CWEB 600 – Final Exam

Instructions:

The dropbox contains multiple items. Make sure you have all starter files provided:

The final.zip should unzip to a folder called final containing the following:

Folder Q1 – empty: you will save files for this question here
Folder Q2 with 9 files,
Folder Q3 with Q3.css, Q3.html,
Folder Q4 with Q4.css, Q4.html

All work completed is to be done here. Once complete, zip the final folder back up and submit it. Ensure you submit the **<u>correct complete</u>** zip file and not the original one you downloaded.

For all questions, you are required to use provided starter files unless instructed otherwise and may use your text, what we covered in class and/or Brightspace. Using any other resources, techniques, etc will result in zero being awarded for any affected question and, depending on circumstances, could also result in formal academic penalty.
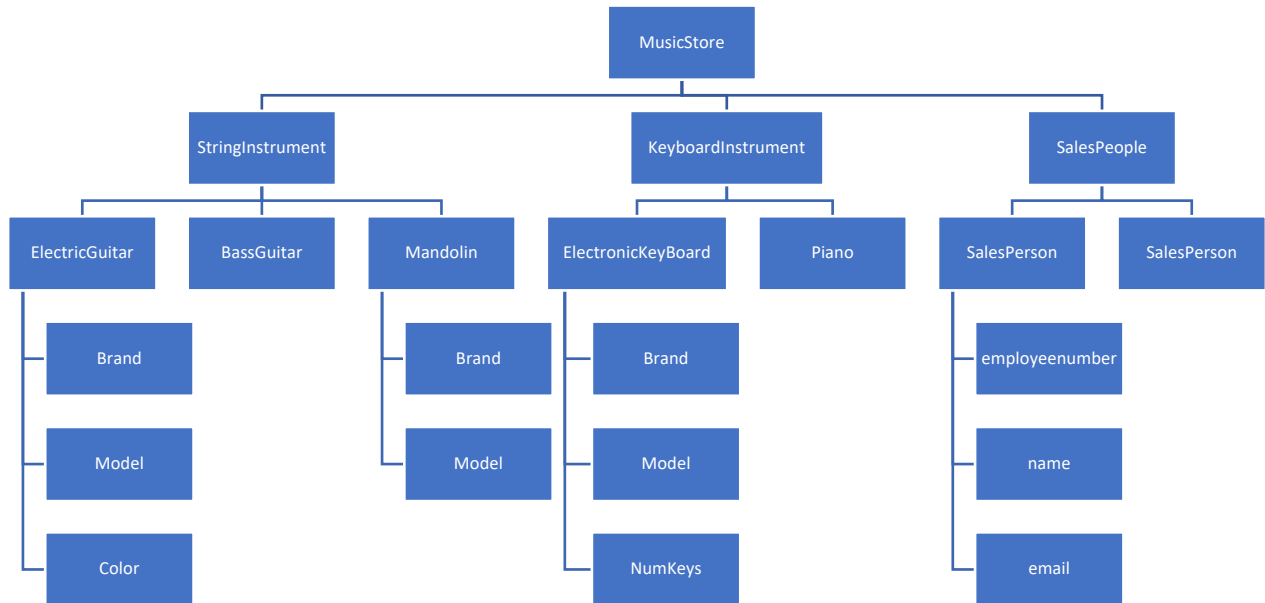
If you're not sure, ask.

Good Luck !!

Question 1   10 Marks

You are given the following model of data for a musical instrument store.

Notes: BassGuitar has the same four elements as ElectricGuitar and Piano has the same four elements as ElectronicKeyboard. StringInstrument may have any number of ElectricGuitar, BassGuitar or Mandolin elements within it or none at all. The same applies to KeyboardInstrument. The additional SalesPerson element is simply to show that SalesPeople is a list. There has to be at least one SalesPerson. You can assume that any data elements will be stored as pcdata. Set up your dtd to be in a separate linked file.

You are to create an XML file and accompanying DTD file to define/store the following data:

Guitars:

Gibson	Les Paul	Red	2020
Fender	Stratocaster	Natural	2020

BassGuitar:

Fender	Precision Bass	Black	2019
Ibanez	Premium BTB 6-String	Sunset Fade	2020

ElectronicKeyboard:

Roland	FP-10	2020	88

SalesPeople:

002	Guarav	guarav@music.com
003	Jose	jose@music.com

Save your files as musicstore.xml and musicstore.dtd to the Q1 folder provided within 'final'.

Question 2   **20 Marks**

You are provided with a partially complete website. You are required to do the following:

1. Complete the styling of the site by adding css style rules to the icc_exam_styles.css file. There is formatting to do to start with, including
    a. Set up the two main pieces of navigation: the buttons for the article archive and the horizontal menubar'.
        i. Add a horizontal menu bar. (nav tags are included in the html file) Use the same blue color used for the footer. Don't forget to provide a proper hover effect to the menu options. You can use (12,85,200) to get a light blue for highlighting. Refer to the images below for the menu item text.
        ii. Style the article archive navigation as shown in the screen shot below. You want to use the same color scheme there with the above dark blue color, including the hover effect, and adjusting the font settings. You may also need to consider line height and margin settings for the 'buttons'.
    b. Configure flexbox layout for the web page. There are two levels of this:
        i. First the body is a flex box containing its first level children. Get the two news items (content section) to take up the rightmost portion of the screen with the above article archive along its left. The content should be about 80 of the flex space with a minimum of 350px. The side navigation can be 130px. Hint: grow and shrink for these two should be simply opposite.
        ii. The second level is the news item containing articles and asides. Rearrange these subparts of the news items to display side by side within their news item boxes. Note that for one of the current news items, there is no aside but that should not affect how you set up your css. The article part should be about 2/3 and 350px with the aside 250px.
        iii. The flex direction for these can just be a regular wrapping direction
2. Style the site for mobile viewing.
    a. Set up two media queries to set styles for when the site is viewed on mobile vs desktop or tablet. Use 480px as the width limit for small mobile devices. Everything larger can be the other query.
        i. See the step b. for what you need to do for the mobile version
        ii. For the larger version, the menubar items will need an automatic height setting. You will also need to move your style rule from above that sets its floating and block styling down to this section so it doesn't affect the mobile version.
    b. Again use flexbox layout to rearrange the parts of the page to display as in the screen shot on the next page. Some important design decisions have been made here in order to provide a cleaner mobile viewing experience:
        i. We've decided not to display the aside section
        ii. The main menubar has been reduced to a navicon
        iii. The left side articles archive has been moved to the end and we're only displaying the most recent four (the first four elements).
        iv. The articles are lined up vertically so their flex direction is also vertical

c. Be sure to set up a navicon for the menu when in mobile view only. You don't have to make the mobile menu fully functional. It just has to be able to expand out when you interact with it.

3. If you see something in the images below that you don't think is covered in the instructions, ask. Its up to you to make the site you're given look like the images below.

Your result should equal the following:

Question 3   20 Marks

Construct the following HTML table.

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM	CWEB600	CWEB600	CWEB603	CWEB600	Advisory
9:00 AM	CWEB600		Lab Times		Advisory
10:00 AM	COSC600		Lab Times		Advisory
11:00 AM	COSC600				Advisory
12:00 PM	Lunch	Lunch	Lunch	Lunch	Lunch
1:00 PM	CWEB603		Research	COSC600	Advisory
2:00 PM	CWEB603		Research	COSC600	Advisory
3:00 PM	COSC601		Research	COSC601	Advisory
4:00 PM	COSC601		Research	COSC601	Advisory

Some of the style information:

1. arial and verdana fonts are used.
2. The colors used are as follows:

   - 225,239,218
   - 217,225,242
   - 180,198,231
   - 100,150,100

3. The table is 700 pixels wide.
4. You should be able to tell that all columns except the time column are the same width and all time rows are the same height. The time column is 10% of the width of the table. The time rows are 40px high.
5. The border around the outside is two lines all the way around. All other borders are the same weight. Don't forget the shadow around the edges!
6. You are provided with starter code for a table. You can add or remove whatever parts you need to.

   Marks:
   a. Table construction – Q3.html   10 marks
   b. Table styling – Q3.css   10 marks

Question 4   **20 Marks**

Construct the following HTML form:

1. Constructing the form.
   a. You are expected to create the form using what we covered in class including using flexbox layouts for the rows of controls.
   b. For reference, the above form is 500px wide
   c. The purple color in this case is 90, 50, 100
   d. Any populated values above can be assumed to be default values
   e. First name, last name and email fields should be required
   f. You should implement a simple highlight effect which highlights a field to light blue when the user enters it. Checkbox and radio controls can be excluded from this.
   g. The only settings here that you can't infer from the screen cap above is the precise width of fields. Make them as close to the above as possible and ensure that you have at least accounted for them. You may find the justify-content setting helpful.
   h. Following are some values to use for lists:
        i. Prov: BC AB MB ON SK QC NL
        ii. Make: Ford Chevrolet   Toyota Honda
        iii. Model: Taurus   Malibu   Camry   Accord
        iv. Body Type: Sedan   Coupe
        v. Color: Black White Red
2. Marks:
      a. Form construction – Q4.html   15 marks
      b. Form styling – Q4.css   5 marks