## Markless Specification

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## 1 Preamble

Markless is a document format aimed to offer an unobtrusive and intuitive way to write plain-text documents. It is most easily comparable to Markdown but aims to avoid several of its kludges that conflict with the expectations inexperienced users have towards markup.

This document specifies the way a Markless document is treated and how the various markup directives are to be interpreted. It does not describe the technological aspects of writing an implementation for Markless.

## 2 Identifier Syntax

In order to concisely specify identifiers we use a special syntax, of which the full grammar and semantics are reflected here using BNF notation.

```
rule ::= "("?(matcher quantifier?)+ ") "?
    rule| string| some-characters
matcher ::= | any-character| not| either|binding
    | binding-reference| identifier-reference
string ::= character+
char-class ::= "~"character
some-characters ::= "["character+"]"
any-character ::= "."
not ::= "!"matcher
either ::= rule"|"rule
binding ::= "<" name" "rule">"
binding-reference ::= "<" name">"
identifier-reference ::= "{"name"}"
quantifier ::= one-or-more| none-or-more|one-or-none
one-or-more ::= rule"+"
none-or-more ::= rule"*"
one-or-none ::= rule"?"
name - Some alphanumeric string to identify the text matched by the rule.
character - A character.
number - An integer.
```

Appearing within the "" quotes are characters to be found in the identifier specifier.
If a backslash appears anywhere within the identifier specifier, it is ignored and the character immediately after it is taken literally without being interpreted as one of the characters in the syntax rules and without being interpreted using this backslash rule. Thus two backslashes immediately after one another are interpreted as a single, literal backslash character.

In order for a rule to match, the quantifier supplied with the matcher must match. If no quantifier is included in a rule, the rule matches if the matcher matches exactly once.

In order for a string to match, the exact sequence of characters must be found.
In order for a char-class to match, a character specified by the character class associated with the given character must be found. The following classes are specified: a for alphabetic, n for numeric, _for whitespace, and w for alphanumeric.

In order for some-characters to match, one of the characters must be found.
In order for any-character to match, a single character must be found, but it matters not which character it is.
In order for not to match, the following matcher must not match.
In order for either to match, either the rule left to it, or the rule right to it must match.
In order for one-or-more to match, the rule must be matched at least once, but may be matched an arbitrary
number of times immediately after each other. The rule is only repeatedly matched until the rule immediately after the one-or-more is matched.

In order for none-or-more to match, the rule does not have to be matched at all, but may be matched an arbitrary number of times immediately after each other. The rule is only repeatedly matched until the rule immediately after the none-or-more is matched.

In order for one-or-none to match, the rule does not have to be matched at all, but if it is, it is only matched exactly once.

In order for a binding to match, the rule contained must match. The specific string matched by the rule is then associated with the name of the binding.

In order for an identifier-reference to match, the identifier corresponding to the name must match. The effect is the as if the according identifier specifier was used in place of the identifier-reference.

In order for a binding-reference to match, the exact string associated with the name of the binding must be found.

## 3 Documents

Markless describes a number of directives to transform a document from its bare string representation into that of a textual component. While the directives are described in this specification using UTF-8 characters, the specification does not enforce any particular encoding on the document. However, in order for an implementation to be conforming, characters used to identify a directive in a document must be equivalent to those in this specification.

The effect of a textual component on its text applies on all levels. In the case of conflicting styles, the style of the textual component on the closest level above the text apply. In effect this means that a textual component on a lower level can override a style for its text.

An implementation may choose to compose multiple textual components in order to achieve the effect of a single specified textual component. It may also insert textual components at any point in the document if necessary by the resulting document format. An implementation may also ignore any style of a specified textual component if the resultingdocument format cannot support its effect.

## 4 Interpretation

To be done:
Line break behaviour
Backslash escaping
Parsing order
Labels
Parser states and switches

## 5 Line Directives

In order for a directive to be a line directive, its identifier must match the beginning of a line and either the end of a line or the beginning of a different line. Thus the identifier of each line directive only matches at the beginning of a line.

A textual component specified by a line directive can potentially contain any other textual component. Therefore, any directive is potentially recognisable within a line directive, including other line directives. However, a line directive may explicitly restrict which directives are recognised within itself. A line directive cannot cross the boundaries of another line directive of a different kind. If such a case were to occur, the current line directive is forcibly ended without regard for any possible trailing match.

### 5.0.1 Singular Line Directives

A line directive is a singular line directive if it is only ever active for a single line. If it is matched on two consecutive lines this results in two separate resulting textual components.

### 5.0.2 Spanning Line Directives

A line directive is a spanning line directive if the identifier contains a content binding, and if matches on consecutive lines of the identifier are interpreted as a single match. The semantics of such a spanning match are as follows: Only a single resulting textual component is produced for all the consecutively matching lines. The text of this resulting textual component is produced by concatenating the contents of the content binding on each line. If the content binding does not match the newline on every line, the nembline must be inserted between each string of the content binding.

### 5.0.3 Guarded Line Directives

A line directive is a guarded line directive if its matched region is specified by two identifiers that each match a single line. The text of the resulting textual component is the text from the line immediately after the line the first identifier matches until and including the line immediately before the line the second identifier matches.

### 5.1 Paragraph

## Identifier Paragraph:

<spaces [ ]*><content! [ ].*>
Textual Component Paragraph: margin: top, bottom
The paragraph is the default textual component and acts as a fall-back. Lines belong to the same paragraph until the length of spaces changes, a new inline directive is recognised, or an empty line is encountered. The paragraph is a spanning line directive. The paragraph directive can only contain inline directives.

Paragraphs are visually distinguished by a margin above and below the text. An implementation may additionally employ indentation rules to distinguish the beginning of a paragraph.

## Examples:

| This is a paragraph <br> that spans multiple lines | $\Rightarrow$ | This is a paragraph <br> that spans multiple lines. |
| :--- | :--- | :--- |
| This is another paragraph. |  |  |$\quad$|  |  |
| :--- | :--- |
|  |  |
| Paragraph is another paragraph. <br> Paragraph Two | $\Rightarrow$ |

### 5.2 Blockquote

## Identifier Blockquote Header:

```
\~ <content .+>
```


## Identifier Blockquote Body:

| <content .*>
Textual Component Blockquote Header: margin: 1eft; font-weight: bold Textual Component Blockquote Body: margin: left

The blockquote header is a singular line directive that identifies the source of a quote. Only the text held by the content binding is outputted into the resulting textual component. The blockquote header can only contain inline directives.

The blockquote body is a spanning line directive that identifies a body of text that is being quoted. The blockquote body can contain any directive with the condition that the directives are matched against the text of the resulting textual component.

An implementation may choose to group the blockquote header and blockquote body together and reorder them if they are found consecutive to one another. However, a body can only ever be grouped together with a single header. In the case where a header lies between two bodies, the header is counted to belong to the second body. If a header is found without a corresponding body, the implementation may signal a parning.

## Examples:

~ This Document
| The blockquote header is a $\backslash \Rightarrow$ Tine directive.
| singular line directive. - This Document
| Unattributed text. $\quad \Rightarrow \quad$ Unattributed text.

### 5.3 Lists

## Identifier Ordered List:

```
<number ~d+> <content .*>
(<spacing ~_+> <content .*>)*
```

Identifier Unordered List:
\. <content .*>
(<spacing ~_+> <content .*>)*
Textual Component Ordered List: margin: 1eft
Textual Component Ordered List Item: display: 1ist-item; 1ist-item-prefix: number
Textual Component Unordered List: margin: 1eft
Textual Component Unordered List Item: display: 1ist-item; 1ist-item-prefix: dot
The lists are spanning line directives and mark the enumeration of one or more items of a list. They can contain contain any directive with the condition that the directives are matched against the text of the resulting textual component.

After the respective list identifier has been matched, a new respective item textual component in which the higher level text is contained, is inserted for each match into the spanning resulting textual component. A single match may span over multiple lines if the text matched by the spacing binding is of the same length as that of the number binding. In such a case, each item match itself is treated like a spanning line directive where the content binding is concatenated.

Ordered list items must be numbered by the decimal number given by the number binding, even if there is no order to how the numbers appear in the list or if there are duplicates.

## Examples:

| - Finish this spec | $\Rightarrow$ | - Finish this spec <br> - Implement a parser |
| :--- | :--- | :--- |
| Implement a parser |  |  |
| 1 Buy some ingredients |  | 1. Buy some ingredients |
| 2 Clean the kitchen |  | 2. Clean the kitchen |
| Don't forget the sink! |  | Don't forget the sink! |
| 5 Watch TV | 5. Watch TV |  |

### 5.4 Header

## Identifier Header:

<level 非> <content .+>
Textual Component Header: font-weight:bold; font-size: l-leve1; indent: true; label:
The header is a singular line directive. It represents a section heading. Only the text held by the content binding is outputted to the resulting textual component. The header can only contain inline directives.

The length of the level binding determines the level of the heading. The level may potentially be infinitely high, though the implementation may represent levels above a certain number in the same manner. It must however support a different representation for at least levels 1 and 2 . Generally, the higher the level, the smaller the font size of the heading should be.

An implementation may choose to number each header, where this number prefix is put together by the number prefix of the header on a level one higher followed by a dot and a counter representing how many headers of the same level have appeared until and including the current one since the last header of a higher level. In the case of a level one heading only the counter is used, as there is no higher level prefix to prepend. In the case where no level one higher is contained in the document, the level is treated as if it existed with the counter for it being 0 .

The resulting textual component is associated with a label of the same name as the text of the resulting textual com－ ponent．

## Examples：

\＃Header
The header is a singular line directive
非 Subsection
That allows neat sectioning！
\＃Cooking a Lasagna
Here＇s what you have to buy：非 Ingredients
A buncha stuff！
非 Steps
It＇s a lengthy recipe，but finally \}
you＇11 have to
非非非 Bake it

## Header

The header is a singular line
$\Rightarrow$ directive．
Subsection
That allows neat sectioning！
1 Cooking a Lasagna
Here＇s what you have to buy：

## 1．1 Ingredients

$\Rightarrow$ A buncha stuff！

## 1．2 Steps

It＇s a lengthy recipe，but finally you＇ll have to
1．2．0．1 Bake it

## 5．5 Horizontal Rule

Identifier Horizontal－rule：
＝＝＋
Textual Component Horizontal－rule：display：1ine
The horizontal rule is a singular line directive．It is translated into a resulting textual component that represents a horizontal rule or break on the page．This must span the entire width of the document and could be represented by a thin line．If the document cannot support the drawing of lines，the horizontal rule may instead be approximated through other means．

## Examples：

| ＝＝ <br> And now，for a brief break． <br> $=====$ <br> Back to the show！ | $\Rightarrow$ |  |
| :--- | :--- | :--- |

## 5．6 Code block

## Identifier Code Block：

```
:: <language ![ ]+>?<options .*>
<content .*>
::
Textual Component Code Block：font－family：monospace；white－space：preserve
```

The code block is a guarded line directive．It marks the text to belong to a textual component that somehow dis－ tinguishes the block as source code．Only the text held by the content binding is outputted to the resulting textual
component. The code block directive cannot contain any other directives.
The newlines and whitespace must be represented exactly as in the source text. Multiple consecutive whitespace characters cannot be combined and must be individually represented. A newline character cannot be escaped and must always result in a new line being started.

## Examples:

Some unexciting code:
:: common-1isp

$($ print "Hello world") $\Rightarrow$| Some unexciting code: |
| :--- |
| (print "Hello world") |

: :

### 5.7 Instruction

## Identifier Instruction:

```
! <instruction .*>
```

The instruction is a singular line directive. Its purpose is to interact with the implementation and cause it to perform differently. There is no corresponding resulting textual component for the comment directive and as such it must not have any effect on the document.

The following instructions and their effect must be supported by an implementation.

```
set <variable> <value> Sets an internal variable of the implementation to a certain value. An implementation may check the value for validity and signal an error if it is invalid.
warn <message> Causes the implementation to signal a parning with the given message.
Causes the implementation to signal an error with the given message.
include <file> Literally splices the contents of the specified file into the document in place of this instruction. The implementation must carry on to interpret the newly spliced text.
disable-directives <directive>* enable-directives <directive>* Adds the named directives to the list of disabled directives. Removes the named directives from the list of disabled directives.
```


### 5.8 Comment

## Identifier Comment:

```
;+ .*
```

The comment is a singular line directive. If the comment identifier is matched, the entire line is skipped and discarded. There is no corresponding resulting textual component for the comment directive and as such it must not have any effect on the document.

## 6 Inline Directives

A directive is an inline directive if its identification is not bound to lines. Unlike line directives therefore it can potentially be identified at any point in a string and span any length.

Any textual component specified by an inline directive can only contain textual components specified by inline directives. Furthermore, an inline directive cannot contain another inline directive of its own type at any level. An inline directive may further restrict which directives may appear within itself. An inline directive cannot cross the boundaries of another directive of a different kind. If such a case were to occur, the current inline directive is forcibly ended without regard for any possible trailing match. A special exception is made in the case of spanning line directives: since a spanning line directive is the combination of multiple matches of the same kind on consecutive lines into a singular textual component, an inline directive must be allowed to span over multiple matches.

### 6.0.1 Surrounding Inline Directives

An inline directive is an surrounding inline directive if its identifier is terminated by a binding-reference to a binding at the start of the identifier. The resulting textual component of a surrounding inline directive never contains the strings matched by the identifier's starting binding. Instead, each surrounding inline directive identifier contains a content binding that matches all the text that the resulting textual component will contain.

### 6.0.2 Entity Inline Directives

An inline directive is an entity inline directive if its identifier does not contain any bindings and instead the text of the resulting textual component is entirely dependant on the entity inline directive specification.

### 6.0.3 Compound Inline Directives

An inline directive is a compound inline directive if its identifier consists of multiple bindings the contents of which are in some form outputted to the resulting textual component.

### 6.1 Bold

Identifier Bold: <start [*]+><content ! [*].*><start>
Textual Component Bold: font-weight: bold
The bold directive marks the text to belong to a textual component that sets the weight of the font to bold. Only the text held by the content binding is outputted to the resulting textual component.

## Examples:

not *bold* at all $\quad \Rightarrow$ not bold at all
and $* * *$ some *things* are bad*** $\Rightarrow$ and some *things* are bad

### 6.2 Italic

Identifier Italic: <start [/]+><content ! [/].*><start>
Textual Component Italic: font-style: italic
Italic is a surrounding inline directive. It marks the text to belong to a textual component that sets the style of the font to italic. Only the text held by the content binding is outputted to the resulting textual component.

## Examples:

I /really/ don't care. $\quad \Rightarrow \quad$ I really don't care.
//ca11/cc// is important. $\Rightarrow$ call/cc is important.

### 6.3 Underline

Identifier Underline: <start [_]+><content ! [_].*><start> Textual Component Underline: text-decoration: underline

Underline is a surrounding inline directive. It marks the text to belong to a textual component that sets the style of the text to underline. Only the text held by the content binding is outputted to the resulting textual component.

## Examples:

We _must_ finish this. $\quad \Rightarrow \quad$ We must finish this.
This __CONSTANT_VALUE__ is variable. $\Rightarrow$ This CONSTANT_VALUE is variable.

### 6.4 Strikethrough

Identifier Strikethrough: \<-<content . *>- \> Textual Component Strikethrough: text-decoration: strikethrough

Strikethrough is an inline directive. It marks the text to belong to a textual component that sets the style of the text to strikethrough. Only the text held by the content binding is outputted to the resulting textual component.

## Examples:

To Do: <-nothing-> $\quad \Rightarrow$ To Do: nothing
<-Solve LOAD-TIME-VALUE problem-> $\Rightarrow$ Solve LOAD-TIME-VALUE problem

### 6.5 Code

Identifier Code: <start [`]+><content ! [`].*><start> Textual Component Code: font-family: monospace

Code is a surrounding inline directive. It marks the text to belong to a textual component that sets the font-family to monospace. Only the text held by the content binding is outputted to the resulting textual component. The code directive cannot contain any other directives.

## Examples:

Call `compile` $\quad \Rightarrow$ Call compile
Earmuffs `*around*` your specials. $\Rightarrow$ Earmuffs*around* your specials.

### 6.6 Dashes

Identifier Em-dash: --
Textual Component Em-dash: display: em-dash
Em-dash is a entity inline directive. If the document does not have direct support for em-dashes, a fallback character may be used when appropriate instead. In unicode encoded documents, this should be -(U+2014).

## Examples:

A game -- or gamble, if you will. $\Rightarrow$ A game - or gamble, if you will.

### 6.7 Subtext

## Identifier Subtext: v<start [(]+><content ! [(].*><start>

 Textual Component Subtext: vertica1-align: subSubtext is a surrounding inline directive. It marks the text to belong to a textual component that sets the style of the text to appear smaller and below the default text line. Only the text held by the content binding is outputted to the resulting textual component.

## Examples:

This is an example $v$ (just so you know) $\Rightarrow$ This is an example ${ }_{\text {justso you know }}$

### 6.8 Supertext

Identifier Supertext: ^<start [(]+><content ! [ (].*><start> Textual Component Supertext: vertical-align: super

Supertext is a surrounding inline directive. It marks the text to belong to a textual component that sets the style of the text to appear smaller and above the default text line. Only the text held by the content binding is outputted to the resulting textual component.

## Examples:

This is a good example $\wedge$ ([citation needed]) $\Rightarrow$ This is a good example [citation needed]

### 6.9 URL

Identifier Url: <target $\sim \mathrm{w}(\sim \mathrm{w} \mid[+-]) *:. / /\left(\sim \mathrm{w} \mid\left[\$-\ldots+!*^{\prime}() \&+, /: ;=? @\right]\right)+>$
Textual Component Url: interaction: link; target: target
URL is an inline directive that marks the text to belong to a textual component that sets its interaction to allow following to the URL target. The user must be presented with an action that allows them to follow to the URL target. The exact manner in which the target is followed as well as the way in which the action is presented are implementation dependant. The text of the resulting textual component must be exactly the same as that of the target binding. The URL directive cannot contain any other directives.

## Examples:

Come chat with us at irc://irc.freenode.net/\%231isp !
$\Rightarrow$ Come chat with us at irc://irc.freenode.net/\%231isp!

### 6.10 Compound

Identifier Compound-content: <start ["]+><content ! ["].*><start>|<content ! [ (]+> Identifier Compound-options: ((in|to) ( <option .*>,)+)
Identifier Compound: \{compound-content\}\{compound-options\}
Textual Component Compound:

The compound directive is a compound inline directive. It determines its style dynamically by the additive combination of present compound-options. In the case where the style combination of two options conflicts, the style of the last option has priority.

Only the text held by the content binding is outputted to the resulting textual component. The compound-options identifier cannot contain any other directives.

An implementation must at least support the options specified in this section, but may add additional options the syntax and implications of which are completely implementation dependant. If an option is found that the implementation does not support, it is ignored.

### 6.10.1 Bold

Identifier Compound-bold: bold
Style Compound-bold: font-weight: bold
If given, this option marks the style to bold the text.

## Examples:

Not again(in bold)! $\Rightarrow$ Not again!

### 6.10.2 Italic

Identifier Compound-italic: italic
Style Compound-italic: font-style: italic
If given, this option marks the style to italicise the text.

## Examples:

This is really(in italic) important! $\Rightarrow$ This is really important!

### 6.10.3 Underline

Identifier Compound-underline: underline
Style Compound-underline: text-decoration: underline
If given, this option marks the style to be set to underline the text.

## Examples:

Solve it today(in underline) ! $\Rightarrow$ Solve it today!

### 6.10.4 Strikethrough

Identifier Compound-strikethrough: strikethrough
Style Compound-strikethrough: text-decoration: strikethrough
If given, this option marks the style to be set to strikethrough the text.

## Examples:

"This is a good idea"(in strikethrough). $\Rightarrow$ This isagoodidea.

## 6．10．5 Spoiler

Identifier Compound－spoiler：spoiler
Style Compound－spoiler：display：hidden
If given，this option marks the style to obscure the text in such a manner that the user must perform an action in order to reveal the text．

## Examples：

This is a secret（in spoiler）！$\Rightarrow$ This is a

## 6．10．6 Font

Identifier Compound－font：font＜font ．＋＞
Style Compound－font：font－family：font
If given，this option marks the style to change the font family．If the specified font is not available to the user for one reason or another，no font change occurs．The implementation may make an effort to include the font in the document in such a way that it is not necessary for the user to have a copy of the font，but it is not required to．

## Examples：

＂Comic sans＂（in font Comic Sans Ms）is a good font to annoy people．
$\Rightarrow$ Comic sans is a good font to annoy people．

## 6．10．7 Color

Identifier Compound－color：（color（＜hex $⿰ ⿰ 三 丨 ⿰ 丨 三 一 .+>\mid<\mathrm{r} \sim \mathrm{n}+>,<\mathrm{g} \sim \mathrm{n}+>,<\mathrm{b} \sim \mathrm{n}+>$ ））｜＜name ．＋＞ Style Compound－color：color：color

If given，this option marks the style to change the colour．The colour can be given in three ways：
1．Through a hexadecimal notation，contained in the hex binding．The hexadecimal number following the 非 must be exactly six characters long．

2．Through a red，green，blue component notation，contained in the $r, g$ ，and $b$ bindings．Each of these bindings must contain a decimal number that may only range between 0 and 255 ．If the number lies outside this range， it is clamped to the nearest boundary．

3．Through an explicit colour name，contained in the name binding．The name must be case insensitive．The set of supported colour names is implementation dependant．

If the specified colour value is invalid or unknown to the implementation according to the above restrictions，no colour change occurs．If the document does not support the specified colour，the implementation must choose an alternative colour that approximates the specified one as closely as possible．

## Examples：

| This is blue（in blue）． | $\Rightarrow$ This is blue． |
| :--- | :--- | :--- |
| Magic！（in color 非9D0ECC） | $\Rightarrow$ Magic！ |
| Now in technicolor（in color $145,16,16)$. | $\Rightarrow$ Now in technicolor． |

## 6．10．8 Size

Identifier Compound－size：（size ）？（＜point $\sim \mathrm{n}+\mathrm{pt}>\mid<\mathrm{em} \sim \mathrm{n}+$ ？（ $\backslash . \sim \mathrm{n}+$ ？）？em＞｜＜name ．$+>$ ） Style Compound－size：font－size：size

This option marks the style to change the font size．The size can be given in three ways：
1．Through a point value，contained in the point binding．The real number must be greater than zero．
2．Through an em value，contained in the em binding．The real number must be greater than zero．The font size is scaled according to the real number multiplied by the font size of the textual component one level below．

3．Through a name，contained in the name binding．The name must be case insensitive．At least the following names，corresponding to scaling factors，must be supported by the implementation：
－Microscopic 0.25 em
－Tiny 0.5 em
－Small 0．8em
－Normal 1．0em
－Big 1．5em
－Large 2.0 em
－Huge 2.5 em
－Gigantic 4.0 em
An implementation may support additional names，the exact sizing effects of which are implementation de－ pendant．

If the specified size value is invalid or unknown to the implementation according to the above restrictions，no size change occurs．

## Examples：

```
Oh "shit!"(in huge) }=>\mathrm{ OhShit!
In "20pt."(in 20pt) }=>\mathrm{ In 20pt.
We11 ""uh, "I don't know..."(in size 0.5em)""(in size 0.8em)
    # Well uh, Idonthoow.
```


## 6．10．9 Hyperlink

Identifier Compound－hyperlink：$\{u r 1\} \mid(\not ⿰ ⿰ 三 丨 ⿰ 丨 三 一$＜interna1 ．＋＞）｜（1ink＜externa1 ．＋＞） Style Compound－hyperlink：interaction：link；target：target

This option marks the style to set the interaction to allow following to the target．The user must be presented with an action that allows them to follow to the target．The exact manner in which the target is followed as well as the way in which the action is presented are implementation dependant．The target can be given in three ways：

1．As an URL，contained in the target binding．In this case the semantics are the same as for the $U R L$ textual component．

2．As an external reference，contained in the external binding．The exact semantics and allowed values for external references are implementation dependant．

3．As an internal reference，contained in the internal binding．The target is set to the position of the textual component associated with the label of the same name as the contents of the binding．

If the specified target is invalid or unknown to the implementation according to the above restrictions, no interaction change occurs.

## Examples:

The "hyperspec"(to http://11sp.org/c1/) is very useful.
$\Rightarrow$ The hyperspec is very useful.
And in "part 2" (to 非identifier-syntax)... $\quad \Rightarrow \quad$ And in part 2...
I drew "something"(to ~/drawings/test.jpg) today. $\Rightarrow$ I drew something today.

## Glossary

## Action

Some form of interaction that a user viewing a document can perform.

## Alphabetic

Any character that is one of the following:
abcdefghijk1mnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ

## Alphanumeric

Any character that is either alphabetic or numeric.

## Binding

A binding syntax rule, the content of which is the string it matches.

## Case Insensitive

When both the lower- and upper-case representation of an alphabetic character are treated as equivalent.

## Character

A singular entity as specified by an encoding.

## Character Class

A specified set of characters.

## Compound Inline Directive

An inline directive as specified in compound inline directives.

## Conforming Document

A document that does not violate any of the requirements set forth by the directives outlined in this specification and can thus be properly interpreted by any conforming implementation.

## Conforming Implementation

An implementation that fully and correctly adheres to all requirements laid down by this specification. An implementation may support additional features not described in this specification and still be conforming, as long as none of the features interfere with the interpretation of a conforming document.

## Content Binding

A binding with the name content.

## Decimal Number

A sequence of characters that are numeric and thus form a mathematical number in base-10/decimal representation.

## Directive

A directive specifies what happens when the implementation matches a particular identifier. In particular, it may specify how the input string is interpreted into text in the document.

## Disabled Directive

1) A directive on the implementation's internal list of disabled directives. 2) A directive whose identifiers must not be recognised.

## Document

1) The top-most textual component that is not contained in any other textual component. 2) A string to be interpreted into a textual component using rules outlined by directives.

## Document Format

A set of grammar and semantics to interpret the contents of a document.

## Empty Line

A line that only contains whitespace and a newline, or a sole nembine.

## Encoding

A particular interpretation of a sequence of bytes into distinguishable characters.

## Entity Inline Directive

An inline directive as specified in entity inline directives.

## Equivalent

Two objects are considered equivalent, if they denote the same meaning or idea. In specific, two characters are equivalent, if they denote the same visual identity.

## Error

A message that when signalled causes the implementation to abort.

## Format

A particular representation of data.

## Guarded Line Directive

A line directive as specified in guarded line directives.

## Hexadecimal Number

A sequence of characters that are one of 0123456789 abcdefABCDEF and thus form a mathematical number in base-16/hexadecimal representation.

## Identifier

Some form of pattern or method by which a string is recognisable. More specifically, an identifier provides a means by which a substring can be distinguished from the rest of the string.

## Identifier Specifier

A pattern in identifier syntax to specify the way in which the identifier can be recognised.

## Implementation

Some form of program or system that implements the semantics of Markless.

## Implementation Dependant

The exact implications are up to the implementation to decide, but must be clearly defined.

## Inline Directive

A directive that can appear at any point within a string.

## Interpretation

The act of detecting directives and executing their effects on a document.

## Label

1) A unique name within a document that is associated with a single textual component of the document. 2) A textual component that is associated through a label.

## Level

A number representing the depth of a directive within the document. The level within any directive is one higher than the level the directive itself is at. The level of the document is always 0 .

## Line

Any sub-sequence within a string that is delimited by the nembline. That is to say, a line always begins at either the beginning of the string or after the nemline, and always ends at either the end of the string or with a newline.

## Line Break Mode

Specifies how nemline characters are interpreted into the output text of the document.

## Line Directive

A directive that spans one or more lines.

## Match

A match occurs if a string is exactly recognised by some specific pattern or method.

## Newline

Any character that represents that a new line should be started.

## Numeric

Any character that is one of the following:
0123456789

## Real Number

A sequence of characters as follows: One or more numeric characters, optionally followed by a . dot, followed by an arbitrary number of numeric characters. This forms a mathematical real number in base-10/decimal representation where the dot denotes the decimal point.

## Resulting Textual Component

The textual component that the directive puts in place of the identifier in the document.

## Signalling

The act by which an implementation can give feedback about the interpretation of the document.

## Singular Line Directive

A line directive as specified in singular line directives.

## Spanning Line Directive

A line directive as specified in spanning line directives.

## Specified Textual Component

A textual component that is declared in this specification.

## String

A sequence of characters.

## Style

A style is an attribute of a textual component that specifies how the textual component and its contents are supposed to be visually represented in the document.

## Substring

A sequence of characters within a string.

## Surrounding Inline Directive

An inline directive as specified in surrounding inline directives.

## Text

Text is made up of a series of strings and textual components.

## Textual Component

A section of text with specific visual styling, representation, and interaction properties.

## User

Some entity —usually a human - that can view and interact with a document.

## Warning

A message that when signalled indicates a potential problem that occurred during interpretation that might cause the resulting document to appear wrong.

## Whitespace

Any character that represents a horizontal gap. Examples include space, tab, zero-width space, etc.

