CIS 4004: Web-Based Information Technology
Summer 2014

Homework Assignment #1 (100 pts)
Due Thursday May 29, 2014

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              http://www.cs.ucf.edu/courses/cis4004/sum2014

Department of Electrical Engineering and Computer Science
University of Central Florida
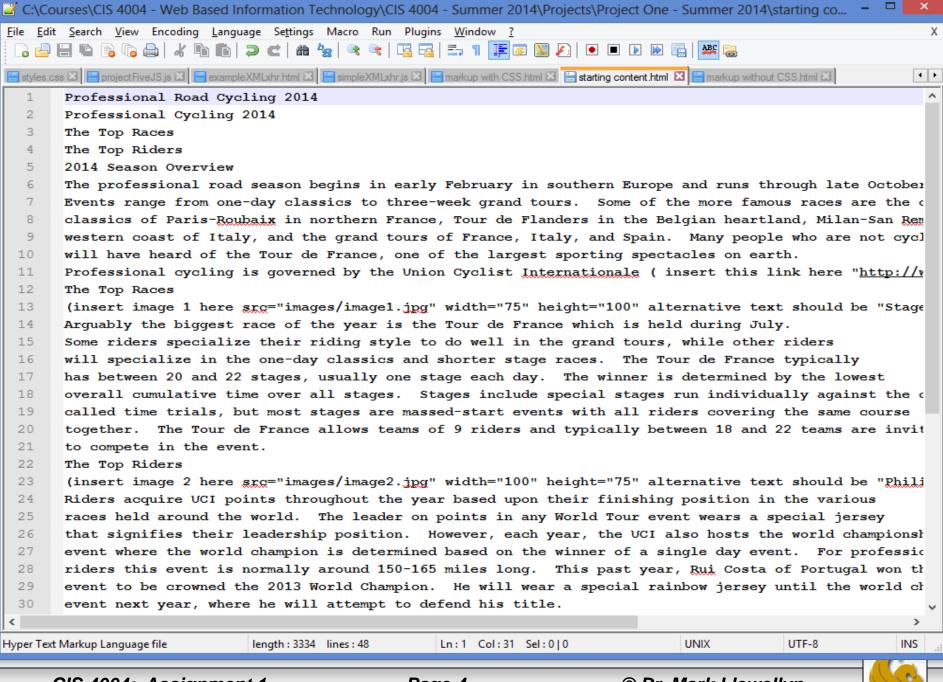
Homework Assignment #1

- This assignment has two main objectives:

  (1) To give you some practice writing HTML5 markup that contains semantically correct elements and augment the markup with appropriate ARIA landmark roles.

  (2) To practice applying basic CSS properties to style page layouts. We'll focus on very basic CSS for this first project.

Task 1 For Assignment #1

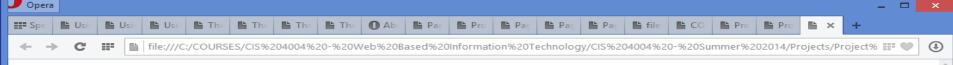- I have placed the file named `startingcontent.html` on the course website and assignment page. Although this file has a `.html` extension, it contains no markup what so ever. It includes only the textual content of what will be your final webpage.

- This page will not render as it is, since it includes no markup. However, the contents of this file (partial contents only) are shown on the next page for illustration purposes only.

File   Edit   Search   View   Encoding   Language   Settings   Macro   Run   Plugins   Window   ?   X

Tabs: styles.css | projectFiveJS.js | exampleXMLxhr.html | simpleXMLxhr.js | markup with CSS.html | starting content.html | markup without CSS.html

```
 1    Professional Road Cycling 2014
 2    Professional Cycling 2014
 3    The Top Races
 4    The Top Riders
 5    2014 Season Overview
 6    The professional road season begins in early February in southern Europe and runs through late Octobe
 7    Events range from one-day classics to three-week grand tours.  Some of the more famous races are the
 8    classics of Paris-Roubaix in northern France, Tour de Flanders in the Belgian heartland, Milan-San Rer
 9    western coast of Italy, and the grand tours of France, Italy, and Spain.  Many people who are not cyc
10    will have heard of the Tour de France, one of the largest sporting spectacles on earth.
11    Professional cycling is governed by the Union Cyclist Internationale ( insert this link here "http://v
12    The Top Races
13    (insert image 1 here src="images/image1.jpg" width="75" height="100" alternative text should be "Stage
14    Arguably the biggest race of the year is the Tour de France which is held during July.
15    Some riders specialize their riding style to do well in the grand tours, while other riders
16    will specialize in the one-day classics and shorter stage races.  The Tour de France typically
17    has between 20 and 22 stages, usually one stage each day.  The winner is determined by the lowest
18    overall cumulative time over all stages.  Stages include special stages run individually against the c
19    called time trials, but most stages are massed-start events with all riders covering the same course
20    together.  The Tour de France allows teams of 9 riders and typically between 18 and 22 teams are invit
21    to compete in the event.
22    The Top Riders
23    (insert image 2 here src="images/image2.jpg" width="100" height="75" alternative text should be "Phili
24    Riders acquire UCI points throughout the year based upon their finishing position in the various
25    races held around the world.  The leader on points in any World Tour event wears a special jersey
26    that signifies their leadership position.  However, each year, the UCI also hosts the world championsh
27    event where the world champion is determined based on the winner of a single day event.  For professio
28    riders this event is normally around 150-165 miles long.  This past year, Rui Costa of Portugal won th
29    event to be crowned the 2013 World Champion.  He will wear a special rainbow jersey until the world ch
30    event next year, where he will attempt to defend his title.
```

Hyper Text Markup Language file   length : 3334   lines : 48   Ln : 1   Col : 31   Sel : 0 | 0   UNIX   UTF-8   INS

Task 1 For Assignment #1

- Your first task in this assignment is to apply HTML5 markup elements to this text in order to produce a page that will render as shown on the next slide.

- Note that at this point, there are no styles applied to the markup content. There are two image files (available on the course website) that appear in the markup, and basic size properties have been applied (see the starting content file).

- When you have completed the markup of the original content, the markup that you have applied should cause the content to render as shown on the next slide.

Professional Cycling 2014

- [Professional Cycling 2014 - Season Overview](#)
-
- [The Top Races](#)
-
- [The Top Riders](#)
-
- [Bikes Of The Professionals](#)

Professional Road Cycling

2014 Season Overview

The professional road season begins in early February in southern Europe and runs through late October with races all over the world. Events range from one-day classics to three-week grand tours. Some of the more famous races are the one-day classics of Paris-Roubaix in northern France, Tour de Flanders in the Belgian heartland, Milan-San Remo along western coast of Italy, and the grand tours of France, Italy, and Spain. Many people who are not cycling fans will have heard of the Tour de France, one of the largest sporting spectacles on earth.

Professional cycling is governed by the Union Cyclist Internationale (UCI) based in Aigle, Switzerland.

The Top Races

 Arguably the biggest race of the year is the Tour de France which is held during July. Some riders specialize their riding style to do well in the grand tours, while other riders will specialize in the one-day classics and shorter stage races. The Tour de France typically has between 20 and 22 stages, usually one stage each day. The winner is determined by the lowest overall cumulative time over all stages. Stages include special stages run individually against the clock called time trials, but most stages are massed-start events with all riders covering the same course together. The Tour de France allows teams of 9 riders and typically between 18 and 22 teams are invited to compete in the event.

The Top Riders

 Riders aquire UCI points throughout the year based upon their finishing position in the various races held around the world. The leader on points in any World Tour event wears a special jersey that signifies their leadership position. However, each year, the UCI also hosts the world championship event where the world champion is determined based on the winner of a single day event. For professional riders this event is normally around 150-165 miles long. This past year, Rui Costa of Portugal won the event to be crowned the 2013 World Champion. He will wear a special rainbow jersey until the world championship event next year, where he will attempt to defend his title.

Other top riders in 2013 were Fabian Cancellara of Switzerland, Tom Boonen of Belgium, and Chris Froome of Great Britan.

Bikes of the Professionals

Professional riders use specific bikes for specific events. Time trial bikes being the most specialized with highly aerodynamic builds and disk wheels often used on the rear wheel. Bikes built for climbing are extremely lightweight while bikes built for sprinting or rougher roads are somewhat heavier. A standard professional bike weighs between 14 and 18 pounds. Today most bike frames are made from carbon fiber as are many of the components and wheels. Typical cost is between $6000 and $20,000 USD per bike. Some of the top bike builders are:

- Colnago (Italy)
- Ridley (Belgium)
- BMC (Switzerland)
- Trek (USA)
- Bianchi (Italy)

Task 2 For Assignment #1

- Starting with the markup document that you produced as the end result of task 1 for this assignment, your second task is two fold.

- (1) Apply the correct CSS style rules that will render your document as shown on the next slide.

- (2) Augment the document with a minimum of three ARIA landmark roles. You can choose which elements to apply the landmark roles to, but I would suggest using the navigation, main, and complementary roles.

Professional Cycling 2014

Professional Road Cycling

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Restrictions For Assignment #1

- For this assignment you will use only an external stylesheet.

- **Do not use and embedded (internal) or any inline styles for this assignment. All styles must be defined in an external style sheet.**

- **The final markup must contain at least three elements with ARIA roles defined.**

- **Your final markup must pass HTML5 validation and your style sheet must pass CSS level 3 validation.**

  - **Note: HTML5 validation will have one warning that refers to the use of an experimental feature which is the HTML5 conformance checker. This warning, and <u>only</u> this warning, is OK (see page 11).**

When And What To Turn In

- The deliverables for this assignment are:

    1. A semantically correct HTML5 markup document without CSS (25 pts). (This is the end result file of task 1.)

    2. A semantically correct HTML5 markup document containing a minimum of three ARIA landmark roles with a link to an external style sheet (35 pts). (This is the end result file of task 2.)

    3. The CSS external stylesheet (20 pts).

    4. A document containing screen captures for both HTML5 documents (without and with CSS applied) validation that shows only the one warning as shown on the next page and CSS validation (all three must be passing!). Make sure that the name of the validated file appears in the screen shots. (10 pts)

    5. A screen shot of your final rendered document. (10 pts)

- The deliverables for this assignment are to be submitted via WebCourses no later than 11:59pm (WebCourses time) on Thursday May 29, 2014.

This document was successfully checked as HTML5!

Result:	Passed, **1 warning(s)**
File :	Use the file selection box above if you wish to re-validate the uploaded file markup with CSS.html
Encoding :	utf-8	(detect automatically)
Doctype :	HTML5	(detect automatically)
Root Element:	html

Browse...

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4839

Flattr

Options

☐ Show Source   ☐ Show Outline   ◉ List Messages Sequentially ○ Group Error Messages by Type
☐ Validate error pages   ☐ Verbose Output   ☐ Clean up Markup with HTML-Tidy

Help on the options is available.

Revalidate

Notes and Potential Issues

The following notes and warnings highlight missing or conflicting information which caused the validator to perform some guesswork prior to validation, or other things affecting the output below. If the guess or fallback is incorrect, it could make validation results entirely incoherent. It is *highly recommended* to check these potential issues, and, if necessary, fix them and re-validate the document.

ⓘ **Using experimental feature:** *HTML5 Conformance Checker.*

The validator checked your document with an experimental feature: *HTML5 Conformance Checker*. This feature has been made available for your convenience, but

The W3C CSS Validation Service

W3C CSS Validator results for projectonestyles.css (CSS level 3)

Jump to: **Validated CSS**

W3C CSS Validator results for projectonestyles.css (CSS level 3)

Congratulations! No Error Found.

This document validates as CSS level 3 !

To show your readers that you've taken the care to create an interoperable Web page, you may display this icon on any page that validates. Here is the XHTML you could use to add this icon to your Web page:

```
<p>
    <a href="http://jigsaw.w3.org/css-validator/check/referer">
        <img style="border:0;width:88px;height:31px"
            src="http://jigsaw.w3.org/css-validator/images/vcss"
            alt="Valid CSS!" />
    </a>
</p>
```

```
<p>
<a href="http://jigsaw.w3.org/css-validator/check/referer">
    <img style="border:0;width:88px;height:31px"
        src="http://jigsaw.w3.org/css-validator/images/vcss-blue"
        alt="Valid CSS!" />
</a>
</p>
```