

Web pages for ME 493 projects are written with *Markdown* syntax and stored in plain text files. This document describes the structure and format of the document.

Markdown is a *markup* language created by Jonathan Gruber<sup>1</sup>. It is very popular for technical documentation, especially when the output is displayed on the web. We use Markdown for the creation of ME 493 web pages because it is the format used by Jekyll<sup>2</sup>, a tool for creating static web sites from a large set of plain text files and images.

Markdown is a play on the work *markup*. A markup language is a set of annotations used to indicate the structure and appearance of document content. The structure refers to the headings, sections, subsections, lists, figures, tables endnotes, etc. that give the document a logical hierarchy and organization. The appearance refers to the size and weight of fonts, margins, indentations and other stylistic features that gives a document its appearance. Although the appearance corresponds to the structure, specification of the appearance and structure are separate.

Figure 1 is an annotated version of the `generic_project.md` file that creates the sample web page. Refer to the *Assignments Page* (<http://web.cecs.pdx.edu/~gerry/class/ME493/assignments/>) for additional details.

## Document Structure

The Markdown files for project description have two main sections. The first section is a *YAML Header*, which supplies metadata used by Jekyll to create the HTML page. The second section is the body of the document, which contains the information displayed on the web page.

### YAML Header

The top lines of the file contain metadata for the file in YAML<sup>3</sup> format. Here is the YAML header for the generic project web page.

```
layout: project
title: Generic Capstone Project Title
sponsor: Industrial company
sponsor_url: http://www.capstonesponsor.com/
document-date: 18 April 2018
```

YAML is a compact and portable format for storing and exchanging data. It is widely used to store configuration data in programming projects. In the Jekyll system, the YAML header provides metadata about the web page that Jekyll uses to format and provide content information not necessarily displayed in the body of the page.

Each line of the YAML header has a **keyword** and **data** pair. The **keyword** is followed by a colon and is separated from the **data** by a single space.

```
keyword: data
```

Don't change the **keywords**. The **data** is a character string that can be arbitrarily long provided it fits on one line. If you don't have a value for a **data** of a **keyword**, for example, if you don't have a URL for the sponsor, then leave the **data** field blank. *Do not* change the first line `layout: project` or the last line `document-date: 18 April 2018`.

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<sup>1</sup><https://daringfireball.net/projects/markdown/>

<sup>2</sup><https://jekyllrb.com>

<sup>3</sup><http://yaml.org>. YAML is a recursive acronym for *YAML: YAML Ain't Markup Language*.



**Figure 1:** Annotated Markdown file for the generic Capstone project page.

### Body of the Web Page

The body of the web page consists of headings, paragraphs and links to image files. The body contains these sections, each with a header

1. Project Objective Statement
2. Sponsor
3. Team members as an unordered list. A photo would be nice, but not required.
4. Customer/Market Requirements
5. Design Challenges
6. Outcomes

## Basic Formatting

Table 1 gives some of the simple formatting syntax for Markdown documents. Paragraphs are just blocks of text separated by a blank line. Refer to <https://daringfireball.net/projects/markdown/> for syntax details.

## URLs and Email Addresses

Team members can have URLs and/or email addresses. The Markdown format for a web link is

```
[Link text](url)
```

for example,

```
[markdown syntax](https://daringfireball.net/projects/markdown/)
[Jane Doe](https://www.janeDoe.com/)
[Dan Johnson](mailto:danJohson@someDomain.com)
```

**Table 1:** Limited set of Markdown syntax

#	Heading level 1
##	Heading level 2
###	Heading level 3
...	...
*	item in an unordered list
1.	item in an ordered, i.e., numbered list
2.	item in an ordered, i.e., numbered list
3.	item in an ordered, i.e., numbered list
<b>*text*</b>	Makes <i>text</i> emphasized i.e., italic
<b>**text**</b>	Makes <b>text</b> bold

## File Names for Upload

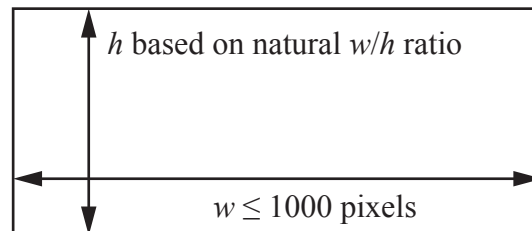
Since your files will be stored on a server with all of the files from other projects, it is *extremely important* that your files have a unique name. Furthermore, to aid in sorting and managing these files, all of the files (`.md`, `.jpg`, `.png`, `.pdf`,...) must have the *same prefix*. For example,

```
streimer_team.jpg
streimer_speed_plot.png
```

Therefore, *do not* use generic names like `markdown.md` or `picture1.jpg`.

### Other rules for file names

1. File names must not contain spaces
2. Markdown files must have `.md` extension
3. Graphics files can be JPEG (`.jpg`) or PNG (`.png`)
4. Graphics files should be no wider than 1000 pixels in the horizontal dimension as shown in Figure 2.



**Figure 2:** Dimensions for `.jpg` or `.png` graphics files appearing on web pages for capstone projects.