Ісаков А.В.

Дерун В.Г.

## MARKDOWN LANGUAGE AS AN ESSENTIAL TOOL FOR DIGITAL WRITING

Vinnytsia National Technical University

Анотація: Розглянуто головні причини для використання мови Markdown, описано деякі її особливості.

Ключові слова: мова розмітки, синтаксис, різновиди Markdown.

Abstract: Major reasons for using Markdown language are reviewed. Some of its features are described.

Keywords: markup language, syntax, Markdown 'flavors'.

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

Thus, "Markdown" is two things: (1) a plain text formatting syntax; and (2) a software tool, written in Perl, that converts the plain text formatting to HTML.

The overriding design goal for Markdown's formatting syntax is to make it as readable as possible. The idea is that a Markdown-formatted document should be publishable as-is, as plain text, without looking like it's been marked up with tags or formatting instructions. While Markdown's syntax has been influenced by several existing text-to-HTML filters, the single biggest source of inspiration for Markdown's syntax is the format of plain text email [1].

The best way to get a feel for Markdown's formatting syntax is simply to look at a Markdown-formatted document. For example, one can view the Markdown source for the referenced article on this page here: <a href="http://daringfireball.net/projects/markdown/index.text">http://daringfireball.net/projects/markdown/index.text</a>

Why Use Markdown? [2]

One might be wondering why people use Markdown instead of a WYSIWYG ("What You See Is What You Get") editor. Why write with Markdown when one can press buttons in an interface to format the text? As it turns out, there are a couple different reasons why people use Markdown instead of WYSIWYG editors.

- Markdown can be used for everything. One can create <u>websites</u>, <u>documents</u>, <u>notes</u>, <u>books</u>, <u>presentations</u>, <u>email messages</u>, and <u>technical documentation</u>.
- Markdown is portable. Files containing Markdown-formatted text can be opened using virtually any application. Markdown files are plain text and it would be just as easy to open in the Office program

as in the simple notebook. That is in stark contrast to word processing applications like Microsoft Word that lock users' content into a proprietary file format.

- Markdown is platform independent. One can create Markdown-formatted text on any device running any operating system.
- Markdown is future proof. Even if the application in use stops working at some point in the future, Markdown-formatted text will still be readable using a text editing application. This is an important consideration when it comes to books, university theses, and other milestone documents that need to be preserved indefinitely.
- Markdown is everywhere. Websites like <u>Reddit</u> and GitHub support Markdown, and lots of desktop and web-based applications support it.

Nowadays multiple variants ("flavors") of markdown exist: the original-one, CommonMark, Github Flavored Markdown, R Markdown. All of them have their own peculiarities, however the vast majority of the syntax is common through all of them. R Markdown for example, allows one to run code (be it R, Python, C++, Haskel) inside special code blocks and observe results in the rendered document. Which flavor to use depends on the environment one is using to render markdown and implementation of the markdown in that environment.

Markdown is not only about text, it allows one to embed images, code blocks, hyperlinks, HTML, themes, etc. It is a powerful tool which each contemporary writer should possess and master.

Complete references about the syntax can be found on <a href="https://bookdown.org/yihui/rmarkdown/">https://bookdown.org/yihui/rmarkdown/</a> and <a href="https://daringfireball.net/projects/markdown/syntax">https://daringfireball.net/projects/markdown/syntax</a>.

```
Here are some examples of the syntax:
# Heading level 1
## Heading level 2
(and so on up to the sixth level)
```

Paragraphs are created by using a blank line to separate one or more lines of text.

Linebrakes are achieved through adding two or more spaces at the end of the line and typing return. This text will be rendered \*italic\*, and this one \*\*bold\*\*, and, intuitively, this is \*\*\*bold+italic\*\*\*.

- > This is a blockquote.
- > Multi-paragraph blockquote.
- >> This is a nested blockquote.
- >> # One can include headings and other \*elements\* in the blockquotes
- 1. This is an ordered list
- 2. No matter what the numbering is
- 2. The rendered output will still be all right, i.e. 1, 2, 3...

For unordered list

- all of these symbols can be used
- + the output is the same bullet points
  - \* One can nest them too

![This is an image](/path/to the image.png)

Added a title to the hyperlink. My favorite search engine is [Duck Duck Go](https://duckduckgo.com "The best search engine for privacy").

In order to escape characters that have special meaning for rendering program one should use backslash

This is a table. Though the widths may wary, the output will be quite decent.

## СПИСОК ВИКОРИСТАНОЇ ЛІТЕРАТУРИ

- 1. <a href="http://daringfireball.net/projects/markdown/index.html">http://daringfireball.net/projects/markdown/index.html</a>
- 2. <a href="https://www.markdownguide.org/getting-started/">https://www.markdownguide.org/getting-started/</a>

Ісаков Андрій Васильович – Факультет інформаційних технологійта комп'ютерної інженерії, Вінницький Технічний Національний Університет, Вінниця, поштова скринька: <a href="mailto:andrik.isakov@gmail.com">andrik.isakov@gmail.com</a>

Науковий керівник: Дерун Віталіна Гарольдівна – старший викладач Вінницького Національного технічного університету, м. Вінниця, e-mail: <u>alla lisnychenko@ukr.net</u>

Isakov Andrew V. — Department of Information Technologies and Computer Engineering, Vinnytsia National Technical University, Vinnytsia, email : <a href="mailto:andrib.isakov@gmail.com">andrib.isakov@gmail.com</a>

Supervisor: V. Derun –a tutor of Vinnytsia National Technical University, Vinnytsia, alla\_lisnychenko@ukr.net.