

Making Accessibility Accessible

Josh Dean

Mary Monroe-Ellis

Susan Mosteller

In Chrome web browser, open the following website.

PSCCMATH.github.io



Important Notes

1. We don't know all the answers or even all the questions.
2. There will be 2 times today that you will need to do EXACTLY what we tell you in the order we tell you to do it. Yes, we know this is hard, but it's the only way we will get through this.



How We Got Here: From Word to HTML

Handwritten notes on a whiteboard illustrating the process of converting a document into HTML, focusing on structure and styling.

HTML Code Snippets:

```
<a href="www.com" target="_blank">
<ol>
  a
  b
  c
</ol>
$
<div class="section" id="UIS2">
  <ul>
    <li></li></ul>
    <ol>
      <li></li></ol>
      <div class="problemset">
        <div class="step">
          A (3,5) (2,7)
          • slope
        </div>
      </div>
    </ol>
  </div>
<div class="section" id="">
  <div class="problemset">
    <div class="step">
      A (3,5) (2,7)
      • slope
    </div>
  </div>
</div>
<div class="avoid-break">
  <div class="problemset">
    <div class="step">
      A (3,5) (2,7)
      • slope
    </div>
  </div>
</div>
```

Diagram and Notes:

- TODO** (written in large letters)
- ignore** (written next to a diagram of a person looking at a screen)
- images** (central node in a diagram, with branches to **hw**, **notes**, and **graphs**)
- hw** (homework) and **notes** (branches from **images**)
- graphs** (branch from **images**, with sub-nodes **u1** and **u2**)
- u1.html** and **u2.html** (files associated with **u1** and **u2**)
- hw.html** (file associated with **hw**)
- 1830** (written next to a diagram of a person looking at a screen)
- Math 1010** (written above **1830**)
- Finance** (written above **1830**)
- images/hw/U354P2.png** (file path)
- h2**, **h3**, **h4** (headings)
- unit**, **section**, **problem** (diagram labels)
- notesu1.html #U2**, **notesu2.html**, **homeworkU1.html #U1** (file names)
- H1 Whole doc**, **H2 Units**, **H3 Sections**, **H4 Problems** (hierarchy levels)
- Directions** (written next to **H4 Problems**)
- * Answers *** (written next to **H4 Problems**)
- div step** (written next to *** Answers ***)
- Spacing? in answers.** (written next to *** Answers ***)
- empty line** (written next to **<p></p>**)
-
** (written next to **<p></p>**)
- <p></p>** (written next to **
**)
- ** (written next to **<p></p>**)
- ** (written next to **<p></p>**)

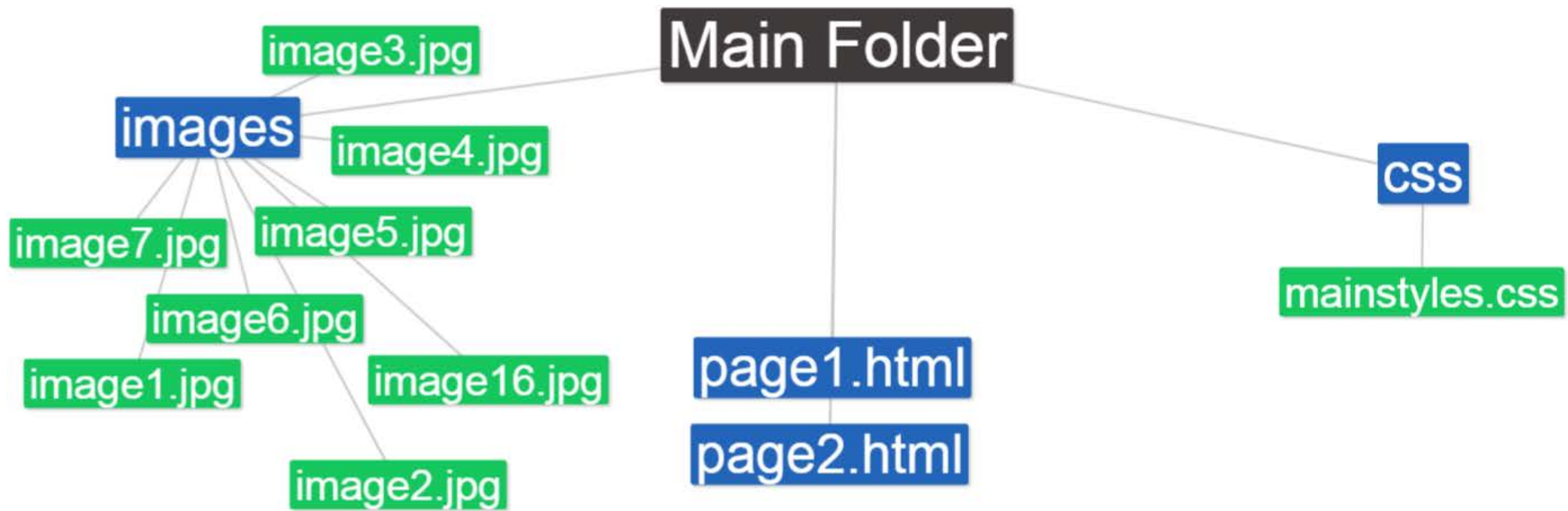
Our Journey Through the 5 Stages of Grieving

- **Denial** – *Our Word documents look really nice.*
- **Anger** – *We have over 250 pages of material to make accessible.*
- **Bargaining** – *Hey! MathType in Word will publish to HTML. Problem solved!*
- **Depression** – *Why did MathPlayer not read that equation....how many steps does it take to fix one typo...and where in the hell are my graphs?*
- **Acceptance** – *Using Markdown to create HTML documents gives us a truly accessible course. It can be navigated with JAWS. And we've found our graphs!!!*

All HTML Documents Are Not The Same

- **HTML documents created using Word and MathType**
 - In Word, convert equations and publish to MathPage.
 - Reliability is dependent on versions of software used by the instructor and student.
- **HTML documents created/edited in D2L**
 - Equations are objects and are not visible in the editor
- **HTML documents created using Markdown**
 - Easy work flow that can begin with your existing Word documents.
 - Forfeit some ability to customize
- **HTML documents created/edited directly in an HTML editor**
 - More robust than Markdown – document can be fully customized.

File Directory Tree



Our Word Document For This Workshop

- Headers
- Basic Text
- Unordered List
- Ordered List
- Links
- Images
- Tables
- Formulas

In Chrome web browser, open the following website.

PSCCMATH.github.io



This is the first time you should do EXACTLY what we tell you!

- Click on the Three Links

StackEdit

Stackedit is an inbrowser markdown editor. Markdown is a text-to-HTML conversion tool for web writers. Markdown allows you to write using an easy-to-read, easy-to-write plain text format, then convert it to structurally valid XHTML (or HTML).

StackEdit

Tables Generator

A free, easy-to-use online HTML table generator to quickly create tables.

Table Generator

Wiris

WIRIS is a set of proprietary HTML-based Javascript tools which can author and edit mathematical formulas, execute mathematical problems, and show mathematical graphics on the Cartesian coordinate system. WIRIS equation editor is a native browser application, with a light server-side, that supports both MathML and LaTeX

Wiris

- We will use each of these as we work through converting our Word doc to Markdown.

Steps to Download and Unzip the Folder

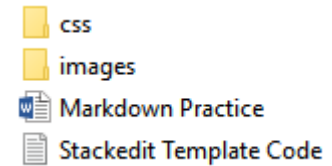
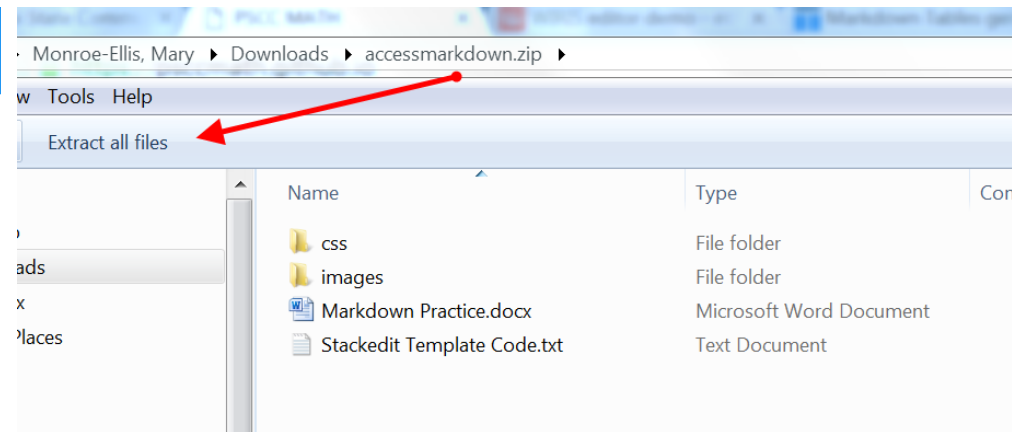
- The files you will use today are zipped in a folder named: **accessmarkdown.zip**

Zip File to Download

Contains the css file, the images folder, and the Word document we are converting to Markdown.

- Download the zip file.
- Go to your downloads folder
- Open the zip file
- Click "extract all" button

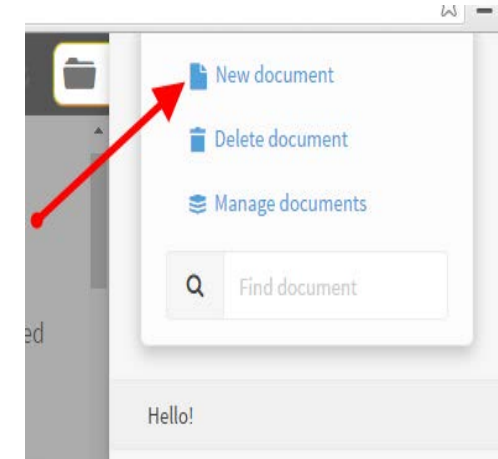
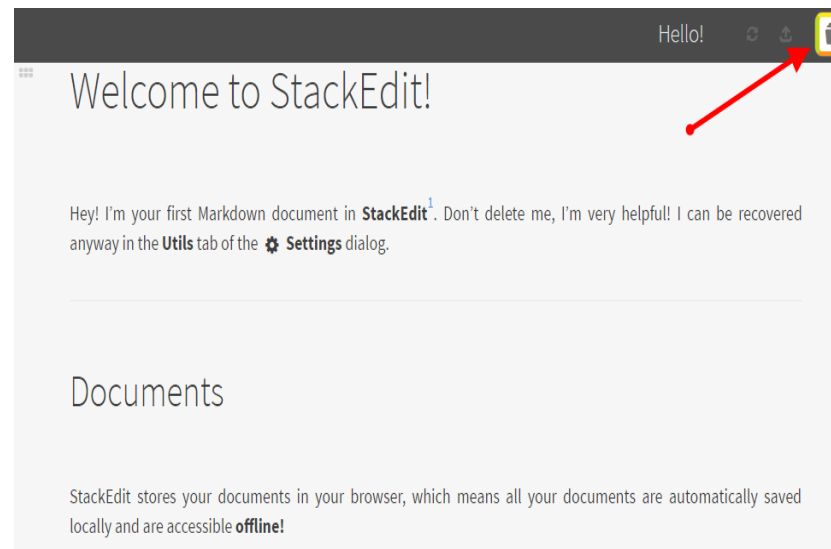
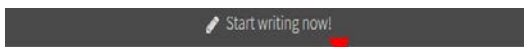
[Access Markdown Zip File](#)



- We now have everything we need in the **DOWNLOADS** folder on our computer.

Click on your StackEdit tab

1. Click Start writing now!
2. Click on the folder icon on the top right.
3. Click on New Document.



Converting Word Document to Markdown

1. Go back to your downloads folder
2. Open the Markdown Practice Document
3. Ctrl A (to highlight the entire document)
4. Ctrl C (to copy the entire document)
5. Click on your Stackedit Tab
6. Ctrl V to paste the Word doc into a new Stackedit document

Editing in StackEdit

- Headings
 - # (space) for Heading 1
 - ## (space) for Heading 2
 - ### (space) for Heading 3
 - ...
- Bold
 - Highlight the text you want to bold and click on the B on the top toolbar.



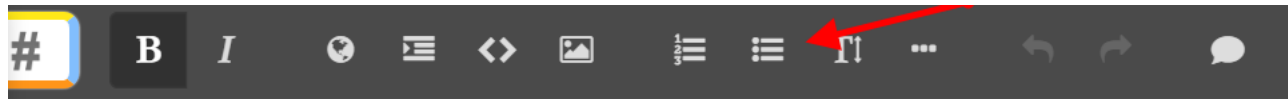
- Italics
 - Highlight the text you want to bold and click on the B on the top toolbar.



Editing in StackEdit

LISTS: For all lists, make sure to hit enter BEFORE the first item in the list.

- Unordered Lists (bullets)
 - Use the unordered list icon on the toolbar
- OR
- Use hyphen (-) and a space



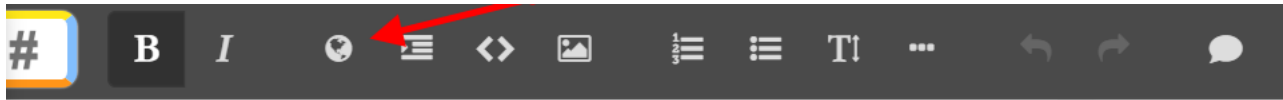
- Ordered Lists (numbered lists)
 - Use the ordered list icon on the toolbar



Editing in StackEdit


LINKS

1. Type in or highlight the words you want to describe the link.
2. Click on the link icon on the top toolbar.



3. Paste the URL into the box.

Please provide the link URL and an optional title:



4. Click OK.

Images in StackEdit


All images must be saved in your images folder.


1. Click on the images icon on the top toolbar.



2. Type in the path to the image: `images/nameoftheimage.jpg`

Please provide the image URL and an optional title:



 Import from Google+

Cancel

OK

3. Click OK.

Images in StackEdit (cont.)

Alternate Text

- After you hit OK to insert the image, you have the option for alternate text.

[enter image description here](images/supplyanddemand.jpg)

- If you already have alternate text in your Word document, copy and paste it into the brackets.
- If you do not already have alternate text, then type the alt text in.

Tables in StackEdit

1. Copy a table from your Word document
2. Go to the Tables Generator website.
http://www.tablesgenerator.com/markdown_tables
3. Make sure you are on the Markdown Tables Tab.



Tables in StackEdit (cont.)

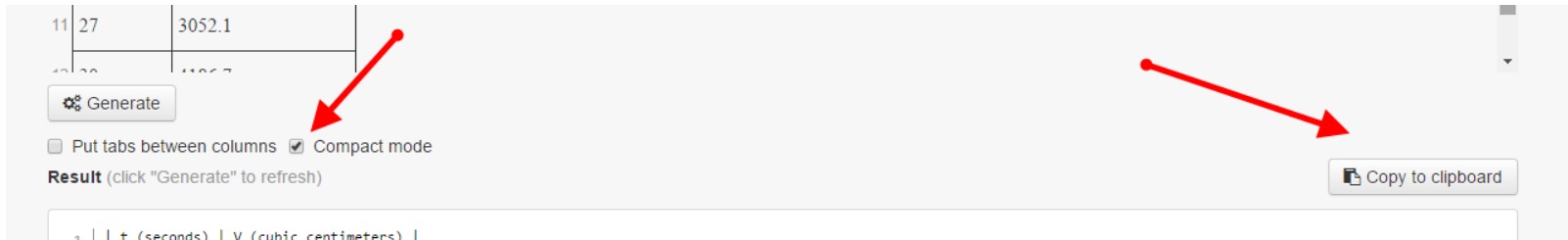
4. Click on the arrow by File and choose Paste Table Data.



5. Ctrl V to paste your data in and click LOAD.

Tables in StackEdit (cont.)

6. Click on Compact Mode on the bottom left.
7. Click on Copy to Clipboard on the bottom right.



8. Go back to your document in StackEdit.
9. Ctrl V to paste the table into StackEdit.

Formulas in StackEdit

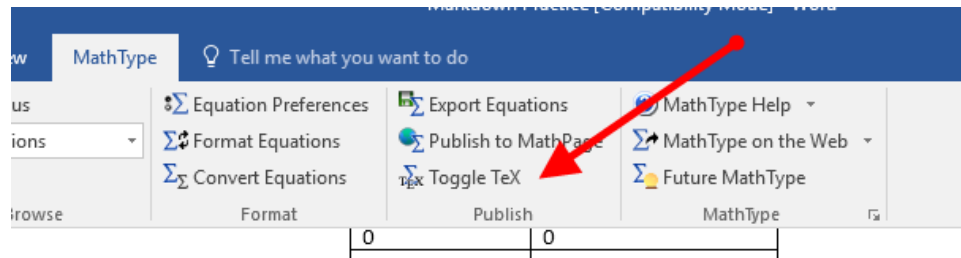
Easy Formulas

- Formulas that can be typed from a standard keyboard can be typed directly into your StackEdit document.
- Enclose the formula in \$ signs
- Example: $y=mx+b$
- Double dollar signs $y=mx+b$ will center the formula on the page.

Formulas in StackEdit: MathType

Formulas in MathType

1. Click on the formula. $N(t) = \frac{178t}{t+5}$
2. Click on the MathType tab.
3. Click on Toggle TeX.



4. Copy the LaTeX code into StackEdit.

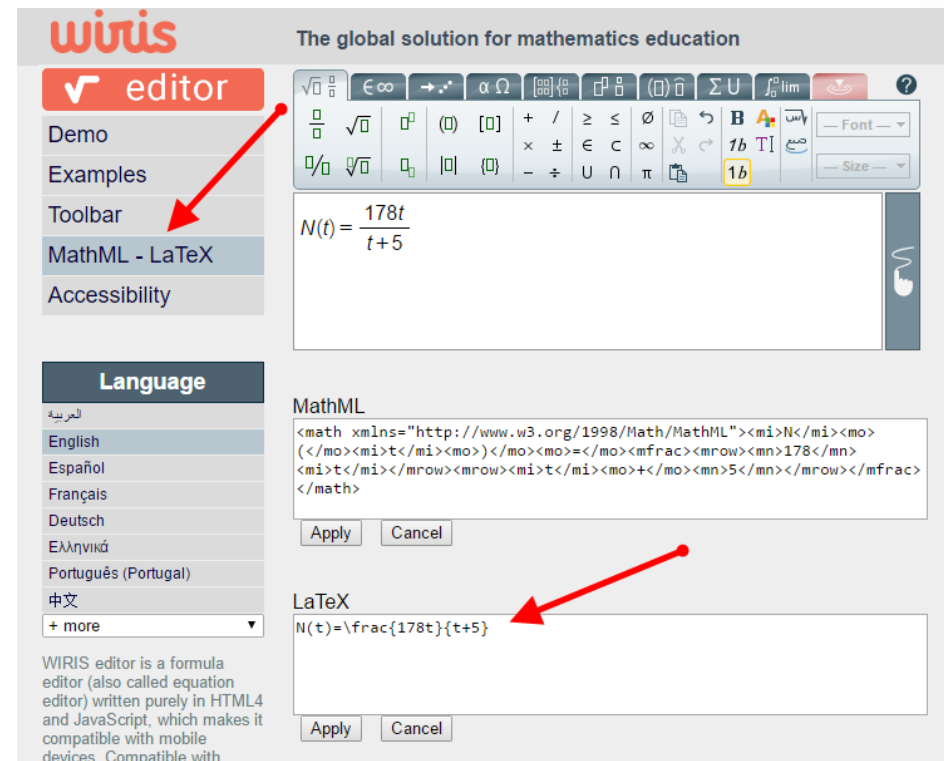
`$N\left(t \right)=\frac{178t}{t+5}$`

Formulas in StackEdit: Wiris

Wiris Equation Editor

<http://www.wiris.com/editor/demo/en/mathml-latex>

1. Open the Wiris Equation Editor.
(make sure you are on MathML-LaTeX)
2. Type the equation in.
3. Copy the LaTeX formula into StackEdit.
(Remember to enclose it in \$ signs.)



The screenshot shows the Wiris Equation Editor interface. On the left, there is a sidebar with a red arrow pointing to the 'editor' button. Below it, there are links for 'Demo', 'Examples', 'Toolbar', 'MathML - LaTeX', and 'Accessibility'. The 'MathML - LaTeX' link is highlighted. Below the sidebar is a 'Language' dropdown menu with options: العربية, English, Español, Français, Deutsch, Ελληνικά, Português (Portugal), 中文, and '+ more'. The main area of the editor shows the equation
$$N(t) = \frac{178t}{t+5}$$
 in a large text box. Below this, there are two sections: 'MathML' and 'LaTeX'. The 'MathML' section shows the MathML code for the equation. The 'LaTeX' section shows the LaTeX code
$$N(t)=\frac{178t}{t+5}$$
, with a red arrow pointing to it. At the bottom of the LaTeX section, there are 'Apply' and 'Cancel' buttons.

CSS Template

This is the 2nd time that you need to do EXACTLY what we say!

(The good news is that you only have to do this once for any computer you are working on.)

1. Go back to your zip file in the Downloads folder
2. Open Stackedit Template Code.txt
3. Ctrl A (to highlight the entire document)
4. Ctrl C (to copy the entire document)
5. Go back to StackEdit
6. Click on the #
7. Settings—Advanced
8. Delete everything in the Default Template box
9. Ctrl V (to paste in the css template)

Export Markdown from StackEdit

1. Click on the # on the left side of StackEdit
2. Export to disk Using Template
(The file will automatically go to your downloads folder but will not be placed in the unzipped accessmarkdown folder.)
3. Go to downloads folder
4. Move the html file to the unzipped accessmarkdown folder
5. Click on the html file to see the finished product