

## **Lab Assignment 1: Basic HTML**

**Q1** This lab assignment focuses on HTML, Hypertext Mark-up Language, which is used to produce web pages. In this assignment, you will produce your own web page in basic HTML.

In the following pages, you are given an example which tells you how to build a web page. What you need to do is to write your own web page by choosing a specific topic, for example about you, your pet, someone you know, or an imaginary person.

**Note** -The file you turn in **MUST** have been typed in Notepad or a similar text editor, **NOT** Dream Weaver or FrontPage or Microsoft Word. The html that these apps generate is very distinctive. If we find that your file comes from one of these applications, you receive **ZERO** points.

If you are not sure about the contents of your file, open it with Notepad on a Windows machine. If it is readable and looks like what you typed in, you should be fine. If it has a lot more stuff there than what you typed in, you have a problem. Consult with respected TA.

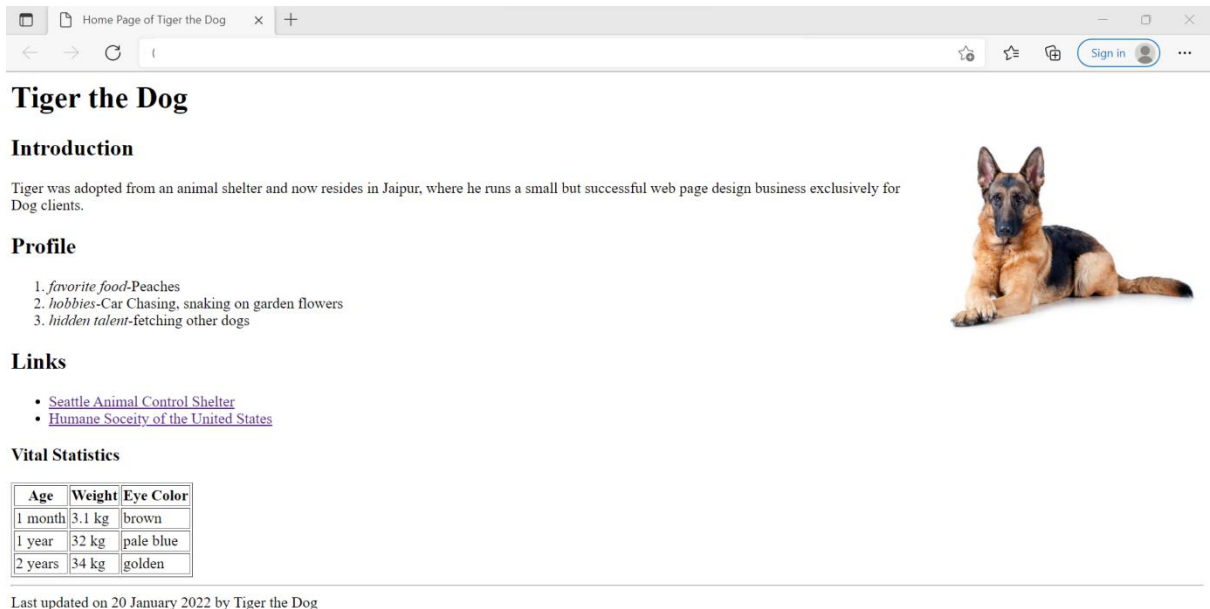
**Your web page must include following elements:**

- A title
- At least two-level headings
- At least one paragraph
- At least one list (ordered or unordered) with at least three list items
- At least one hyperlink to another web page
- At least one image
- At least one of the images has a thumbnail
- At least one horizontal rule, with author and modification date
- At least one kind of normal text formatting (bold, italic or underline)
- At least one table, with at least 3 columns and 3 rows

**NOTICE: YOUR WEB PAGE CANNOT CHOOSE THE EXACT SAME TOPIC AS THE FOLLOWING EXAMPLE. YOU MUST BUILD YOUR OWN WEB PAGE AND SUBMIT IT.**

**TIPS:** Here are the detailed steps of creating a web page, which have been used to create the example web page "Tiger the Dog". You could follow them carefully to build your own web page by replacing your own contents.

The example web page will look something like this, but we will add one feature at a time and check the result in a web browser after each step.



After completing the assignment, zip your html file, your image files and anything else you need for your page and submit it.

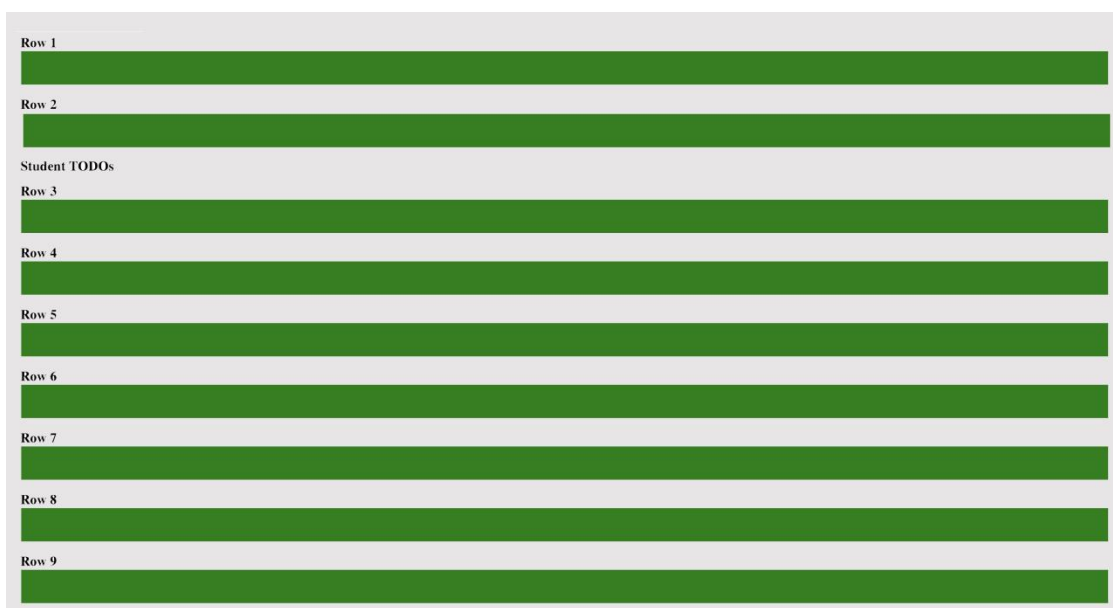
**Q2** The objective of this assignment is making you comfortable working with HTML and CSS. By the end of this assignment, you will have styled some rectangular blocks.

**Note:** Only CSS and HTML will be used for this assignment.

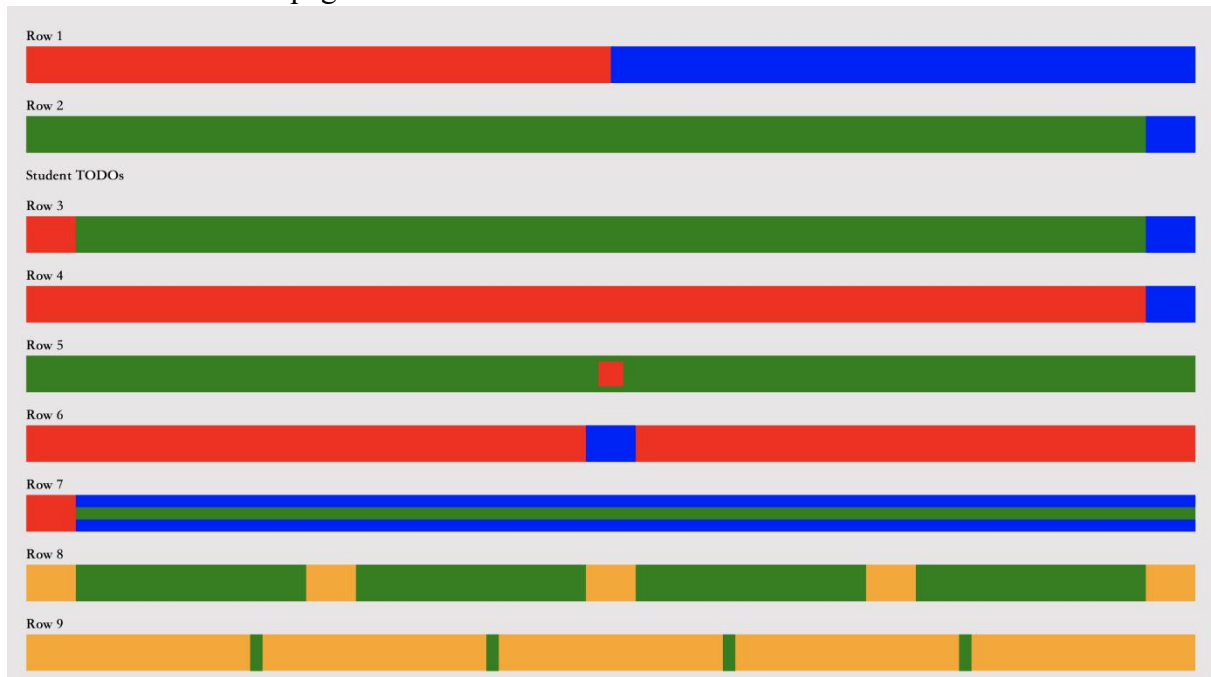
### Specifications:

Now that you understand some of the basics of HTML and CSS, let's take a look at how to align HTML elements. There are multiple ways to align HTML elements, but in this part, we recommend using flexboxes as they are widely used in modern web development.

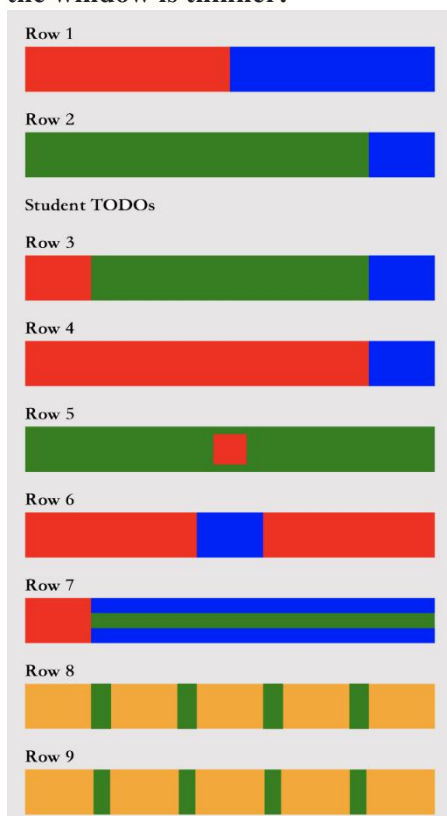
So, First create a web page, which contains 9 green rectangular blocks. it should look like this:



Your task is to apply stylings and add div elements inside of the 9 green rectangular blocks to create a webpage that looks like this:



**Note that these rectangular blocks should be responsive. Here is what they look like when the window is thinner:**



We will describe how each row will behave dynamically:

1. For the first row, the red and blue rectangles should shrink in same ratio.
2. For the second row, the blue end rectangle should remain the same size, and the green space should shrink.
3. For the third row, the red and blue end rectangles should remain the same width, and the green space should shrink.

4. For the fourth row, the blue end rectangle should remain the same width, and the red rectangle should shrink.
5. For the fifth row, the red square should remain the same size, but always remain in the centre of the green rectangle.
6. For the sixth row, the blue rectangle should remain the same size, while the red rectangles should shrink. The blue rectangle should remain in the centre of the row.
7. For the seventh row, the red rectangle should remain the same width.
8. For the eighth row, the orange rectangles should remain the same size while the green space between them shrinks.
9. For the ninth row, the green space between the orange rectangles should remain the same width while the orange rectangles narrow.

**Note: Do not use Bootstrap or any other CSS framework for this assignment.**