



# CSCI 165

## Introduction to the Internet and the World Wide Web

### Lecture 4: Markdown



Jetic Gū  
2024 Spring Semester (S1)

# Overview

- Focus: Course Introduction
- Architecture: WWW
- Core Ideas:
  1. What is Markdown
  2. Where would you find Markdown
  3. Working with Markdown

# CSCI165 So Far

- HTML: Markup language for describing the content of a webpage
- CSS: Styling for HTML, make it look pretty
- Javascript: Dynamic webpages, interactive design, run programmes

# What about documents?

- HTML was initially designed for writing documents  
Kinda like online M\$ Word
- Problem
  - Programmers are not very thrilled with having to type all these tags over and over again
  - HTML has become something else, not just documents: HTML5 supports 3D animation etc.

# Markdown

- **Lightweight** markup language: much much much simpler than HTML
- Created by John Gruber and Aaron Swartz 2004 for easier text writing than HTML; Standardised in 2016
- Can be treated as **extremely simplified HTML**: Markdown can be converted to HTML easily
- Markdown doesn't have styling options (**no CSS**)
- Who uses Markdown? **Every programmer!**  
Github, Gitlab, Reddit, Qt, StackExchange (Stack Overflow), Swift, etc.

# Markdown

- Below are the same document in HTML vs Markdown. Markdown is easier to write and read for humans.

```
<h2>Subject Title</h2>
<p>This is an arbitrary
<em>sentence</em></p>
<code>int i=1;</code>
<ul>
  <li>item1</li>
  <li>item1</li>
</ul>
```

```
## Subject Title
This is an arbitrary
*sentence*
    int i=1;
- item1
- item1
```

## Subject Title

This is an arbitrary *sentence*

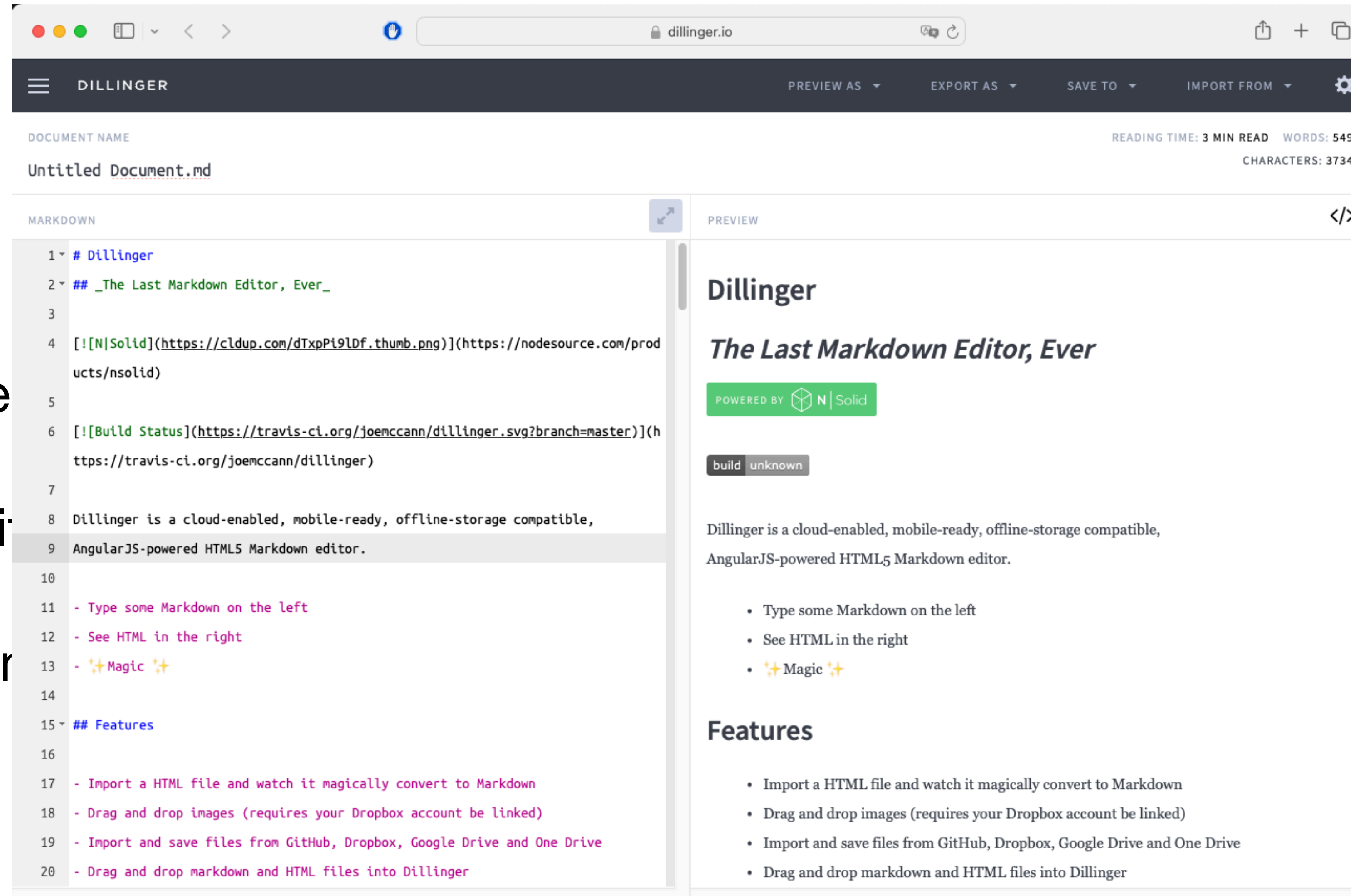
```
int i=1;
```

- item1
- item1



# Editor

- There are
- Any edi
- Recomr



Technical

# Useful Resources

- Markdown Editor: <https://dillinger.io/>
- Cheatsheet: <https://www.markdownguide.org/cheat-sheet/>
- Math: <https://docs.github.com/en/get-started/writing-on-github/working-with-advanced-formatting/writing-mathematical-expressions>



# Basic Syntax

	HTML	Markdown
<b>Headings</b>	<pre>&lt;h1&gt;Heading 1&lt;/h1&gt; &lt;h2&gt;Heading 2&lt;/h2&gt; &lt;h3&gt;Heading 3&lt;/h3&gt;</pre>	<pre># Heading 1 ## Heading 2 ### Heading 3</pre>
<b>Paragraphs</b>	<pre>&lt;p&gt;This is a sentence.&lt;/p&gt;</pre>	<pre>This is a sentence.</pre>
<b>Bold</b>	<pre>&lt;b&gt;This is bold.&lt;/b&gt;</pre>	<pre>**This is bold.**</pre>
<b>Italic</b>	<pre>&lt;i&gt;This is italic.&lt;/i&gt;</pre>	<pre>*This is italic.*</pre>
<b>Blockquote</b>	<pre>&lt;blockquote&gt;This is it.&lt;/blockquote&gt;</pre>	<pre>&gt; This is it.</pre>

# Basic Syntax

	HTML	Markdown
Ordered List	<pre>&lt;ol&gt;   &lt;li&gt;First item&lt;/li&gt;   &lt;li&gt;Second item&lt;/li&gt;   &lt;li&gt;Third item&lt;/li&gt; &lt;/ol&gt;</pre>	<pre>1. First item 2. Second item 3. Third item</pre>
List	<pre>&lt;ul&gt;   &lt;li&gt;First item&lt;/li&gt;   &lt;li&gt;Second item&lt;/li&gt;   &lt;li&gt;Third item&lt;/li&gt; &lt;/ul&gt;</pre>	<pre>- First item - Second item - Third item</pre>
Inline Code	<pre>&lt;code&gt;int i=10;&lt;/code&gt;</pre>	<pre>`int i=10;`</pre>
Horizontal Line	<pre>&lt;hr&gt;</pre>	<pre>---</pre>
Link	<pre>&lt;a href="jetic.org"&gt;Click me&lt;/a&gt;</pre>	<pre>[Click me] (<u>jetic.org</u>)</pre>
Image	<pre>&lt;img src="image.jpg" alt="alt text"&gt;</pre>	<pre>![alt text] (image.jpg)</pre>

# Exercise

- Use [dillinger.io](https://dillinger.io) to rewrite your Lab 2 using Markdown