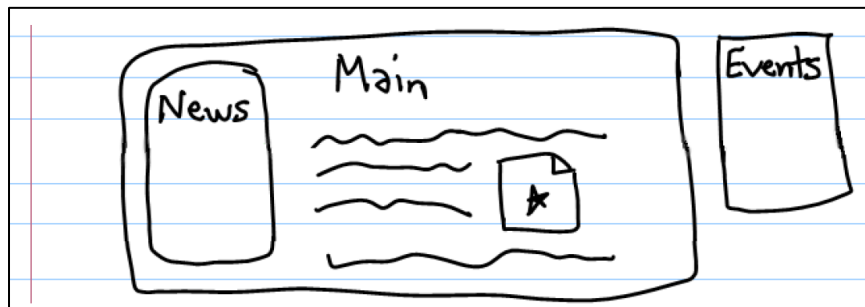**EECS 1012**

ULTIMATE FRISBEE CASE STUDY

This case study starts with a simple HTML document that has no CSS. The case study iterative modifies the HTML and CSS to improve the layout.

This is an example is from an old textbook used in prior years of EECS1012.   It is an interesting example to show step-by-step how to modify a webpage using CSS. Our lab#2 will be similar to this example.

The corresponding HTML code and CSS is also provided in this zip file.

TO BEGIN:

When start a webpage, we generally have an idea of what the layout should look like. In this case, we want something roughly like this.

There is an example that shows the "desired" output based on the sketch above.

Figure 4.1 Ultimate Frisbee web page, desired appearance

VERSION 0: **ultimate_v0.html**

Here is a simple HTML page, no CSS associated. The HTML code is on the following page.

News

- Ultimate frisbee declared an Olympic sport
- Study find frisbee playing makes you smarter
- Link between frisbee skills and ability to code HTML
- Poutine consumption improves frisbee performance

Marty's Ultimate Page

Welcome to the ultimate frisbee page! Here we have news, links, and other information related tothe most underrated sport in North America.

2017 College and HS Westerns

 Take a look at how bid allocations broke out for each region as teams work to qualify for the 2017 National Championships.

2017 Canada Open Club

 Follow along as 126 adult and youth teams converge on Winnipeg, Manitoba at the first-ever Canada Open Club Championships.

Events

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

HTML - ultimate_v0.html (STARTING POINT)

```html
<!DOCTYPE html>
<html>
 <head>
   <title>Ultimate Frisbee</title>
   <meta charset="utf-8">
 </head>
 <body>

   <h1>News</h1>
    <ul>
       <li>Ultimate frisbee declared an Olympic sport</li>
       <li>Study find frisbee playing makes you smarter </li>
       <li>Link between frisbee skills and ability to code HTML </li>
       <li>Poutine consumption improves frisbee performance </li>
    </ul>

 <h1>Marty's Ultimate Page</h1>
   <p>Welcome to the ultimate frisbee page! Here we have news, links, and other information
related tothe most underrated sport in North America.</p>

 <h2>2017 College and HS Westerns</h2>
   <p><img src="https://tinyurl.com/frisbee99" alt="ultimate" height="150">
    Take a look at how bid allocations broke out for each region as teams work to qualify for
the 2017 National Championships. </p>
 <h2>2017 Canada Open Club</h2>
   <p><img src="https://tinyurl.com/frisbee98" alt="ultimate2" height="150">
    Follow along as 126 adult and youth teams converge on Winnipeg, Manitoba at the first-ever
Canada Open Club Championships.

 <h1>Events</h1>
   <ul>
    <li><a href="">January</a></li>
    <li><a href="">February</a></li>
    <li><a href="">March</a></li>
    <li><a href="">April</a></li>
    <li><a href="">May</a></li>
    <li><a href="">June</a></li>
    <li><a href="">July</a></li>
    <li><a href="">August</a></li>
    <li><a href="">September</a></li>
    <li><a href="">October</a></li>
    <li><a href="">November</a></li>
    <li><a href="">December</a></li>
   </ul>

 </body>
</html>
```

VERSION 1 – Modifications over version 0?
We have modified our initial HTML code to add in *divisions* and *spans*.

1) We have changed all the fonts by modifying body.

2) We have created div with #ids about News (News area), Announcements (Marty's Ultimate Page are), Calendar (Events).

3) We have created spans about the headers in the Announcements and use class "announcement". (Why class and not ID? Because there are more than one item with this class).

4) They create a "firstword" class that is used in spans about the first word in the announcements.

VERSION 1 HTML - ultimate_v1.html

```html
<!DOCTYPE html>
<html>
 <head>
    <title>Ultimate Frisbee</title>
    <meta charset="utf-8">
    <link href="ultimate_v1.css" rel="stylesheet">
 </head>
 <body>

   <div id="news"> <!-- news div -->
    <h1>News</h1>
     <ul>
        <li>Ultimate frisbee declared an Olympic sport</li>
        <li>Study find frisbee playing makes you smarter </li>
        <li>Link between frisbee skills and ability to code HTML </li>
        <li>Poutine consumption improves frisbee performance </li>
     </ul>
   </div> <!-- end news div -->

  <div id="announcements"> <!-- announcements div -->
  <h1>Marty's Ultimate Page</h1>
   <p>Welcome to the ultimate frisbee page! Here we have news, links, and other information
related tothe most underrated sport in North America.</p>

  <h2><span class="announcement"> 2017 College and HS Westerns</span> </h2>
   <p><img src="https://tinyurl.com/frisbee99" alt="ultimate" height="150">
      <span class="firstword">Take</span> a look at how bid allocations broke out for each region
as teams work to qualify for the 2017 National Championships. </p>
  <h2><span class="announcement">2017 Canada Open Club</span> </h2>
   <p><img src="https://tinyurl.com/frisbee98" alt="ultimate2" height="150">
      <span class="firstword">Follow</span> along as 126 adult and youth teams converge on
Winnipeg, Manitoba at the first-ever Canada Open Club Championships.
   </div> <!-- end announcements div -->

   <div id="calendar"> <!-- Calendar div -->
    <h1>Events</h1>
     <ul>
        <li><a href="">January</a></li>
        <li><a href="">February</a></li>
        <li><a href="">March</a></li>
        <li><a href="">April</a></li>
        <li><a href="">May</a></li>
        <li><a href="">June</a></li>
        <li><a href="">July</a></li>
        <li><a href="">August</a></li>
        <li><a href="">September</a></li>
        <li><a href="">October</a></li>
        <li><a href="">November</a></li>
        <li><a href="">December</a></li>
     </ul>
   </div> <!-- end calendar -->
 </body>
</htmL>
```

NOTE: The textbook does not show the inline `<spa > </span>` code, however, they define it in the CSS.

VERSION 1 — CSS ultimate_v1.css

```css
body {
  font: 12pt "Tahoma", "Arial", sans-serif;
}

.announcement { /* text inside h2 headings */
  background-color: #0000cc;
  color: white;
}

#announcements {  /* div about the announcements */
  background-color: #ddffdd;
  border: 2px solid black;
}

.firstword { /* first word of paragraph in announcements */
  font-size: 20pt;
}

h1 {
  margin: 0em 0em 0.5em 0em;
  text-align: center;
}
```

VERSION 2 - Modifications over Version 1

1) We have added modified the #news section (see CSS), including the <ul> and <li> elements.

2) We have modified the <h2> elements in the #announcement section.

3) We modified the #calendar section to have background and border. We changed the line spacing in the calendar, something discussed in the book chapter (but not in my notes). See: https://www.w3schools.com/cssref/pr_dim_line-height.asp

VERSION 2 HTML - ultimate_2.html (only the link to style sheet changed!)

```html
<!DOCTYPE html>
<html>
 <head>
   <title>Ultimate Frisbee</title>
   <meta charset="utf-8">
   <link href="ultimate_v2.css" rel="stylesheet">
 </head>
 <body>
   <div id="news"> <!-- news div -->
   <h1>News</h1>
    <ul>
      <li>Ultimate frisbee declared an Olympic sport</li>
      <li>Study find frisbee playing makes you smarter </li>
      <li>Link between frisbee skills and ability to code HTML </li>
      <li>Poutine consumption improves frisbee performance </li>
    </ul>
   </div> <!-- end news div -->

 <div id="announcements"> <!-- aanouncement div -->
 <h1>Marty's Ultimate Page</h1>
  <p>Welcome to the ultimate frisbee page! Here we have news, links, and other
information related tothe most underrated sport in North America.</p>

  <h2><span class="announcement"> 2017 College and HS Westerns</span> </h2>
   <p><img src="https://tinyurl.com/frisbee99" alt="ultimate" height="150">
     <span class="firstword">Take</span> a look at how bid allocations broke out for
each region as teams work to qualify for the 2017 National Championships. </p>
  <h2><span class="announcement">2017 Canada Open Club</span></h2>
   <p><img src="https://tinyurl.com/frisbee98" alt="ultimate2" height="150">
     <span class="firstword">Follow</span> along as 126 adult and youth teams converge
on Winnipeg, Manitoba at the first-ever Canada Open Club Championships.
   </div> <!-- end announcements div -->o

  <div id="calendar"> <!-- Calendar div -->
   <h1>Events</h1>
    <ul>
      <li><a href="">January</a></li>
      <li><a href="">February</a></li>
      <li><a href="">March</a></li>
      <li><a href="">April</a></li>
      <li><a href="">May</a></li>
      <li><a href="">June</a></li>
      <li><a href="">July</a></li>
      <li><a href="">August</a></li>
      <li><a href="">September</a></li>
      <li><a href="">October</a></li>
      <li><a href="">November</a></li>
      <li><a href="">December</a></li>
    </ul>
  </div> <!-- end calendar -->

 </body>
</html>
```

VERSION 2 CSS: ultimate_v2.css

```css
body {
font: 12pt "Tahoma", "Arial", sans-serif;
}

.announcement {
background-color: #0000cc;
color: white;
}

#announcements {
background-color: #ddffdd;
border: 2px solid black;
}

#announcements img {    /* ADDED IN V2: All images in announcements */
float: right;          /* float right, with margin */
margin-left: 2em;
}

/* ADDED IN V2: h2 in announcements bottom border, they clear right floats */
#announcements h2 {
border-bottom: 2px solid black;
clear: right;
}

#calendar {   /* ADDED IN V2: calendar div now has some formatting */
background-color: #00eeee;
border: 2px solid black;
line-height: 1.5em; /* changes spacing vertical spacing between elements */
}

#news { font-size: smaller; }   /* ADDED IN V2: modify font for #news div */

#news > ul {   /* ADDED IN V2: modify ul only in #new */
list-style-type: none;
padding-left: 0em;
}

#news li {   /* ADDED IN V2: modify li only in #new */
background-color: #ffffcc;
border: 3px solid #ffffc88;
margin-bottom: 1em;
padding: 1em;
}

.firstword {
  font-size: 20pt;
}

h1 {
margin: 0em 0em 0.5em 0em;
text-align: center;
}
```

VERSION 3: Changes over version 2?

1) Modified layout of #calendar div (made it fixed position – doesn't scroll)

2) Modified layout of #news div (floats right, scrolls)

VERSION 3 HTML - ultimate_3.html (only the link to style sheet changed!)

```html
<!DOCTYPE html>
<html>
 <head>
   <title>Ultimate Frisbee</title>
   <meta charset="utf-8">
   <link href="ultimate_v3.css" rel="stylesheet">
 </head>

 <body>
   <div id="news"> <!-- news div -->
   <h1>News</h1>
    <ul>
      <li>Ultimate frisbee declared an Olympic sport</li>
      <li>Study find frisbee playing makes you smarter </li>
      <li>Link between frisbee skills and ability to code HTML </li>
      <li>Poutine consumption improves frisbee performance </li>
    </ul>
   </div> <!-- end news div -->

 <div id="announcements"> <!-- announcement div -->
 <h1>Marty's Ultimate Page</h1>
  <p>Welcome to the ultimate frisbee page! Here we have news, links, and other
information related tothe most underrated sport in North America.</p>

 <h2><span class="announcement">2017 College and HS Westerns</span></h2>
  <p><img src="https://tinyurl.com/frisbee99" alt="ultimate" height="150">
    <span class="firstword">Take</span> a look at how bid allocations broke out for
each region as teams work to qualify for the 2017 National Championships. </p>
 <h2><span class="announcement">2017 Canada Open Club</span></h2>
  <p><img src="https://tinyurl.com/frisbee98" alt="ultimate2" height="150">
    <span class="firstword">Follow</span> along as 126 adult and youth teams converge
on Winnipeg, Manitoba at the first-ever Canada Open Club Championships.
  </div> <!-- end announcements div -->

   <div id="calendar"> <!-- Calendar div -->
    <h1>Events</h1>
     <ul>
       <li><a href="">January</a></li>
       <li><a href="">February</a></li>
       <li><a href="">March</a></li>
       <li><a href="">April</a></li>
       <li><a href="">May</a></li>
       <li><a href="">June</a></li>
       <li><a href="">July</a></li>
       <li><a href="">August</a></li>
       <li><a href="">September</a></li>
       <li><a href="">October</a></li>
       <li><a href="">November</a></li>
       <li><a href="">December</a></li>
     </ul>
   </div> <!-- end calendar -->
 </body>
</html>
```

VERSION 3: CSS - ultimate_v3.css

```css
body {
font: 12pt "Tahoma", "Arial", sans-serif;
}

.announcement { /* text inside h2 headings */
background-color: #0000cc;
color: white;
}

#announcements {
background-color: #ddffdd;
border: 2px solid black;
margin-right: 10em;   /* ADDED IN V3 */
}

#announcements img {
float: right;
margin-left: 2em;
}

#announcements h2 {
border-bottom: 2px solid black;
clear: right;
}

#calendar {
   background-color: #00eeee;
   border: 2px solid black;
   line-height: 1.5em;
   position: fixed; /* ADDED IN V3 */
   right: 1em; /* ADDED IN V3 */
   top: 1em;   /* ADDED IN V3 */
   width: 8em; /* ADDED IN V3 */
}

#news {
   font-size: smaller;
   float:left;    /* ADDED IN V3 */
   font-size: smaller;  /* ADDED IN V3 */
   margin-left: 1em;   /* ADDED IN V3 */
   width: 8em;   /* ADDED IN V3 */
 }

#news > ul {
list-style-type: none;
padding-left: 0em;
}

#news li {
background-color: #ffffcc;
border: 3px solid #ffffc88;
margin-bottom: 1em;
padding: 1em;
}

.firstword { /* first word of paragraph in announcements */
   font-size: 20pt;
}
```

VERSION 4 (FINAL): Modification over version 3

1) Wrapped #announcements and #news in #main section.

2) Change the #announcements to have no background or border.   Make #main havethe border and background that #announcements use to have

3) Modified the margin of #announcements to make space for the "News" section.

4) I added an overflow property to all paragraphs to handle the images.   Since the do not have a fixed "height" property, the will expand to accommodate the images.

VERSION 4 HTML - ultimate_4.html

```html
<!DOCTYPE html>
<html>
 <head>
   <title>Ultimate Frisbee</title>
   <meta charset="utf-8">
   <link href="ultimate_v4.css" rel="stylesheet">
 </head>
 <body>
   <div id="main"> <!-- main div -->
   <div id="news"> <!-- news div -->

   <h1>News</h1>
    <ul>
      <li>Ultimate frisbee declared an Olympic sport</li>
      <li>Study find frisbee playing makes you smarter </li>
      <li>Link between frisbee skills and ability to code HTML </li>
      <li>Poutine consumption improves frisbee performance </li>
    </ul>
   </div> <!-- end news div -->

   <div id="announcements"> <!-- announcements div -->
   <h1>Marty's Ultimate Page</h1>
    <p>Welcome to the ultimate frisbee page! Here we have news, links, and other information
related tothe most underrated sport in North America.</p>

   <h2><span class="announcement">2017 College and HS Westerns</span></h2>
    <p><img src="https://tinyurl.com/frisbee99" alt="ultimate" height="150">
      <span class="firstword">Take</span> a look at how bid allocations broke out for each
region as teams work to qualify for the 2017 National Championships. </p>
   <h2><span class="announcement">2017 Canada Open Club</span></h2>
    <p><img src="https://tinyurl.com/frisbee98" alt="ultimate2" height="150">
      <span class="firstword">Follow</span> along as 126 adult and youth teams converge on
Winnipeg, Manitoba at the first-ever Canada Open Club Championships.
    </div> <!-- end announcements div -->
   </div> <!-- end main div -->

  <div id="calendar"> <!-- Calendar div -->
   <h1>Events</h1>
    <ul>
      <li><a href="">January</a></li>
      <li><a href="">February</a></li>
      <li><a href="">March</a></li>
      <li><a href="">April</a></li>
      <li><a href="">May</a></li>
      <li><a href="">June</a></li>
      <li><a href="">July</a></li>
      <li><a href="">August</a></li>
      <li><a href="">September</a></li>
       <li><a href="">October</a></li>
      <li><a href="">November</a></li>
      <li><a href="">December</a></li>
    </ul>
  </div> <!-- end calendar -->

 </body>
</html>
```

VERSION 4 CSS - ultimate_4.css

```css
body {
font: 12pt "Tahoma", "Arial", sans-serif;
}

.announcement { /* text inside h2 headings */
background-color: #0000cc;
color: white;
}

/* V4: Background color and border moved to #main */
#announcements {
  margin-left: 8em;
}

#announcements img {
float: right;
margin-left: 2em;
}

#announcements h2 {
border-bottom: 2px solid black;
clear: right;
}

#calendar {
  background-color: #00eeee;
  border: 2px solid black;
  line-height: 1.5em;
  position: fixed;
  right: 1em;
  top: 1em;
  width: 8em;
}

#main {   /* ADDED IN V4 */
  background-color: #ddffdd;
  border: 2px solid black;
  margin-right: 10em;
}

#news {
  float:left;
  font-size: smaller;
  margin-left: 1em;
  width: 8em;
 }

#news > ul {
  list-style-type: none;
  padding-left: 0em;
}

#news li {
  background-color: #ffffcc;
  border: 3px solid #ffffc88;
  margin-bottom: 1em;
  padding: 1em;
}
```

```css
.firstword { /* I modified this too*/
   font-size: 1em;
}


h1 {
   margin: 0em 0em 0.5em 0em;
   text-align: center;
}


/* Added by me - since I want to clear the image on the final paragraph.  Remove this to see what happens. */
#main p {    overflow: auto;
}
```