

# 1. Working with text

## Structure

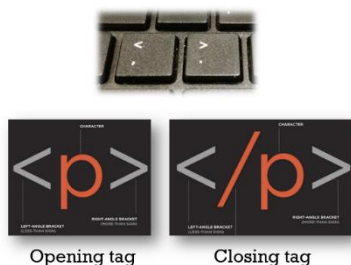
Many web apps act like electronic versions of documents such as Newspapers, which has headline, some text, and possibly some images. If the article is a long piece, there may be subheadings that split the story into separate sections or quotes from those involved. Structure helps readers understand the stories in the newspaper.

**Structure** is a way to build a web app to organize and make it easier for the reader to follow what he/she is reading. HTML code builds the structure or layout of a web app.



## The HTML code

The HTML code is made up of characters that live inside angled brackets, which are called HTML **elements**. Elements are usually made up of two **tags**: an opening tag and a closing tag.



Each HTML element tells the browser something about the information that sits between its opening and closing tags.

## Basic HTML elements

The basics HTML elements are:

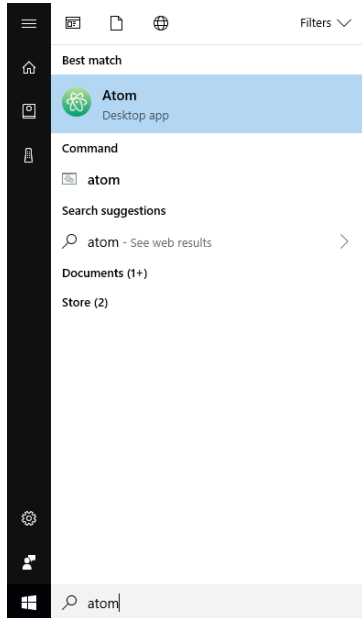
1. The opening **<html>** tag element indicates that anything between it and a closing **</html>** tag is HTML code
2. A **<head>** element contains information about the page such as title
3. The contents of the **<title>** element are either shown in the top of the browser, above where you usually type in the URL of the page you want to visit, or on the tab for that page (if your browser uses tabs to allow you to view multiple pages at the same time).
4. The **<body>** tag indicates that anything between it and the closing tag **</body>** should be inside the main browser window.

## Class Activity 1

Activity 1 we are going to create our first app view using HTML and check our code through google Chrome browser.

### Steps:

1. We start by writing the HTML code using Atom.



2. In Atom, open a new file and save it with your last name and the file extension .html. Make sure that you save the file in your local drive or computer Desktop.
3. The first line that we write in an html file is `<html>` tag to declare the html file. One of the great thing about Atom is that when you type a tag name, it will automatically build a basic code structure of the code. Write html and click enter and Atom will create the following code:

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <title></title>
  </head>
  <body>

  </body>
</html>
```

The **<!DOCTYPE>** declaration must be the very first thing in your HTML document, before the `<html>` tag and it specifies the rules for the markup language, so that the browsers render the content correctly.

The attribute **lang** indicates the language and the value **en** means English. This line specifies that the html code is based in English.

The attribute **dir** indicates the direction of the text and the value **ltr** indicates that the text will be display from left-to-right.

Metadata is data (information) about data. The **<meta>** tag provides metadata about the HTML document. Metadata will not be displayed on the page, but will be machine parsable.

Meta elements are typically used to specify page description, keywords, author of the document, last modified and other metadata

**UTF-8** is the Unicode character sets from 1 to 4 bytes long. UTF-8 can represent any character in the Unicode standard. UTF-8 is backwards compatible with ASCII and the encoding for e-mail and web pages.

For app view development, it is an important to add the following line:

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

The **viewport** is the user's visible area of a web page. It varies with the device, and will be smaller on a mobile phone than on a computer screen. viewport element gives the browser instructions on how to control the page's dimensions and scaling.

The **width=device-width** part sets the width of the page to follow the screen-width of the device (which will vary depending on the device).

The **initial-scale=1.0** part sets the initial zoom level when the page is first loaded by the browser.



**Without the viewport meta tag**

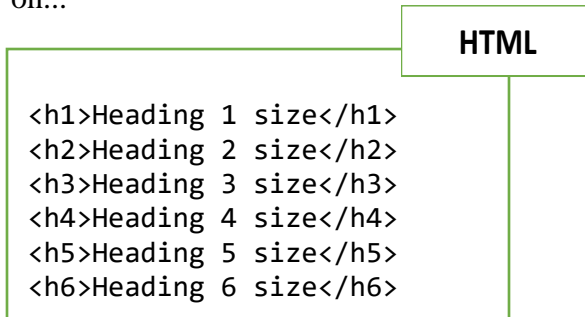


**With the viewport meta tag**

Once we have the **<head>** element sets, we can use some tags in the **<body>**. Most of the tags that we use in **<body>** are visible in the web app. We are try to add some heading the body.

HTML has six levels of headings:

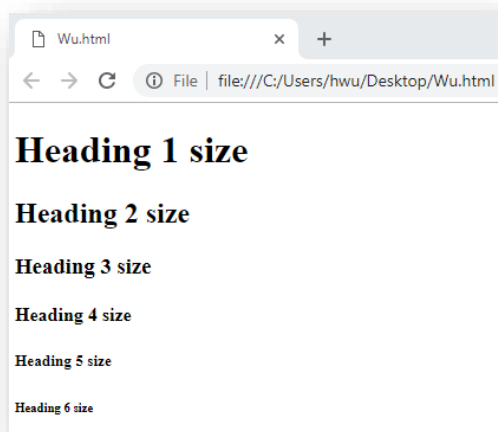
- `<h1>` is used for main headings
- `<h2>` is used for subheadings.
- If there are further sections under the subheadings then the `<h3>` element is used, and so on...



To see the output of the html code, we can go to the location of our html file, and double click on html icon



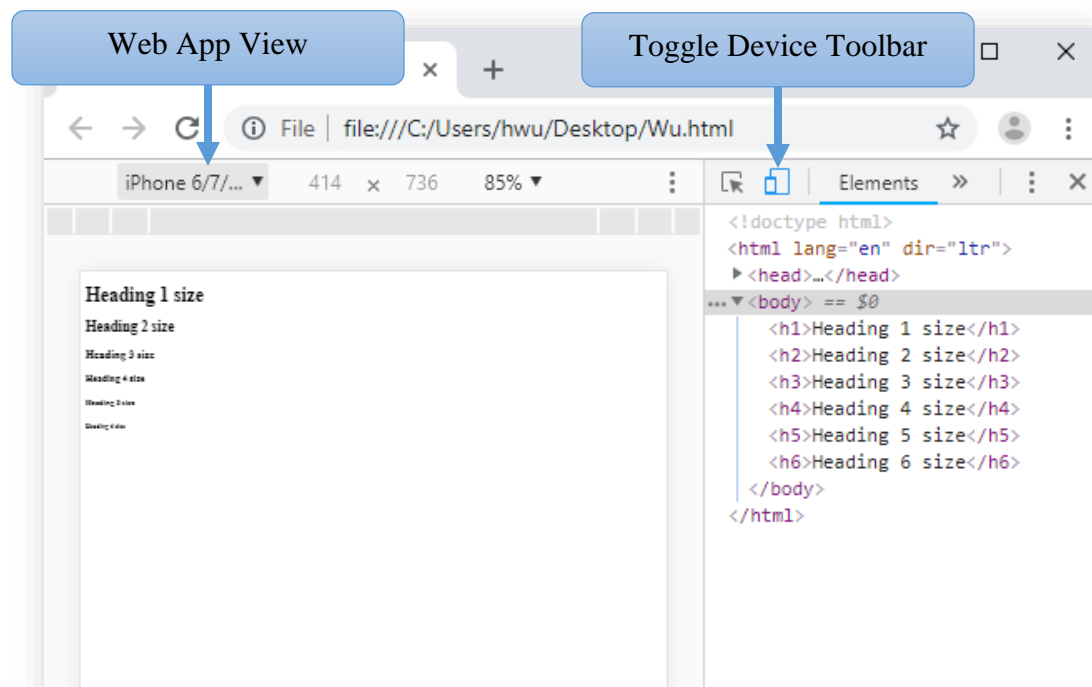
The html file will open in internet browser



Since we are creating web app, we can use the browser development tools. To get to the development tools in Google Chrome, we just hit the function key F12 from our keyboard



In the development window, we can select the “Toggle Device Toolbar”, and select the size of the app view.



Now that we have learn the basic set up of an app view, we can try more html tags.

### [More elements](#)

#### [Paragraph](#)

The **<p> tag** specifies a paragraph of text. It is a block-level element and it automatically have margin before and after the tag.

```
<p>Queensborough Community College - QCC</p>
```

## Bold

By enclosing words in the tags `<b>` and `</b>` we can make characters appear bold.

```
<p>Inside a product description you might see some <b>key features</b> in bold.</p>
```

## Italic

By enclosing words in the tags `<i>` and `</i>` we can make characters appear italic.

```
<p>My cousin is reading <i>The Adventures of Tom Sawyer</i> for two classes: <i><b>English</b></i> and <i><b>History</b></i>.</p>
```

## Line Breaks

The browser will automatically show each new paragraph or heading on a new line. But if you wanted to add a line break inside the middle of a paragraph you can use the line break tag `<br/>`

```
<p>The Earth<br/>gets one hundred tons heavier every day <br/>due to falling space dust. </p>
```

## Horizontal Rules

To create a break between themes — such as a change of topic in a book or a new scene in a play — you can add a horizontal rule between sections using the `<hr/>`

```
<p>Venus is the only planet that rotates clockwise.</p>
<hr /> <p>Jupiter is bigger than all the other planets combined.</p>
```

## Strikethrough

Strikethrough means to cross something out by drawing a line through it.

The `<s>` element indicates something that is no longer accurate or relevant (but that should not be deleted).

Visually the content of an `<s>` element will usually be displayed with a line through the center.

```
<p>Laptop computer:</p> <p><s>Was $995</s></p> <p>Now only $375</p>
```

