

## Text Class Rules

There are nine instances of text classes that are detected by FlexTalk: addresses, dates, fractions, money, telephone numbers, time, ordinal numbers, measurements and names. Each one of these "detectors" can be set in one of the three modes (Text Class Detection Modes): off, conservative and risky. Initially, all the detectors are in the conservative mode. Refer to the Text Classes for description of how these modes operate. The text class detection modes can be changed using escape sequences with the following general format:

\!ncm

where c is one of the following text classes:

|   |                              |
|---|------------------------------|
| a | for address class            |
| d | for date class,              |
| f | for fraction class,          |
| i | for measurements class,      |
| m | for money class,             |
| n | for proper names class,      |
| o | for ordinal numbers class,   |
| p | for telephone numbers class, |
| t | for time class,              |

and m is one of the three possible class detector settings for this text class:

|   |  |
|---|--|
| o | turn the class detector off,                           |
| c | set the class detector to conservative mode (default), |
| r | set the class detector to risky mode.                  |

Examples:

Switch address detector to risky mode:

\!nar

Switch date detector to conservative mode:

\!ndc

Switch telephone numbers detector off:

\!npo

## ADDRESSES Text Class

In the address conservative mode (default, also set via the \!nac escape), only full addresses are detected. These can have one of the following formats. Optional punctuation is omitted for clarity.

Examples:

[Name][Location]-Street-[Location]-CityState- Roger Rabbit 1 Main Street Podunk NJ

[Name]-PoBox-number-CityState- Elsie Borden PO Box 101 Alta UT 89001

In the address risky mode (set via the \!nar escape), both full addresses described above and partial addresses below are detected. These can have one of the following formats.

[Name][Location]-Street-[Location] Dr Smith, 1 Smith Dr

-PoBox-number- P.O. Box 120001

-CityStateZip- Yorkville Illinois 60560

## TELEPHONE NUMBERS Text Class

In the phone conservative mode (default, also set via the \!npc escape), the following formats of telephone numbers are detected.

## Examples

AreaCode-(3number)-hyphen-(4number)-[Extension]      1-708-713-5290  
(3number)-hyphen-(4number)-[Extension]      555-1212 x3550

In the phone risky mode (set via the \!npr escape), both the conservative syntax above plus the following syntax are detected.

AreaCode-7(word|acronym)-1 (800) CALLATT  
AreaCode-3(word|acronym)-hyphen-4(word|acronym)-      1-900-get-help  
(3number)-(4(word|acronym))-      345-NEWS  
nOneOne-      911

## FRACTIONS Text Class

The fractions are detected and expanded only in the fraction risky mode (set via the \!nfr escape). The following fraction syntax is recognized.

## Examples

FractPart-      3/4  
number-[hyphen]-FractPart      1-1/2

## TIME Text Class

In the time conservative mode (default, also set via the \!ntc escape), the following syntax of time is detected.

## Example

Time-["o'clock"]-AmPm-      3:10 a.m.

In the time risky mode (set via the \!ntr escape), both the conservative syntax above plus the following syntax are detected.

Time-["o'clock"]      9:27 o'clock

## DATES Text Class

In the date conservative mode (default, also set via the \!ndc escape), the following syntax of time is detected.

## Examples

MonthName-(number<32)-[OrdEnd][MddRange][Year]      Dec 24th-26th 1990  
[DdmRange]-(number<32)-[OrdEnd]-MonthName-[Year]      24 Dec.-26 Dec. 1990

In the date risky mode (set via the \!ndr escape), both the conservative syntax above plus the following syntax are detected.

(number<13)-"/"-(number<32)-[Year]      12/24/90  
YearRisky      '09

## MONEY Text Class

In the money conservative mode (default, also set via the \!nmc escape), the following syntax of monetary amounts is detected.

## Examples

"\$"-[period]-number-[period][number]-Cents-     \$.25 cents  
"\$"-LargeAmt-[LargeRange]-Zillions-[Dollars]     \$1.2 million - 2 million  
"\$"-SmallAmt-[SmallRange][Dollars]     \$1 dollar

In the money risky mode (set via the \!nmr escape), the same syntax as above is detected, except the initial dollar sign is not required. This in effect matches any number as a dollar amount.

## PROPER NAMES Text Class

In the name conservative mode (default, also set via the \!nnc escape) the names are detected only when case is not significant (set via the \!ce escape). The reason is that when case is significant, the recognition and correct pronunciation of proper names can be achieved by capitalizing them. However, when case is being ignored, FlexTalk must use a riskier strategy to determine proper names. In this mode the following syntax of names is recognized. Optional punctuation is omitted for clarity.

Example

TitleCons-[FirstRisky][word][PersEpithet][roman] mr. jones jr. iii  
FirstCons-word-[PersEpithet][roman] j. b. jones

In the name risky mode (set via the \!nnr escape), the following syntax of names is recognized. Optional punctuation is omitted for clarity.

Examples

(word|letter)-[word|letter][And][word|letter]-CoEpithet     Brown & Green Inc.  
TitleRisky-[FirstRisky]-word-[PersEpithet][roman] Mr J Jones Sr.  
TitleRisky-FirstRisky-[PersEpithet][roman] St John  
FirstRisky-word-[PersEpithet][roman] John Jones  
roman- XXII

## MEASUREMENTS Text Class

The measurements are only detected in the measurement risky mode (set via the \!nir escape). Any number immediately followed by an unmatched single or double quote is a measurement and is expanded as follows.

- If the number preceding the single or double quote is an expanded fraction with no whole number, the quote is expanded to of a foot or of an inch respectively. For example, if measurement and fraction risky modes are set, 1/2" expands to one half of an inch, and 3/4' expands to three fourths of a foot.

- If the number preceding the single or double quote is an expanded fraction containing a whole number, the quote is expanded to feet and inches respectively. For example, if measurement and fraction risky modes are set, 1 1/2" expands to one and one half inches, and 3 3/4' expands to three and three fourths feet.

- If the number preceding the single or double quote is 1, the quote is expanded to foot or inch respectively. For example 1" expands as one inch.

- In all other cases, the single or double quote is expanded to feet or inches respectively. For example 17' expands to seventeen feet, or 1/2" expands to one slash two inches.

## ORDINALS Text Class

In the ordinal conservative mode (default, also set via the \!noc escape), the ordinal ending must match the preceding number and it must follow the number without an intervening space. The possible ordinal endings are st, nd, rd and th. For example 3rd is detected as ordinal number, but 3th or 3 rd is not. If an ordinal number is detected, the ordinal ending is deleted and the number is translated as an ordinal, for example 27th is translated as twenty seventh. If an ordinal number is not detected, the ordinal ending is left unchanged, for example 3th is translated as three th.

In the ordinal risky mode (set via the \!nor escape), the ordinal ending does not have to match the preceding number, but it still must follow the number without an intervening space. The same translation rules are used as in the conservative mode. For example 3th is translated as third, and 5 th is translated as five th.

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