



Two Types of Storage

### **Properties**

```
CurrentPerson

FirstName: Theodore

NickName: Ted

LastName: Decker

...
```

```
1 {{ CurrentPerson.NickName }}
```



**Property Filter** 

```
1 {{ CurrentPerson | Property:'NickName' }}
```



**Property Filter** 

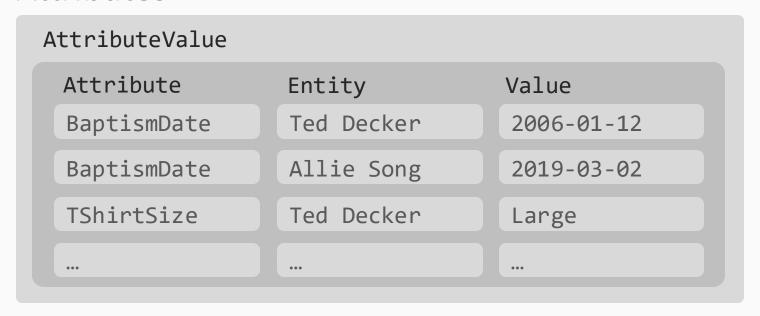
```
1 {{ CurrentPerson | Spouse | Property: 'NickName' }}
```

This filter is usually only used after another filter.



Two Types of Storage

#### Attributes





Attribute Filter

```
1 {{ CurrentPerson | Attribute: 'BaptismDate' }}
```

The goal of the Attribute filter is to provide human-understandable <u>text</u>.



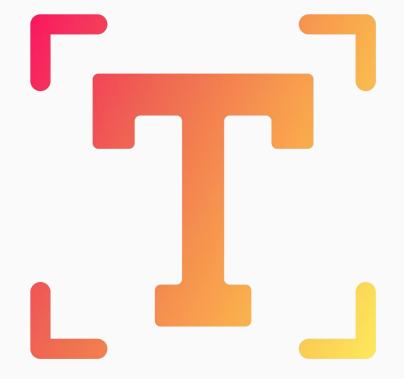
## Attribute

```
1 {{ CurrentPerson | Attribute: 'School' }}
```

**Washington Elementary School** 



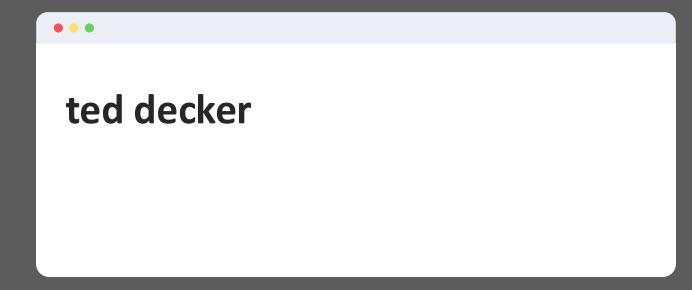
# **Text Filters**





## Downcase

```
1 <h2>{{ CurrentPerson.FullName | Downcase }}</h2>
```





# Upcase

```
1 <h2>{{ CurrentPerson.FullName | Upcase }}</h2>
```

• • •

**TED DECKER** 



## SentenceCase

```
1 <h2>{{ 'good to great' | SentenceCase }} </h2>
```

• • •

**Good to great** 



# Capitalize

```
1 <h2>{{ 'good to great' | Capitalize }}</h2>
```

**Good To Great** 



# TitleCase

```
1 <h2>{{ 'good to great' | TitleCase }}</h2>
```

• • •

**Good to Great** 



## NewlineToBr

```
1 {{ Workflow.Note | NewlineToBr }}
```



Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Ut blandit felis vitae nunc feugiat euismon.



## Pluralize

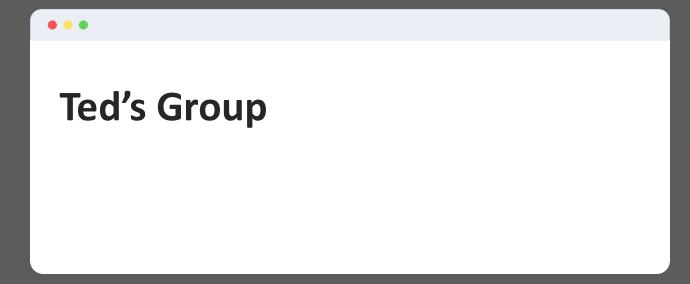
```
1 <h2>Ted's {{ 'Child' | Pluralize }}</h2>
```

**Ted's Children** 



## Possessive

```
1 <h2>{{ CurrentPerson.NickName | Possessive }} Group</h2>
```





## Singularize

```
1/ {{ 'trees' | Singularize }}
2 {{ 'women' | Singularize }}
3 {{ 'geese' | Singularize }}
```

tree woman goose



## Size

```
1 <h2>{{ 'We Will We Will Rock You' | Size }}</h2>
```





# StripHtml

```
1 {{ Item.Content | StripHtml }}
```

```
1 <h1>Big Header</h1>
2 
3 List Item
4 Second List Item
5 Third List Item
6
```



Big Header List Item Second List Item Third List Item



## StripNewlines

```
1 {{ Item.Content | StripNewlines }}
```

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean sodales, metus id viverra semper, nibh ipsum porttitor nibh, in luctus nulla eros non sapien.

Vivamus efficitur cursus condimentum. Ut blandit felis vitae nun

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean sodales, metus id viverra semper, nibh ipsum porttitor nibh, in luctus nulla eros non sapien. Vivamus

efficitur cursus condimentum. Ut blandit felis vitae nun



## Trim

```
1 <h2>-{{ ' Ted Decker ' }}-</h2>
2 <h2>-{{ ' Ted Decker ' | Trim }}-</h2>
```

#### **Additional Options**

1. String to Remove

• • •

- Ted Decker -
- -Ted Decker-



# Filters can have options





## TrimEnd

```
1 <h2>-{{ ' Ted Decker ' }}-</h2>
2 <h2>-{{ ' Ted Decker ' | TrimEnd }}-</h2>
```

• • •

- Ted Decker-

#### **Additional Options**

1. String to Remove



## TrimStart

```
1 <h2>-{{ ' Ted Decker ' }}-</h2>
2 <h2>-{{ ' Ted Decker ' | TrimStart }}-</h2>
```

• • •

-Ted Decker -

#### **Additional Options**

1. String to Remove



# Append

```
1 <h2>{{ CurrentPerson.LastName | Append:' Family' }}</h2>
```

• • •

**Decker Family** 



# Prepend

```
1 <h2>{{ CurrentPerson.NickName | Prepend:'Hello ' }}!</h2>
```

```
Hello Ted!
```



## PluralizeForQuantity

```
1  {% assign leaderCount = 3 %}
2
3  {{ 'Leader' | PluralizeForQuantity:leaderCount }}: {{ leaderCount }}
```

```
Leaders: 3
```



# Right

```
1/ The last four letters are
2 '{{ CurrentPerson.LastName | Right:4 }}'
```

• • •

The last four letters are 'cker'



## Truncate

1 <h2>{{ CurrentPerson.FullName | Truncate:9,'...' }}</h2>

#### **Additional Options**

- 1. Number of Letters
- 2. Appended String

Ted De...



# Filters can have multiple options





## TruncateWords

```
1 {{ Item.Content | TruncateWords:7,'...' }}
```

#### **Additional Options**

- 1. Number of Words
- 2. Appended String

• • •

Lorem ipsum dolor sit amet, consectetur adipiscing...



### ReadTime

```
1 {{ Item.Content | ReadTime }}
2 {{ Item.Content | ReadTime:275 }} ← words per minute
3 {{ Item.Content | ReadTime:275,12 }} ← seconds per image
```

#### **Additional Options**

- 1. Words per minute
- 2. Seconds Per Image

30 secs

1 mins 1 hr 23 mins



## Remove

```
1 {{ 'We Will We Will Rock You' | Remove:'We Will' }}
```

Rock You



## RemoveFirst

```
1 {{ 'We Will We Will Rock You' | RemoveFirst:'We Will' }}
```

• • •

We Will Rock You



# Replace

```
1 {{ 'We Will We Will Rock You' | Replace:'We Will','Rock Will' }}
```

• • •

Rock Will Rock You



# ReplaceFirst

```
1 {{ 'We Will We Will Rock You' | ReplaceFirst:'We Will','Rock Will' }}
```

Rock Will We Will Rock You



# ReplaceLast

```
1 {{ 'We Will We Will Rock You' | ReplaceLast:'We Will','Rock Will' }}
```

We Will Rock Will Rock You



### Slice

```
1/ {% assign code = 'GX925' %}
2 First two characters
3 '{{ code | Slice:0,2 }}'
4 and the last three characters
5 '{{ code | Slice:2,3 }}'.
```

#### **Additional Options**

- 1. Start character
- 2. Length

• • •

First two characters 'GX' and the last three characters '925'



### WithFallback

1 {{ CurrentPerson.NickName | WithFallback:', are','Are' }}
2 you interested in baptism?

### **Additional Options**

- 1. Value to prepend if not null
- 2. Value to use if null
- 3. Option to append instead

• • •

Ted, are you interested in baptism?

-or if CurrentPerson was null-

Are you interested in baptism?



### Default

1 Anniversary: {{ CurrentPerson.AnniversaryDate | Default:'(none)' }}

• • •

**Anniversary: (none)** 



## Split

```
1 {% assign emailParts = CurrentPerson.Email | Split:'@' %}
2 Your email domain is {{ emailParts | Last }}
```

#### **Additional Options**

- 1. Pattern
- 2. Remove Empty
- 3. Maximum Items Returned

• • •

Your email domain is: rocksolidchurchdemo.com.



### Remember this?

Attribute Filter

```
1 {{ CurrentPerson | Attribute: 'School' }}
```

The goal of the Attribute filter is to provide human-understandable <u>text</u>.



1 {{ CurrentPerson | Attribute: 'School' }}

### **Additional Options**

- 1. AttributeKey
- 2. Return Value

• • •

**Washington Elementary School** 



```
1 {{ CurrentPerson | Attribute: 'School', 'Id' }}
2 {{ CurrentPerson | Attribute: 'School', 'Description' }}
3 {{ CurrentPerson | Attribute: 'School', 'IsActive' }}
```

#### **Additional Options**

- 1. AttributeKey
- 2. Return Value

• • •

173
A sample elementary school true



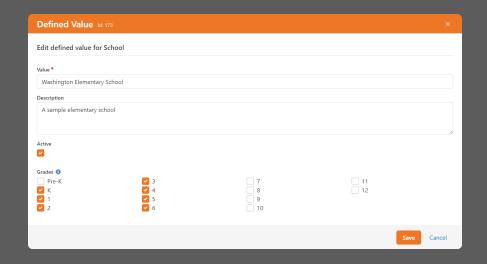
```
1 {{ CurrentPerson | Attribute: 'School', 'Object' }}
```

### **Additional Options**

- 1. AttributeKey
- 2. Return Value



1 {{ CurrentPerson | Attribute: 'School', 'Object' | Attribute: 'Grades' }}



### **Additional Options**

- 1. AttributeKey
- 2. Return Value

K, 1, 2, 3, 4, 5, 6



### **Other Text Filters**

- FromMarkdown
- Linkify
- ObfuscateEmail
- RegExMatch
- RegExMatchValue
- RegExReplace
- SanitizeSql
- ToCssClass
- ToPascal



### **Other Text Filters**

- UnescapeDataString
- Escape
- EscapeDataString
- HtmlDecode
- Humanize



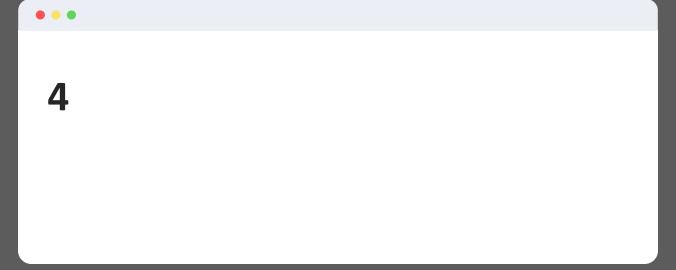
# Numeric Filters





# Plus

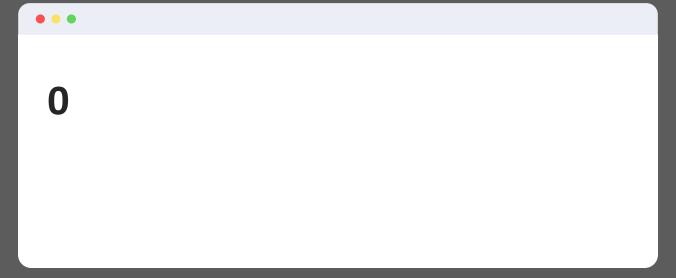
```
1 <h2>{{ 2 | Plus:2 }}</h2>
```





# Minus

```
1 <h2>{{ 2 | Minus:2 }}</h2>
```





# Times

```
1 <h2>{{ 2 | Times:10 }}</h2>
```





## DividedBy

```
1 <h2>{{ 20 | DividedBy:2 }}</h2>
2 <h2>{{ 12.434 | DividedBy:6,2 }}</h2>
```

### **Additional Options**

- 1. Number
- 2. Rounded to Digits

• • •

10

2.07



### Modulo

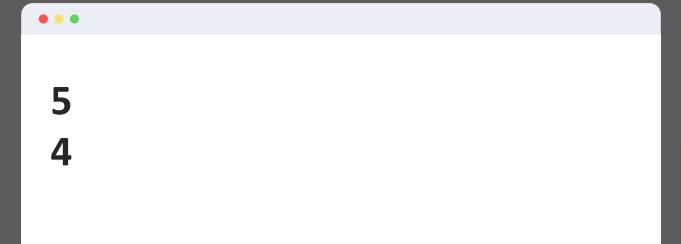
1 <h2>The remainder of 7/3 is {{ 7 | Modulo:3 }}.</h2>

The remainder of 7/3 is 1.



### AtLeast

```
1 {{ 4 | AtLeast:5 }}
2 {{ 4 | AtLeast:3 }}
```





## AtMost

```
1 {{ 4 | AtMost:5 }}
2 {{ 4 | AtMost:3 }}
```

• • •

4

3



# Floor

```
1/ {{ 1.2 | Floor }}
2 {{ 2.0 | Floor }}
3 {{ 183.357 | Floor }}
```

```
1
2
183
```



# Ceiling

```
1 {{ 1.2 | Ceiling }}
2 {{ 2.0 | Ceiling }}
3 {{ 183.357 | Ceiling }}
```

```
2
2
184
```



### Round

```
1
3
183.36
```



### Format

```
1 {{ 1200.23 | Format:'#,##0.00' }}
```

1,200.23



# FormatAsCurrency

```
1 {{ 1200.23 | FormatAsCurrency }}
```

```
$1,200.23
```



### NumberToOrdinal

```
1st
2nd
3rd
```



### NumberToOrdinalWords

```
1/ {{ 1 | NumberToOrdinalWords }}
2 {{ 2 | NumberToOrdinalWords }}
3 {{ 3 | NumberToOrdinalWords }}
```

first second third



### NumberToRomanNumerals

```
1 {{ 1 | NumberToRomanNumerals }}
2 {{ 2 | NumberToRomanNumerals }}
3 {{ 3 | NumberToRomanNumerals }}
```



### NumberToWords

```
1 {{ 1 | NumberToWords }}
2 {{ 2 | NumberToWords }}
3 {{ 3 | NumberToWords }}
```

one two three



### RandomNumber

```
1 The raffle winner is # {{ 100 | RandomNumber }}
```

• • •

The raffle winner is # 23



### **ToQuantity**

```
1 {% assign phonecount = CurrentPerson.PhoneNumbers | Size %}
2 Ted has {{ 'phone number' | ToQuantity:phonecount }}.
```

• • •

Ted has 3 phone numbers.



# **Date Filters**





### Date

```
1 {% assign firstVisit = CurrentPerson | Attribute: 'FirstVisit' %}
2 {{ firstVisit | Date: 'M/d/yyyy' }}
3 {{ firstVisit | Date: 'dddd, MMMM d, yyyy' }}
```

#### **Additional Options**

1. Format

• • •

2/13/2011 Sunday, February 13, 2011



### DateAdd

#### **Additional Options**

- 1. Number
- 2. Interval (y Years, M Months, w weeks, d –days, h hours, m minutes, s seconds)

First Visit: 2/14/2011

2 Week Follow-up: 2/28/2011



### DateDiff

```
1 {% assign firstVisit = ... %}
2 {% assign secondVisit = ... %}
3 It was {{ firstVisit | DateDiff:secondVisit,'d' }}
4 days between {{ CurrentPerson.Nickname | Possessive }} first 5 and second visit.
```

#### **Additional Options**

- 1. Number
- 2. Interval (y Years, M Months, w weeks, d –days, h hours, m minutes, s seconds)

• • •

It was 32 days between Ted's first and second visit.



### DatesFromICal

#### **Additional Options**

- 1. Number of Occurrences to Display (# or All)
- 2. End Date Time

• • •

- 7/15/2015 7:00 PM
- 7/16/2015 7:00 PM



### DaysFromNow

```
1 {% assign firstVisit = CurrentPerson | Attribute: 'FirstVisit' %}
2 Visited {{ firstVisit | DaysFromNow }}.
```

• • •

Visited 14 days ago.



## DaysInMonth

```
1 { 'now' | DaysInMonth }}
2 {{ '2/1/2017' | DaysInMonth }}
3 {{ '' | DaysInMonth:'02','2016' }}
```

Additional Options (if no date is provided)

- 1. Month
- 2. Year

• • •

31

28

29



### DaysSince

```
1 {{ CurrentPerson.NickName }} was married
2 {{ CurrentPerson.AnniversaryDate | DaysSince }}
3 days ago.
```

• • •

Ted was married 8215 days ago.



# Remember you can chain filters

```
1 {{ CurrentPerson.NickName }} was married
2 {{ CurrentPerson.AnniversaryDate | DaysSince | Format:'#,##0' }}
3 days ago.
```

Ted was married 8,215 days ago.



### DaysUntil

```
1 {{ CurrentPerson.NickName }} can take a sabbatical in
2 {{ CurrentPerson | Attribute: 'StaffSabbatical' | DaysUntil }}
3 days.
```

• • •

Ted can take a sabbatical in 546 days.



### HumanizeDateTime

```
1 {{ CurrentPerson.NickName }} was married
2 {{ CurrentPerson.AnniversaryDate | HumanizeDateTime }}.
```

• • •

Ted was married 18 years ago.



### HumanizeTimeSpan

#### **Additional Options**

- 1. Date
- Precision (3 weeks/days, 4 weeks/days/hours, 5 Weeks/days/hours/minutes)

• • •

It was 4 weeks between Ted's first and second visit.



### IsDateBetween

• • •

We're in the 2020s!



## NextDayOfTheWeek

```
1 {{ CurrentPerson | Attribute:'FirstVisit' | NextDayOfTheWeek:'Friday' }}
```

#### **Additional Options**

- 1. Day of Week
- 2. Include Current Day
- 3. Number of Weeks

• • •

2/11/2011



## SundayDate

```
1 {{ CurrentPerson | Attribute: 'FirstVisit' | SundayDate }}
```

```
2/11/2011
```



### TimeOfDay

```
1 {% assign firstVisit = ... %}
2 {% assign secondVisit = ... %}
3 {{ CurrentPerson.NickName | Possessive }} first visit was in
4 the {{ firstVisit | TimeOfDay }} and second visit was in
5 the {{ secondVisit | TimeOfDay }}.
```

#### **Time Periods**

- Morning (5am 11:59:59am)
- Afternoon (12pm 4:59:59pm)
- Evening (5pm 8:59:59pm)
- Night (9pm 4:59:59am)

• • •

Ted's first visit was in the Afternoon and second visit was in the Morning.



## ToMidnight

```
1 {{ CurrentPerson | Attribute: 'FirstVisit' }}
2 {{ CurrentPerson | Attribute: 'FirstVisit' | ToMidnight }}
```

• • •

2/11/2011 8:00:00 AM 2/11/2011 12:00:00 AM



### **Other Date Filters**

- AsDateTimeUtc
- DateRangeFromSlidingFormat