## Goals

- Practice common HTML tags
- Build nested lists
- Build a table

In this lab you will build a web page using the provided textual content. You will add the necessary markup so that your page looks like the provided screenshots.

## Step 1. Setup

Go to our course web site, click the Resources link (on the right). Under the Code subheading you'll find a link to the blank HTML template. Right-click that link, choose "save link as" (or "save target as") and save the file to your computer. Give this file the name lab1.html (you may save it with its original name - template.html - and then rename it).

**Important:** Make sure your filename contains no spaces and is all lowercase.

## Step 2. Add your content

Open your lab1.html file in a text editor (Notepad++ or any other text editor). You will see that your file already contains the minimum necessary HTML. It also contains a "link" to a file called style.css – that's a stylesheet reference we will discuss a week from now, so you may ignore it for this lab.

Download the file lab1.zip and unzip it (right click > extract all). You'll see the following files:

1. screenshot1.png
2. screenshot2.png
3. content.txt

The first two files are screenshots of the top and bottom part of the webpage you need to construct. Use them for reference.

The third file is a plain text file that contains the content for your web page.

Copy and paste this content into your lab1.html file between the opening and closing body tags:

```
1   <!DOCTYPE html>
2   <html lang="en">
3       <head>
4           <title>HTML template</title>
5           <meta charset="utf-8">
6           <link rel="stylesheet" href="style.css">
7       </head>
8       <body>
9
10  ------ PASTE YOUR CONTENT HERE -------
11
12      </body>
13  </html>
14
```

Save your file, then open your web page in a browser (just double-click the file icon and your default browser will open it; if you are on Windows, I recommend Chrome or Firefox).

This is what your web page will look like:

Interactive Digital Studies at UNI The IDS Foundation First our students take foundation classes in the "3 C's": Communication, Context, Culture. Communication Interactive Digital Communication (COMM 2555) gives you a solid foundation in creative digital production skills and creative problem solving that you'll need for all your other .ids classes. This is where you will learn Photoshop to manipulate digital images, Dreamweaver and WordPress to master the design and coding of websites, and After Effects to get a taste of motion graphics and animation. But it's not just a skills class - You'll also learn about visual design, writing, and graphic design history to give you powerful visual communication strategies to amplify your ability to articulate and communicate big ideas. Content Mass Communication and Society (COMM COR 1010) acknowledges that every media industry has been drastically impacted by the Internet and the digital turn. It combines discussions about the media, history and culture, and focuses on how both media industries and audiences create our shared entertainment and information culture. The core ideas of this course are that a diverse media is essential to democracy, culture is an ongoing and cyclical process, and media convergence is the future of mass communication. Culture Digital Culture and Communication (COMM 4544/5544) gets you to begin thinking seriously about how the Web connects us, and what kinds of digital innovations are shaping our future. You will learn about the Internet as a positive, social networked sphere with a thriving creative commons, but you will also begin to see the dark side of our hyper-connected world: a digital culture plagued with questions about copyright, government and corporate controls, and issues about privacy and unethical digital citizenship. You will also begin to consider how a life increasingly connected to digital tools is affecting our daily lives. The IDS Bundles What are Bundles? Each IDS "bundle" is made up of five courses in eight different areas of emphasis. Each bundle is sponsored by a different UNI department. There are also global bundles offered through partner institutions. Sample Bundles Digital advertising ECON 1031: Introduction to Economics MKTG 2110: Principles of Marketing MKTG 3143: Advertising and Promotion MKTG 3146: Digital Advertising MKTG 3153: Personal Selling Digital Computation CS1510: Introduction to Computing CS1520: Data Structures CS 2530: Intermediate Computing CS 3110: Web Application Development: Build client-side web applications with JavaScript Build server-side web applications with PHP and MySQL Integrate client-side and server-side code Learn to use frameworks React Angular CS 3120/5120: User Interface Design Digital Writing ENGLISH 4025/5025: Theory and Practice of Writing ENGLISH 4785/5785: Applied Writing: Projects, Grants & Careers ENGLISH 4040/5040: Digital Writng: Theory and Practice Calendar January 2017

## Step 3. Add basic markup
Let's add some markup!

Start with adding the appropriate headings to your content (h1, h2, h3). Your content includes indentation to help you choose what headings to use:

```
Interactive Digital Studies at UNI
      The IDS Foundation
            Communication
            Content
            Culture
      The IDS Bundles
            What are Bundles?
            Sample Bundles
      Calendar
```

Remember to add matching closing tags. Here is an example of what your code should look like:

```
<h1>Interactive Digital Studies at UNI</h1>

    <h2>The IDS Foundation</h2>

        First our students take foundation classe:

        <h3>Communication</h3>

            Interactive Digital Communication (CO
            learn Photoshop to manipulate digital
```

Save your file, switch to the browser and refresh. This is what your page will look like:

## Interactive Digital Studies at UNI

### The IDS Foundation

First our students take foundation classes in the "3 C's": Communication, Context, Culture.

#### Communication

Interactive Digital Communication (COMM 2555) gives you a solid foundation in creative digital production skills and creative problem solving that you'll need for all your other .ids classes. This is where you will learn Photoshop to manipulate digital images, Dreamweaver and WordPress to master the design and coding of websites, and After Effects to get a taste of motion graphics and animation. But it's not just a skills class - You'll also learn about visual design, writing, and graphic design history to give you powerful visual communication strategies to amplify your ability to articulate and communicate big ideas.

#### Content

Mass Communication and Society (COMM COR 1010) acknowledges that every media industry has been drastically impacted by the Internet and the digital turn. It combines discussions about the media, history and culture, and focuses on how both media industries and audiences create our shared entertainment and information culture. The core ideas of this course are that a diverse media is essential to democracy, culture is an ongoing and cyclical process, and media convergence is the future of mass communication.

#### Culture

Digital Culture and Communication (COMM 4544/5544) gets you to begin thinking seriously about how the Web connects us, and what kinds of digital innovations are shaping our future. You will learn about the Internet as a positive, social networked sphere with a thriving creative commons, but you will also begin to see the dark side of our hyper-connected world: a digital culture plagued with questions about copyright, government and corporate controls, and issues about privacy and unethical digital citizenship. You will also begin to consider how a life increasingly connected to digital tools is affecting our daily lives.

### The IDS Bundles

#### What are Bundles?

Each IDS "bundle" is made up of five courses in eight different areas of emphasis. Each bundle is sponsored by a different UNI department. There are also global bundles offered through partner institutions.

#### Sample Bundles

Digital advertising ECON 1031: Introduction to Economics MKTG 2110: Principles of Marketing MKTG 3143: Advertising and Promotion MKTG 3146: Digital Advertising MKTG 3153: Personal Selling Digital Computation CS1510: Introduction to Computing CS1520: Data Structures CS 2530: Intermediate Computing CS 3110: Web Application Development: Build client-side web applications with JavaScript Build server-side web applications with PHP and MySQL Integrate client-side and server-side code Learn to use frameworks React Angular CS 3120/5120: User Interface Design Digital Writing ENGLISH 4025/5025: Theory and Practice of Writing ENGLISH 4785/5785: Applied Writing: Projects, Grants & Careers ENGLISH 4040/5040: Digital Writng: Theory and Practice

### Calendar

#### January 2017

Weekdays Weekend Monday Tuesday Wednesday Thursday Friday Saturday Sunday 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Now add the following tags:
- paragraph tags <p> to the beginning of each line of text that does not have a heading tag (no closing tag required)
- horizontal lines <hr> before each <h2> heading (no closing tag required)
- bold tags <b> to the names of the three bundles (closing tags are required)

Validate your code (use the W3 validator https://validator.w3.org/ - choose the  Validate by File Upload tab).

Correct any errors before proceeding.

# Step 4. Make the nested list

Time to make your list. Here is your goal:

1. **Digital advertising**
   - ECON 1031: Introduction to Economics
   - MKTG 2110: Principles of Marketing
   - MKTG 3143: Advertising and Promotion
   - MKTG 3146: Digital Advertising
   - MKTG 3153: Personal Selling
2. **Digital Computation**
   - CS1510: Introduction to Computing
   - CS1520: Data Structures
   - CS 2530: Intermediate Computing
   - CS 3110: Web Application Development:
     - Build client-side web applications with JavaScript
     - Build server-side web applications with PHP and MySQL
     - Integrate client-side and server-side code
     - Learn to use frameworks
       - React
       - Angular
   - CS 3120/5120: User Interface Design
3. **Digital Writing**
   - ENGLISH 4025/5025: Theory and Practice of Writing
   - ENGLISH 4785/5785: Applied Writing: Projects, Grants & Careers
   - ENGLISH 4040/5040: Digital Writng: Theory and Practice

You can see that your main list is an ordered list that has three list items. Each of these list items contains a nested unordered list. One of these nested lists (CS 3110: Web Development Bundle) contains another nested list, and an item of that list (Learn to use frameworks) contains yet another nested list.

How do you implement all this complexity? Easy!

1. Each list is surrounded by an opening and a matching closing list tag: <ul></ul> for unordered lists and <ol></ol> for ordered lists.
2. Each list item starts with a list item tag: <li>. You do not need to use the closing </li> tag - it's optional and, in my opinion, it adds clutter to your markup.

Use indentation to make your code more readable.

**Important:** Make sure you add a closing tag to each list. To make sure your lists are closed, place the cursor inside the opening tag; Notepad++ will highlight the closing tag; a thin red line connecting the opening and closing tags will highlight your list's boundaries, as in the following screenshot that shows part of the code you are writing:

```html
<ol>
    <li><b>Digital advertising</b>
        <ul>
            <li>ECON 1031: Introduction t
            <li>MKTG 2110: Principles of
            <li>MKTG 3143: Advertising an
            <li>MKTG 3146: Digital Advert
            <li>MKTG 3153: Personal Selli
        </ul>
    <li><b>Digital Computation</b>
        <ul>
            <li>CS1510: Introduction to C
            <li>CS1520:  Data Structures
            <li>CS 2530:  Intermediate Cc
            <li>CS 3110:  Web Application
                <ul>
                    <li>Build client-side
                    <li>Build server-side
                    <li>Integrate client-
                    <li>Learn to use fram
                        <ul>
                            <li>React
                            <li>Angular
                        </ul>
                </ul>
            <li>CS 3120/5120: User Interf
```

Validate your code. Correct any errors before proceeding.

## Step 5. Build the calendar

You need to build a 6x7 table to display a calendar for January 2017. You will use the top two rows for header information marking weekdays and weekends. The the rest of the cells will contain the date; Tuesdays and Thursdays will list the COMM 2555 class. Here's what your goal is:

| Weekdays | | | | | Weekend | |
|----------|----------|-----------|----------|--------|----------|--------|
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
| 2<br>COMM 2555 | 3 | 4<br>COMM 2555 | 5 | 6<br>COMM 2555 | 7 | 8 |
| 9<br>COMM 2555 | 10 | 11<br>COMM 2555 | 12 | 13<br>COMM 2555 | 14 | 15 |
| 16<br>COMM 2555 | 17 | 18<br>COMM 2555 | 19 | 20<br>COMM 2555 | 21 | 22 |
| 23<br>COMM 2555 | 24 | 25<br>COMM 2555 | 26 | 27<br>COMM 2555 | 28 | 29 |

As you remember, tables are specified rows-first:

1. open table
2. open row
3. list all the row cells (for each cell: open cell, add content, close cell)
4. close row
5. move on top the next row and repeat steps 2-5 until you run out of rows
6. close table

A few things to note:
- Use the "border" attribute in the opening table tag: this will display the table gridlines.
- The two top rows are header rows, so we use <th> tags (table header) instead of <td> tags (table data).
- All rows except the top row contain 7 cells. The top row has only two cells: the first one (Weekdays) spans five cells, the second one (Weekend) spans the remaining two. You use the "colspan" attribute to specify that.

Here's what it looks like in code (this is part of your table):

```html
<table border="1">
    <tr>
        <th colspan="5">Weekdays</th>
        <th colspan="2">Weekend</th>
    </tr>
    <tr>
        <th>Monday</th>
        <th>Tuesday</th>
        <th>Wednesday</th>
        <th>Thursday</th>
        <th>Friday</th>
        <th>Saturday</th>
        <th>Sunday</th>
    </tr>
    <tr>
        <td>2<br>COMM 2555</td>
        <td>3</td>
        <td>4<br>COMM 2555</td>
        <td>5</td>
        <td>6<br>COMM 2555</td>
        <td>7</td>
        <td>8</td>
    </tr>
```

Don't forget to close your table using the closing table tag </table>.

Closing </th>, </td>, and </tr> tags are optional. However, I recommend you use them because if you have a matching closing tag you can use Notepad++ syntax highlighting to help you see the boundaries of each cell, row, and the table - like you did with the lists:

```
<table border="1">
    <tr>
        <th colspan="5">Weekdays</th>
        <th colspan="2">Weekend</th>
    </tr>
    <tr>

<tr>
    <th>Monday</th>
    <th>Tuesday</th>
    <th>Wednesday</th>
    <th>Thursday</th>
```

Validate your code. You will see a warning about using the border attribute with the table tag - you may ignore it. Correct any errors before proceeding.

## Submit your work

Submit your lab1.html file to eLearning:

https://bb9.uni.edu > log in with CatID > our course > Course Content > Labs > Lab 1

# Congratulations, you're done!