display. - All the buttons show without having to drag the horizontal lift on the right or left.	Page # [specify] in your report. -Attach a screenshot with a page name. - Good display. - All the buttons show without having to drag the horizontal lift on the right or left.

Test Results Table 3

Kevin Arbelaez Group#21 5/14/20

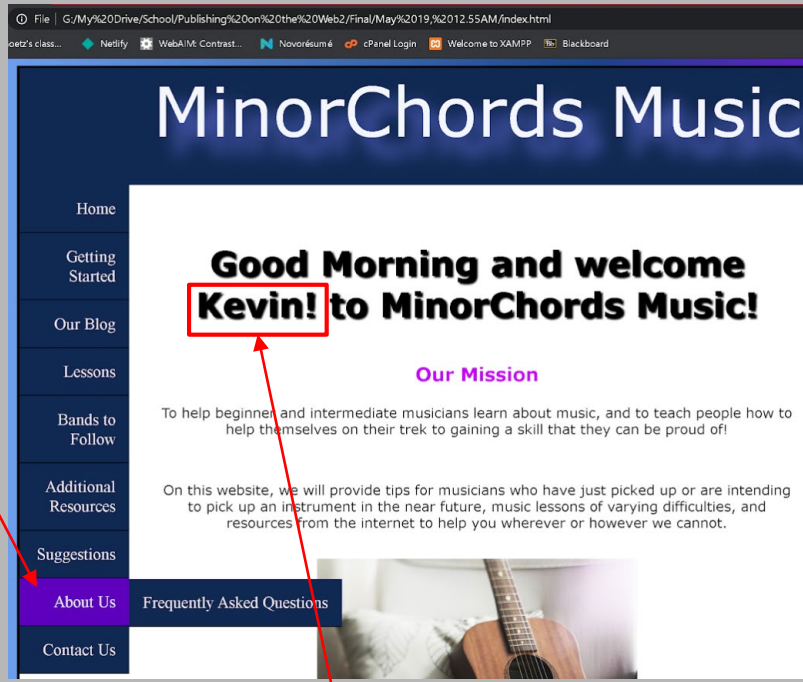
	Our Blog txt link => blog page **Lessons** txt link => lessonspage **Bands to follow** => bandspage **Additional Resources** txt link =>Resourcespage **Suggestions** txt link => Suggestions page **About us** txt link => Aboutuspage **Contact us** txt link => Contactuspage **E-mail** => popup sneem all form		- All the buttons show without having to drag the horizontal left on the right or left. 		- Good display in Chrome - Good display in Mozilla
javascript.js	JavaScript		Validation your JavaScript code (if applicable) – specify available names; attached screenshots with each page name		

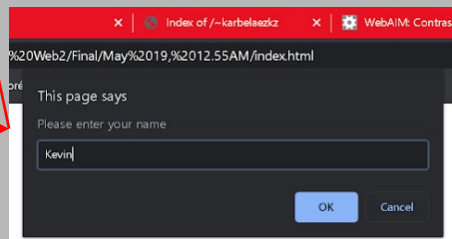
CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25

Index	1/INPUT	Prompt for the input	**ch7, Fig 7.9:** window.prompt("Enter Integer Grade, -1 to Quit:", "0");
Index	2/OUT	Produce an output	the same as above or **ch7 Fig. 7.11**; document.writeln("output string");
Index, about, bands, blog, contact	4/MENU	Dropdown Menu	**Create** Dropdown Menu => 04_Templ3_MyVerticalMultiSubMenusHTML5_Fig_4.17_p130+++++.html or 04_Templ4_dropdown 3 menus+shown_text_org_float left+++++.html

```
36  <body onload="greeting()">
37      <div id="wrapper">
38          <header>
39              MinorChords Music
40          </header>
```

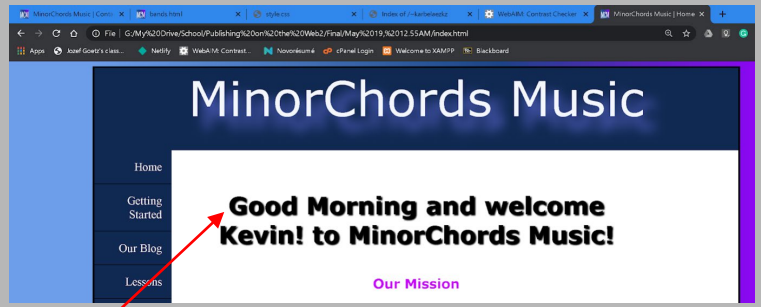
```
//KArbelaez NEW 1i: one function to display personalized greeting
function greeting() {
    var now = new Date(); // current date and time
    document.getElementById("time").innerHTML = now.toLocaleString();

    var hour = now.getHours(); // current hour
    if (hour < 12)
        document.getElementById("greetingTime").innerHTML="Good Morning";
    else {
        hour = hour - 12; // convert from 24-hour clock to PM time

        // determine whether it is afternoon or evening
        if (hour < 6)
            document.getElementById("greetingTime").innerHTML = "Good Afternoon";
        else
            document.getElementById("greetingTime").innerHTML = "Good Evening";
    } // end else


    if (document.cookie) {
        var myCookie = unescape(document.cookie);

        var cookieTokens = myCookie.split("=");

        name = cookieTokens[1];
    }
    else {
        name = window.prompt("Please enter your name", " ");

        document.cookie = "name =" + escape(name);
    }
    document.getElementById("user").innerHTML = name;


    var modDate = new Date(document.lastModified);
    document.getElementById("time").innerHTML += " |This page was last modified " + modDate.toLocaleString();

}
```





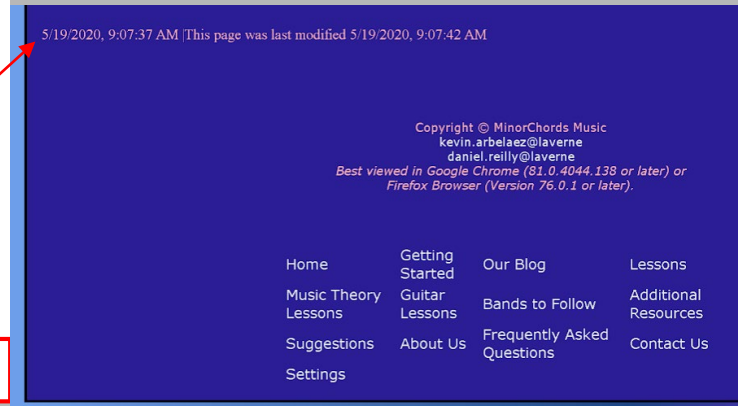
CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25

Index	15/LOCAL	Setup the date	the same as above use now.toLocaleString();
Index	16/MOD	When a document was last modified, use the document object's lastModified property	Use modDate.toLocaleString() or better at http://classes.jgspectrum.com/classes/319_S18/Assignment.doc/. => 13_a lot_of_examples_from_text1_CS218_ed5.zip => documentwrite.htm




```
36  <body onload="greeting()">
37      <div id="wrapper">
38          <header>
39              MinorChords Music
40          </header>
```

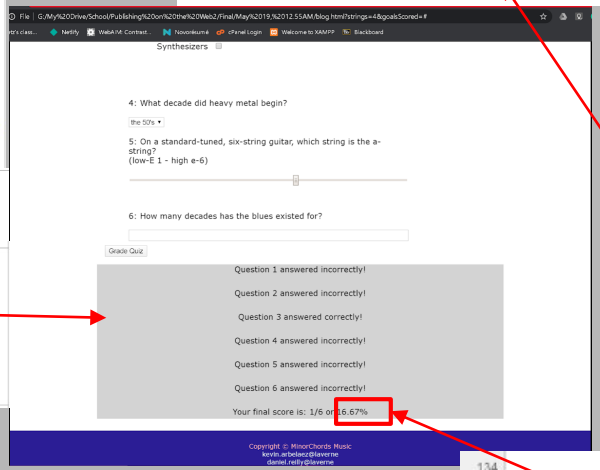
```
//KArbelaez NEW 1L: one function to display personalized greeting
function greeting() {
    var now = new Date(); // current date and time
    document.getElementById("time").innerHTML = now.toLocaleString();

    var hour = now.getHours(); // current hour
    if (hour < 12)
        document.getElementById("greetingTime").innerHTML="Good Morning";
    else {
        hour = hour - 12; // convert from 24-hour clock to PM time

        // determine whether it is afternoon or evening
        if (hour < 6)
            document.getElementById("greetingTime").innerHTML = "Good Afternoon";
        else
            document.getElementById("greetingTime").innerHTML = "Good Evening";
    } // end else


    if (document.cookie) {
        var myCookie = unescape(document.cookie);

        var cookieTokens = myCookie.split("=");

        name = cookieTokens[1];
    }
    else {
        name = window.prompt("Please enter your name", " ");

        document.cookie = "name =" + escape(name);
    }

    document.getElementById("user").innerHTML = name;


    var modDate = new Date(document.lastModified);
    document.getElementById("time").innerHTML += " |This page was last modified " + modDate.toLocaleString();
}
```



CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25

blog	3/OUT all in column 3	Produce an **output** in a • 3/OUT/TA: **textarea,** • 3/OUT/T: **text,** • 3/OUT/D: **division** • 3/OUT/P: paragraph.	1. **in a textarea –** <document.getElementById("result").value = theArray[i]; <textarea id = "result" rows = "7" cols = "60"> or http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/., =>10_Quiz_my_template_ed4.html or 10_Quiz_My_tempate_with_registration++++.html 2. **in a text:** document.getElementById("result").value = "Value not found"; <input id = "result" type = "text" size = "30" /> 3. in a **division** at http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/ => **09_Craps_framework_for_ed4.html** 4. in a **paragraph** in Fig. 9.7 p.300
blog, javascript.js	6/PREC	Setup the **output precision** for floating-point numbers	**ch8, Fig.8.6 p.259 – amount.toFixed(2)**
blog	12/QUIZ	**Quiz Project - Personalized greeting** (welcome) **webpage** display local **time**, a random **image**, a random **quotation** and a short **quiz**	**Include your project assignment P5, a quiz result should be displayed at the parent page** (Adopted JavaScript in Fig.11.16 – 11.17 **ed4** described in my Lecture Notes, also the source code for 2008 ed4). **You may see: 11_combine asking for name-quiz-quotes.zip** (run in Internet Explorer) **at** http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/.

```
function display(message) {
    var node = document.createElement("p");
    var textnode = document.createTextNode(message);
    node.appendChild(textnode);
    document.getElementById("results").appendChild(node);
}
```




```
function gradeQuiz() {
    // Initialize score variable
    var score = 0;

    // Q1: Check question one
    if (id("q1_correct").checked) {
        display("Question 1 answered correctly!");
        score = score + 1;
    }
    else {
        display("Question 1 answered incorrectly!");
    }

    // Q2: Check question two
    if (id("q2_correct").checked) {
        display("Question 2 answered correctly!");
        score = score + 1;
    }
    else {
        display("Question 2 answered incorrectly!");
    }

    // Q3: Check question three
    if (id("q3_correct1").checked && id("q3_correct2").checked &&
        !id("q3_wrong1").checked && !id("q3_wrong2").checked &&
        !id("q3_wrong3").checked) {
        display("Question 3 answered correctly!");
        score = score + 1;
    } else {
        display("Question 3 answered incorrectly!");
    }

    // Q4: Check question four
    if (id("q4_correct").selected) {
        display("Question 4 answered correctly!");
        score = score + 1;
    } else {
        display("Question 4 answered incorrectly!");
    }

    //KArbelaez 4/20/20 NEW 6L: Added new if else statement to check correct answer for question 4
    if (id("strings").value == 3) {
        display("Question 5 answered correctly!");
        score = score + 1;
    } else {
        display("Question 5 answered incorrectly!");
    }

    //KArbelaez 4/20/20 NEW 6L: Added new if else statement to check correct answer for question 5
    if (id("bluesDecades").value == 15) {
        display("Question 6 answered correctly!");
        score = score + 1;
    } else {
        display("Question 6 answered incorrectly!");
    }
    //KArbelaez 4/20/20 NEW 1L: added an extra display to show score percent

    var finalScore = (score / 6) * 100;

    display("Your final score is: " + score + "/6 or " + finalScore.toFixed(2) + "%");
}
```

```
134                <button onclick="gradeQuiz()">Grade Quiz</button>
135
136            </form>
137        </div>
138        <div id="results"></div>
139    </main>
```

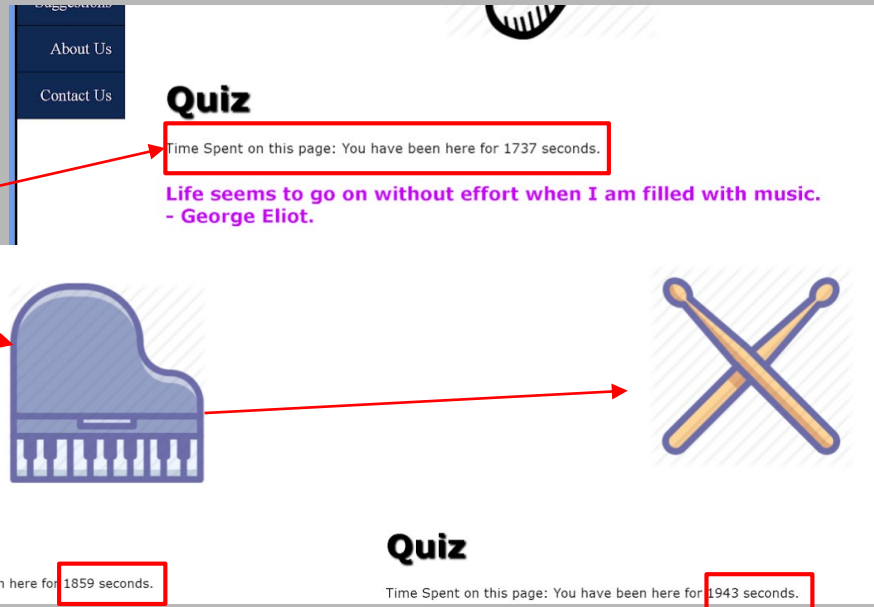
CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25

blog	9/RAND	Random or sequentially generated images	**1. Generate randomly images** (change the time to 4 – 5 sec) http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/ => 13_generate_randomly_images+traditional+inline registration++++++.zip **2. Random** after clicking a picture - **ch10** p.338-9 Fig.10.11-12 **3. Sequentially** display a new image every 5 sec (Fig.13.2).
blog	18/QTIMER	**Timer**: Indicate how many **sec** have **elapsed since doc was loaded**	**ch13** p.424 Fig. 13.2 - **onload**.html or better Use it to show the time for a quiz and stop it after the specified time.

```
<body onload="randomQuote(); timeCounter();">
```

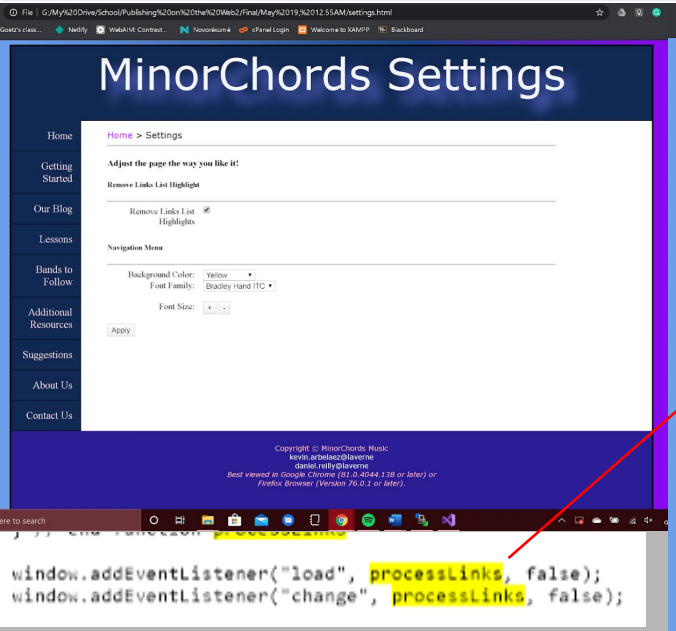
```
//KArbelaez 5/13/20 NEW 6L: fucntion to count time spent on page
var seconds = 0;
function timeCounter() {
    seconds++;
    var el = document.getElementById("secondsCounter");
    el.innerHTML = "You have been here for " + seconds + " seconds.";
}
setInterval(timeCounter, 1000);
```

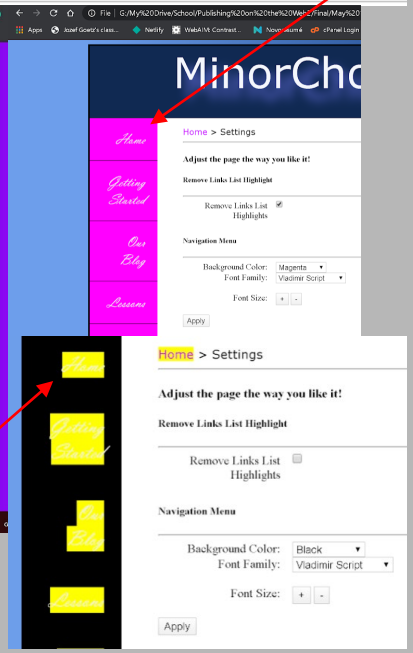
```
//KArbelaez NEW 10L: One function to display random quote and image
function randomQuote() {
    var pictures =
        ["drums", "eguitar", "guitar", "harp", "piano", "saxophone", "trumpet"];

    // KArbelaez 4/24/20 MOD 5L: Changed the quotes that will be randomly displayed
    var quotes = ["If music be the food of love, play on.<br>" +
        "- William Shakespeare.",
    "Life seems to go on without effort when I am filled with music.<br>" +
    "- George Eliot.",
    "Music gives a soul to the universe, wings to the mind, flight to the imagination, and life to everything.<br>" +
    "- Plato."];

    document.getElementById("quotes").innerHTML = ("<img src = \"pictures/"+pictures[Math.floor(Math.random() * 7)] +".jpg\"+ \"alt=randPic\" /> <br/>");

    // write the random quote to the page
    document.getElementById("quotes").innerHTML += quotes[Math.floor(Math.random() * 3)];
    //document.write(quotes[Math.floor(Math.random() * 3)]);
}
setInterval(randomQuote, 5000);
```



CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25

settings	5/Font
	+
	5/Color
		Prompt the user:
		5/LINK/Coll: **links collection in yellow,**
		5/LINK/Font: **a font size** and
		5/LINK/Colo: **a color**
			Prompt the user **to set up a web page** with font and color features and more.
			1. Font size - ch8, Fig. 8.2 p.254:
			`for ( var counter = 1; counter <= 7; ++counter )`
			`document.writeln( "<p style = \"font-size: " + counter + "ex\">`
			`HTML font size " + counter + "ex</p>" );`

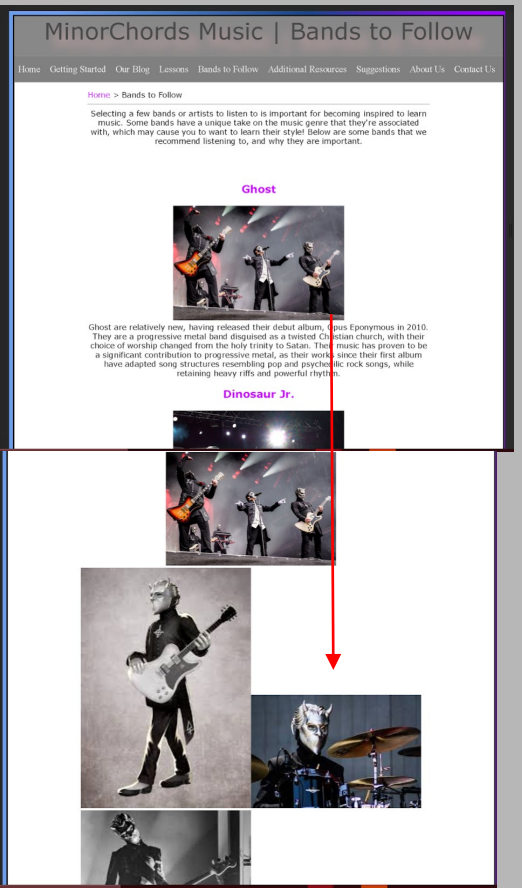





```
<nav id="navigationBar">
    <ul id="navUl">
        <li><a href="index.html">Home</a></li>
        <li>
            <a href="started.html">Getting Started</a>
            <ul>
                <li><a href="settings.html">Settings</a></li>
            </ul>
        </li>
        <li><a href="blog.html">Our Blog</a></li>
        <li>
            <a href="lesson.html">Lessons</a>
            <ul>
                <li><a href="theoryLessons.html">Music Theory Lessons</a></li>
                <li><a href="guitarLessons.html">Guitar Lessons</a></li>
            </ul>
        </li>
        <li><a href="bands.html">Bands to Follow</a></li>
        <li><a href="resources.html">Additional Resources</a></li>
        <li><a href="suggestions.html">Suggestions</a></li>
        <li>
            <a href="about.html">About Us</a>
            <ul>
                <li><a href="faq.html">Frequently Asked Questions</a></li>
            </ul>
        </li>
        <li><a href="contact.html">Contact Us</a></li>
    </ul>
</nav>
```

```
function update() {
    navBGColorChange();
    navFontChange();
}
//KArbelaez 5/13/20 NEW 4L: fucntion to change backgrounf color of navigation
function navBGColorChange() {
    var color = document.getElementById("bgColor").selectedIndex;
    document.getElementById("navigationBar").style.backgroundColor = document.getElementsByTagName("option")[color].value;
}
//KArbelaez 5/13/20 NEW 4L: fucntion to change font family
function navFontChange() {
    var selectedFont = document.getElementById("fontFamily").selectedIndex;
    if (selectedFont == 0) {
        document.getElementById("navUl").style.fontFamily = "Bradley Hand ITC";
    }
    else if (selectedFont == 1) {
        document.getElementById("navUl").style.fontFamily ="Brush Script MT" ;
    }
    else if (selectedFont == 2) {
        document.getElementById("navUl").style.fontFamily = "Jokerman";
    }
    else if (selectedFont == 3) {
        document.getElementById("navUl").style.fontFamily = "Mongolian Baiti";
    }
    else if (selectedFont == 4) {
        document.getElementById("navUl").style.fontFamily = "Vladimir Script";
    }

}
```

CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25




```
onmouseout="removeElementsGhost()"></a>
```

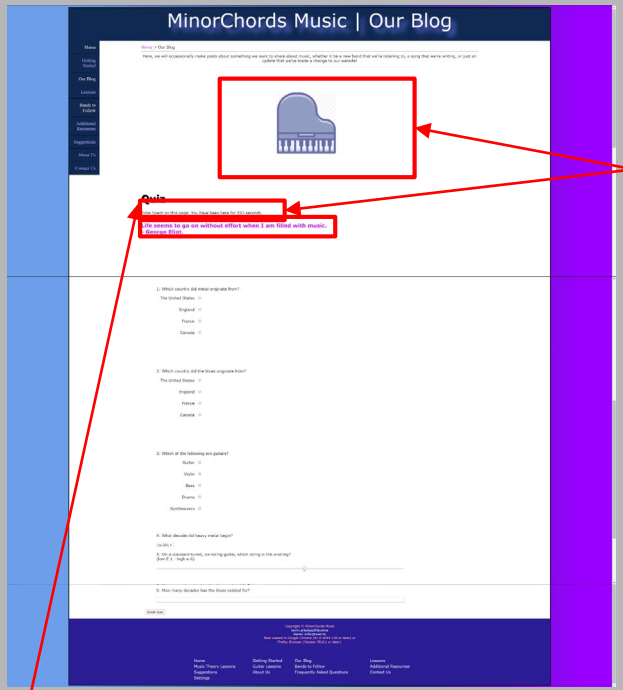
```
<a href="http://ghost-official.com/" target="_blank"><img height="75%" width="75%" src="pictures/ghostBand.jpg" alt="Ghost performing" onmouseover="showMembersGhost()"
```

```
//KArbelaez NEW 6L: function to remove all members from div
function removeElementsGhost() {
    var divMem = document.getElementById("membersGhost");
    for (var i = divMem.childElementCount; i >= 0; i--) {
        divMem.removeChild(divMem.childNodes[0]);
    }
}
```

bands	7/CLICK + 7/LOAD + 7/MOUSE	• click event • load event • mouseOver • mouseOut	1. Click event => ch9, p.299 Fig.9.7; http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/. 2. Load event => Fig.13.2 p.424; Fig.12.14 p.411; Fig.12.16 p.412 3. mouseover, mouseout => Fig.13.7 p.433

```
//KArbelaez NEW 9L: fynction to append all members to div
function showMembersGhost() {
    var membersPics =
        ["Ghoul.jpg", "GhoulEarth.jpg", "GhoulWater.jpg", "Nihil.jpg", "tobias.jpg"];
    for (var i = 0; i < membersPics.length; i++) {
        //document.getElementById("membersGhost").innerHTML = ("<img src = \"pictures/membersGhost/" + membersPics[i] + ".jpg\"+ \"alt=memberPic\" /> <br/>");
        addElementsGhost("pictures/membersGhost/"+membersPics[i]);
    }
}
```

CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25




```
//KArbelaez NEW 16L: one function to display random quote and image
function randomQuote() {
    var pictures =
        ["drums", "eguitar", "guitar", "harp", "piano", "saxophone", "trumpet"];

    // KArbelaez 4/24/20 MOD 5L: Changed the quotes that will be randomly displayed
    var quotes = ["If music be the food of love, play on.<br>" +
        "~ William Shakespeare.",
    "Life seems to go on without effort when I am filled with music.<br>" +
    "~ George Eliot.",
    "Music gives a soul to the universe, wings to the mind, flight to the imagination, and life to everything.<br>" +
        "~ Plato."];

    document.getElementById("quotes").innerHTML = ("<img src = \"pictures/"+pictures[Math.floor(Math.random() * 7)] +".jpg\"+ \"alt=randPic\" /> <br/>");

    // write the random quote to the page
    document.getElementById("quotes").innerHTML += quotes[Math.floor(Math.random() * 3)];
    //document.write(quotes[Math.floor(Math.random() * 3)]);
}
```

```
    <script type="text/JavaScript" src="javascript.js"></script>
</head>
    <body onload="randomQuote(); timeCounter();">
        <div id="wrapper">
            <header>
                MinorChords Music | Our Blog
            </header>
```

```
//KArbelaez 5/13/20 NEW 6L: fucntion to count time spent on page
var seconds = 0;
function timeCounter() {
    seconds++;
    var el = document.getElementById("secondsCounter");
    el.innerHTML = "You have been here for " + seconds + " seconds.";
}
setInterval(timeCounter, 1000);
```

blog

10/SEQ

Different Banner Images or Photos generate sequentially on your home page

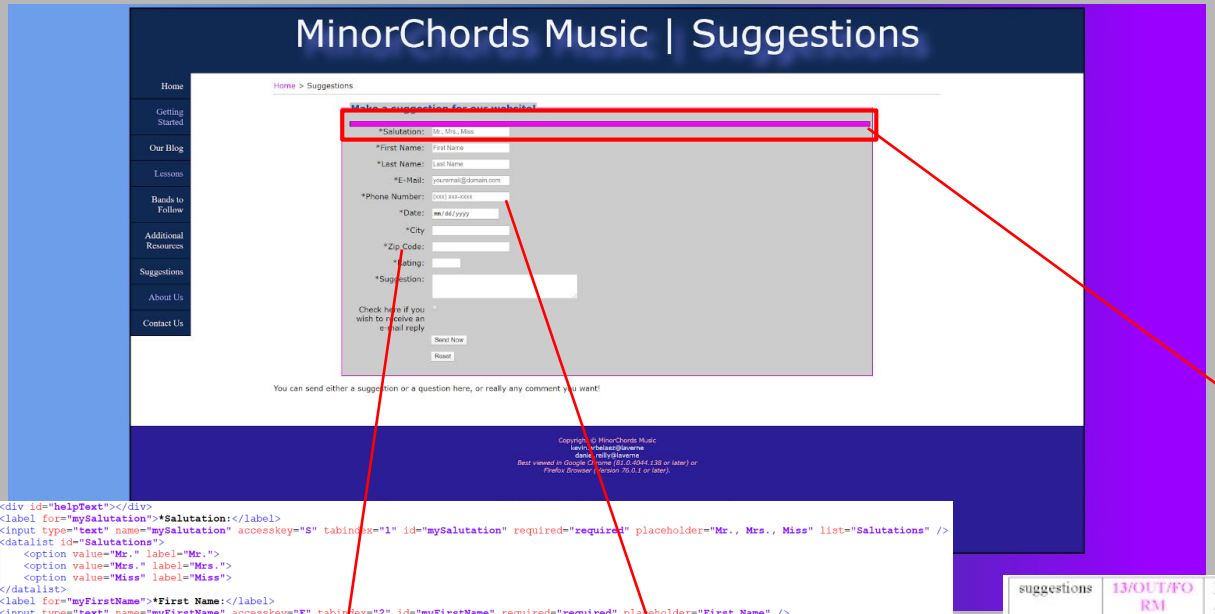
1. **Generate sequentially images** (change the time to 4 – 5 sec)

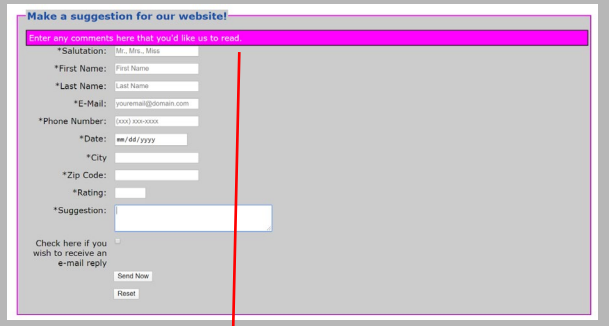
http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/

=>

12_S19_L21-2_Run_images_with_delay.zip

CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25





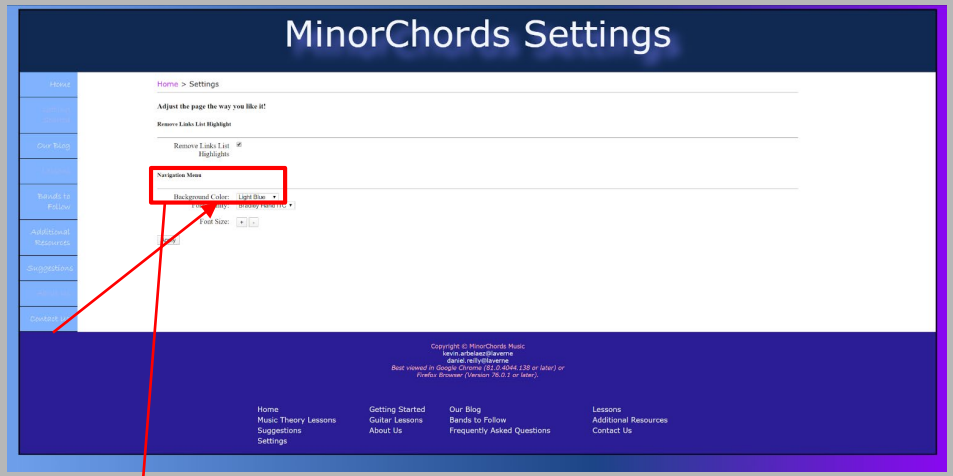

```
<form class="suggestionsForm">
  <fieldset>
    <legend>Make a suggestion for our website!</legend>
    <div id="helpText"></div>
    <label for="mySalutation">*Salutation:</label>
    <input type="text" name="mySalutation" accesskey="S"
    <datalist id="Salutations">
```

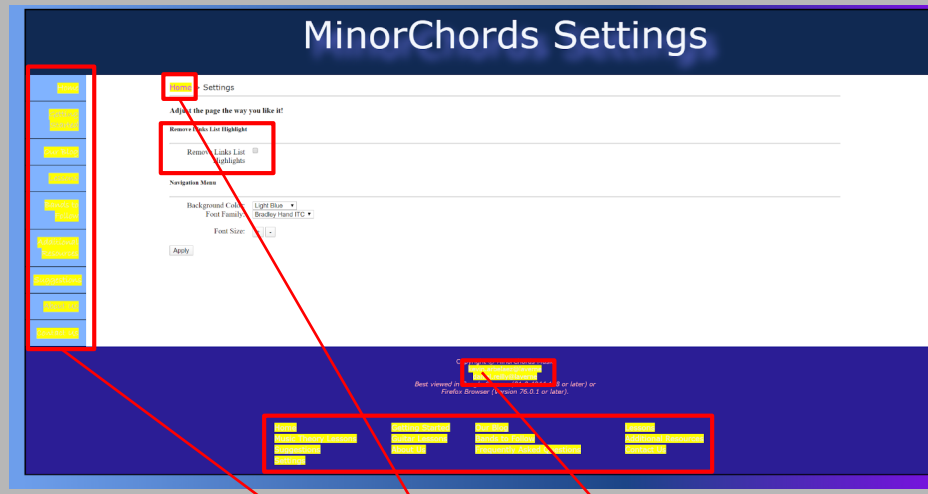
```
<div id="helpText"></div>
<label for="mySalutation">*Salutation:</label>
<input type="text" name="mySalutation" accesskey="S" tabindex="1" id="mySalutation" required="required" placeholder="Mr., Mrs., Miss" list="Salutations" />
<datalist id="Salutations">
    <option value="Mr." label="Mr.">
    <option value="Mrs." label="Mrs.">
    <option value="Miss" label="Miss">
</datalist>
<label for="myFirstName">*First Name:</label>
<input type="text" name="myFirstName" accesskey="F" tabindex="2" id="myFirstName" required="required" placeholder="First Name" />
<label for="myLastName">*Last Name:</label>
<input type="text" name="myLastName" accesskey="L" tabindex="3" id="myLastName" required="required" placeholder="Last Name" />
<label for="myEmail">*E-Mail:</label>
<input type="email" name="myEmail" accesskey="E" tabindex="4" id="myEmail" required="required" placeholder="youremail@domain.com" />
<label for="myPhone">*Phone Number:</label>
<input type="tel" name="myPhone" accesskey="P" tabindex="5" id="myPhone" required="required" placeholder="(xxx) xxx-xxxx" />
<label for="myDate">*Date:</label>
<input type="date" name="myDate" accesskey="A" tabindex="6" id="myDate" required="required" />
<label for="myCity">*City</label>
<input type="text" name="myCity" accesskey="Y" tabindex="7" id="myCity" required="required" />
<label for="myZip">*Zip Code:</label>
<input type="text" name="myZip" accesskey="Z" tabindex="8" id="myZip" required="required" />
<label for="myRating">*Rating:</label>
<input type="number" name="myRating" accesskey="R" tabindex="9" id="myRating" required="required" min="1" max="10" />
<label for="myComments">*Suggestion:</label>
<textarea name="myComments" accesskey="C" tabindex="0" id="myComments" required="required" rows="3" cols="40"></textarea>
<label for="myReply">Check here if you wish to receive an e-mail reply</label>
<input type="checkbox" name="myReply" accesskey="R" id="myReply" /> <br> <br>
<input id="mySubmit" type="submit" value="Send Now" accesskey="D">
<input id="myReset" type="reset" value="Reset" accesskey="T">
```

suggestions	13/OUT/FORM	Produce an **output** in next to each field in your **form**	⇨ 13_My_templ_ed5_corrects_fig13_10_dyn_help_on_right_side+submit_reset_work+feedback_FR_server+++.zip at http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/.
suggestions	14/FIELDS	**Contact webpage:** **Form processing** add 2 fields: zip and tel. # and replace name with First Name: and Last Name	See http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/ . ⇨ 13_My_templ_ed5_corrects_fig13_10_dyn_help_on_right_side+submit_reset_work+feedback_FR_server+++.zip

CheckList Table 4

1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25





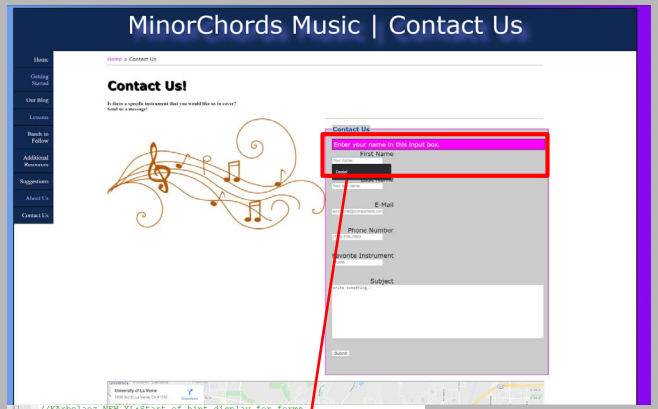

```
<main>
    <span class="breadcrumb"><a href="index.html">Home</a> &gt; Settings</span> <br> <hr>
    <h4>Adjust the page the way you like it!</h4>
    <h5>Remove Links List Highlight</h5><hr />
    <label for="removeHighlight">Remove Links List Highlights</label>
    <input type="checkbox" id="removeHighlight" type="checkbox"/><br />

    <h5>Navigation Menu</h5><hr />
    <label for="bgColor">Background Color:</label>
    <select id="bgColor">
        <option value="#FFFF00">Yellow</option>
        <option value="#FF00FF">Magenta</option>
        <option value="#8aff66">Light Green</option>
        <option value="#80b3ff">Light Blue</option>
        <option value="#000000">Black</option>
    </select><br />
    <label for="fontFamily">Font Family:</label>
    <select id="fontFamily">
        <option value="Bradley Hand ITC">Bradley Hand ITC</option>
        <option value="Brush Script MT">Brush Script MT</option>
        <option value="Jokerman">Jokerman</option>
        <option value="Mongolian Baiti">Mongolian Baiti</option>
        <option value="Vladimir Script">Vladimir Script</option>
    </select><br /><br />
    <label for="textSize">Font Size:</label>
    <button type="button" class="fontSizeButton" onclick="increaseFontSize()">+</button>
    <button type="button"  onclick="decreaseFontSize()">-</button>

    <br /><br /><button type="button" onclick="update()">Apply</button>
</main>
<footer>
```

settings	17/BACKGR	to ask the user to enter the **color** of the **background**	**ch.12 p.412 Fig.12.15-16 or better** http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/ => 12_ex12_06_dynamically_change_background&fonts.zip

settings	21/COLLECTION	**Highlight** all the **links** in the **page** instead of displaying them in a box at the bottom.	**1. Links collection displayed** at the bottom of the page – **Fig. 12.12 – 12.14 and display all links on page in yellow =>** **12_2013_ex12_03_highlight_hyperlinks_in_yellow.zip at** http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/ and **Fig.12.14 p.411 - lab18** In Fig.12.14 use a background color to **highlight** all the links on the Web page instead of displaying them in a box at the bottom. **Tip:** : Replace the body of the loop by: **linkslist.item[i].setAttribute("style","background-color: yellow");**

```
function processLinks() {
    var linksList = document.links; // get the document's links
    var contents = "<ul>";

    // concatenate each link to contents
    for (var i = 0; i < linksList.length; ++i) {
        var currentLink = linksList[i];
        contents += "<li><a href='" + currentLink.href + "'>" +
            currentLink.innerHTML + "</li>";
        if (id("removeHighlight").checked) {
            currentLink.setAttribute("style", "background-color:none");
        }
        else {
            currentLink.setAttribute("style", "background-color:yellow");
        }

    } // end for

    contents += "</ul>";
    document.getElementById("links").innerHTML = contents;
} // end function processLinks

window.addEventListener("load", processLinks, false);
window.addEventListener("change", processLinks, false);
```

CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25

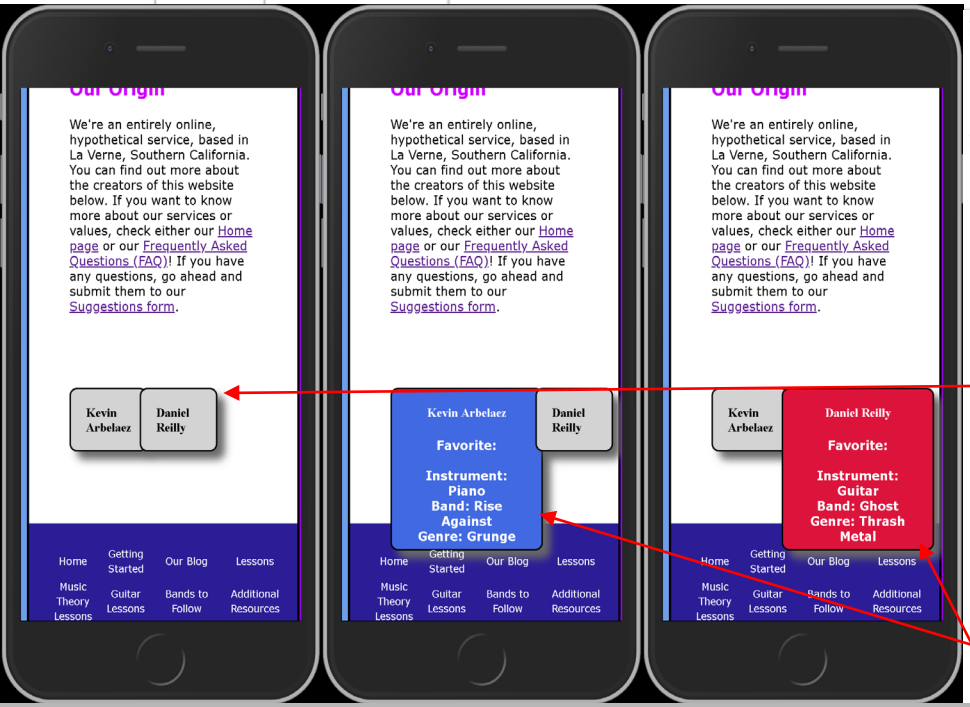



```
//KArbelaez NEW XL:Start of hint display for forms
var helpArray = ["Enter your name in this input box.",
    "Enter your last name in this input box.",
    "Enter your e-mail address in the format user@domain.",
    "Enter your phone number.",
    "Enter the date.",
    "Enter your city.",
    "Enter your zip code.",
    "Enter your rating.",
    "Enter any comments here that you'd like us to read.",
    "Check this box if you want to subscribe.",
    "Please fill out entire form",
    "Please enter your favorite instrument"];
var helpTextDiv;

// KArbela NEW 22L: initialize helpTextDiv and register event handlers
function init() {
    helpTextDiv = document.getElementById("helpText");

    // register listeners
    registerListeners(document.getElementById("myFirstName"), 0);
    registerListeners(document.getElementById("myLastName"), 1);
    registerListeners(document.getElementById("myEmail"), 2);
    registerListeners(document.getElementById("myPhone"), 3);
    registerListeners(document.getElementById("myDate"), 4);
    registerListeners(document.getElementById("myCity"), 5);
    registerListeners(document.getElementById("myZip"), 6);
    registerListeners(document.getElementById("myRating"), 7);
    registerListeners(document.getElementById("myComments"), 8);
    registerListeners(document.getElementById("myReply"), 9);
    registerListeners(document.getElementById("favInstrument"), 10)
    registerListeners(document.getElementById("mySubmit"), 11);
    registerListeners(document.getElementById("myReset"), 12);
;

    var myForm = document.getElementById("suggestionsForm");
    myForm.addEventListener("submit",
        function () {
            return confirm("Are you sure you want to submit?");
        }, // end anonymous function
        false);
    myForm.addEventListener("reset",
        function () {
            return confirm("Are you sure you want to reset?");
        }, // end anonymous function
        false);
} // end function init
```

contact	20/VALID	**Forms validation** function	**Fig. 13.8 p.434 and** http://classes.jgspectrum.com/classes/319_S19/Assignment.doc/ => **11_combine asking for name-quiz-quotes.zip** (run in Internet Explorer)

CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25

aboutUs	22/RUN	Animation	Create animated effect: ch12, Fig. 12.18 p.417 line 36

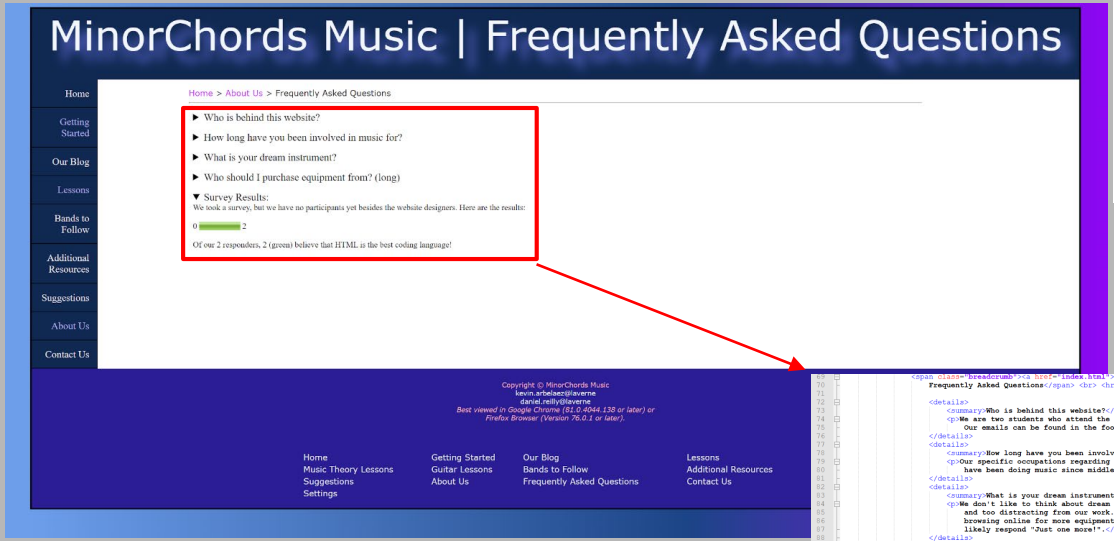
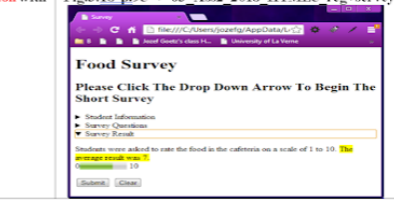
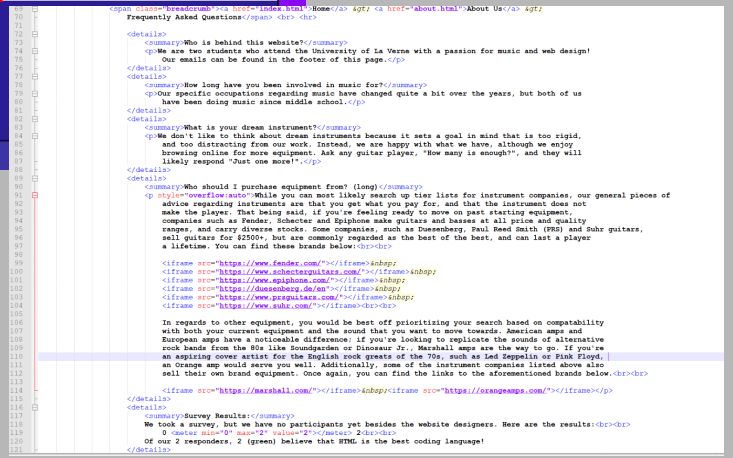



```
/*KArbelaez NEW 10L: class to define the inital size of flexbox*/
.flexbox {
        width: 100px;
        height: 100px;
        display: -webkit-box;
        display: box;
        -webkit-box-orient: horizontal;
        box-orient: horizontal;
        padding-top: 5em;
        padding-bottom: 5em;
}
        /*KArbelaez NEW 10L: class to define how long transiotion is and its appearnace*/
        .flexbox > div {
                -webkit-transition: 1s ease-out;
                transition: 1s ease-out;
                -webkit-border-radius: 10px;
                border-radius: 10px;
                border: 2px solid black;
                width: 60%;
                margin: 10px -10px 10px 0px;
                padding: 20px 20px 20px 20px;
                box-shadow: 10px 10px 10px dimgrey;
        }
                /*KArbelaez NEW 3L: class to hide the paragraph in flexbox when no hovered*/
        .flexbox > div p {
                display:none;
        }
                /*KArbelaez NEW 6L: class to define the color of each div before being hovered */
                .flexbox > div:nth-child(1) {
                        background-color: lightgrey;
                }
                .flexbox > div:nth-child(2) {
                        background-color: lightgrey;
                }
 /*KArbelaez NEW 10L: class to define how wide its going to stretch*/
 .flexbox > div:hover {
         color: white;
         font-weight: bold;
         height: 10em;
         width: 40em;
         text-align: center;
 }
 /*KArbelaez NEW 3L: class to display the paragraph in flexbox when hovered*/
 .flexbox > div:hover p{
         display:block;
 }
 .flexbox > div:nth-child(1):hover {
         background-color: royalblue;
 }
 .flexbox > div:nth-child(2):hover {
         background-color: crimson;
 }
```

```
<div class="flexbox">
    <div>
        <h4 style="margin-top:0" id="kevin">Kevin Arbelaez<br /></h4>
        <p>
            Favorite:<br /><br />
            Instrument: Piano<br />
            Band: Rise Against<br />
            Genre: Grunge
        </p>
    </div>
    <div>
        <!--<img src="EPT.png" alt="Error prevention tip icon">-->
        <h4 style="margin-top:0" id="daniel">Daniel Reilly<br /></h4>
        <p>
            Favorite:<br><br>
            Instrument: Guitar<br>
            Band: Ghost<br>
            Genre: Thrash Metal
        </p>
    </div>
</div>
```

```
.flexbox > div:hover {
        color: white;
        font-weight: bold;
        height: 10em;
        width: 15em;
}
```

CheckList Table 4 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25



FAQ	23/DETAILS	Detail information with HTML5	Fig.3.18_p.95=> 03_Ass2_2018_HTML5_reg+surveys++++.html