

# Quick guide to functionality

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## Basic usage

### Creating a huxtable

```
ht_orig <- huxtable(a = c('Parsley', 'Sage', 'Rosemary', 'Thyme'), b = 10 ^ (2:5))
width(ht_orig) <- 0.25
ht_orig <- set_all_borders(ht_orig, 1:nrow(ht_orig), 1:ncol(ht_orig), 1)
ht_orig
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

### Table position

```
ht <- ht_orig
position(ht) <- 'left'
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

### Cell alignment

```
ht <- ht_orig
align(ht)[,1] <- 'left'
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

### Vertical alignment

```
ht <- ht_orig
valign(ht)[1,1] <- 'top'
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

## Column span

```
ht <- ht_orig
background_color(ht)[1,1] <- 'green'
colspan(ht)[1,1] <- 2
ht
```

Parsley	
Sage	1000
Rosemary	10000
Thyme	1e+05

## Row span

```
ht <- ht_orig
ht[1,1] <- 'A rather long block of text'
background_color(ht)[1,1] <- 'green'
rowspan(ht)[1,1] <- 2
ht
```

A rather long block of text	100
	1000
Rosemary	10000
Thyme	1e+05

## Row and column span

```
ht <- ht_orig
ht[1,1] <- 'A rather long block of text'
background_color(ht)[1,1] <- 'green'
rowspan(ht)[1,1] <- 2
colspan(ht)[1,1] <- 2
ht
```

A rather long block of text	
Rosemary	10000
Thyme	1e+05

## Table width

```
ht <- ht_orig
width(ht) <- 0.5
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

## Column width

```
ht <- ht_orig
col_width(ht) <- c(.8, .2)
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

## Row height

```
ht <- ht_orig
height(ht) <- 0.2;
if (! is_latex) height(ht) <- '100px' # need a specific height for row heights to work in HTML
row_height(ht) <- c(.4, .2, .2, .2) * 0.2
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

## Borders

```
ht <- ht_orig
ht <- set_all_borders(ht, 1:4, 1:2, 0)
top_border(ht) <- c(2, 0, 0, 1)
bottom_border(ht)[4,] <- 2
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

## Padding

```
ht <- ht_orig
ht <- set_all_padding(ht, 1:4, 1:2, 0)
left_padding(ht)[,1] <- 40
right_padding(ht)[,2] <- 40
top_padding(ht) <- 20
bottom_padding(ht) <- 20
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

## Text color, bold, italic, font size

```
ht <- ht_orig
text_color(ht)[,2] <- 'red'
bold(ht)[1,] <- TRUE
italic(ht)[3,] <- TRUE
font_size(ht)[2,] <- 14
font(ht)[4,] <- if (is_latex) 'phv' else 'times'
ht
```

<b>Parsley</b>	<b>100</b>
Sage	1000
<i>Rosemary</i>	<i>10000</i>
Thyme	<b>1e+05</b>

## Replace NAs

```
ht <- ht_orig
ht[2,] <- NA
ht
```

Parsley	100
Rosemary	10000
Thyme	1e+05

```
na_string(ht) <- '--'
ht
```

Parsley	100
–	–
Rosemary	10000
Thyme	1e+05

## Joining, subsetting and manipulating huxtables

### Subsets

```
ht <- ht_orig
bottom_border(ht)[c(1,4),] <- 1
background_color(ht)[1,] <- 'wheat'

ht[1:3,1]
```

Parsley
Sage
Rosemary

## Joining

```
ht2 <- ht_orig
italic(ht2) <- TRUE
rbind(ht, ht2)
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05
<i>Parsley</i>	<i>100</i>
<i>Sage</i>	<i>1000</i>
<i>Rosemary</i>	<i>10000</i>
<i>Thyme</i>	<i>1e+05</i>

```
cbind(ht, ht2)
```

Parsley	100	<i>Parsley</i>	<i>100</i>
Sage	1000	<i>Sage</i>	<i>1000</i>
Rosemary	10000	<i>Rosemary</i>	<i>10000</i>
Thyme	1e+05	<i>Thyme</i>	<i>1e+05</i>

```
rbind(c("Oregano", 300), ht)
```

```
## Warning in `[<-.factor`(`*tmp*`, ri, value = c(100, 1000, 10000, 1e+05)):
```

```
## invalid factor level, NA generated
```

Oregano	300
Parsley	
Sage	
Rosemary	
Thyme	

## Transpose

```
colspan(ht)[1, 1] <- 2
ht
```

Parsley	
Sage	1000
Rosemary	10000
Thyme	1e+05

```
t(ht)
```

Parsley	Sage	Rosemary	Thyme
	1e+03	1e+04	1e+05

## Advanced usage

### Number formatting

```
ht <- ht_orig
ht[,2] <- ht[,2] + rnorm(4)
number_format(ht)[2,] <- 2
number_format(ht)[3,] <- '%011.4f'
number_format(ht)[4,] <- list(function(x) prettyNum(round(x, 3), big.mark = ','))
ht
```

Parsley	99.3710409187856
Sage	999.84
Rosemary	009998.4898
Thyme	99,998.5

## Cell rotation

```
ht <- ht_orig
height(ht) <- 0.2 # necessary
if (! is_latex) height(ht) <- '300px'
col_width(ht) <- c(.25, .75)
rotation(ht)[,1] <- 90
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

## Caption

```
ht <- ht_orig
caption(ht) <- 'A simple table'
ht
```

Table 1: A simple table

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

## Caption below

```
ht <- ht_orig
caption(ht) <- 'A simple table'
caption_pos(ht) <- 'bottom'
ht
```



Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

Table 2: A simple table

## Label (LaTeX only)

```
ht <- ht_orig
caption(ht) <- 'Captions are required for labels to work'
label(ht) <- 'tab:mytable'
ht
```

Table 3: Captions are required for labels to work

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05

```
knitr::asis_output('If this is LaTeX we can see a reference to table \\ref{tab:mytable}.')
```

If this is LaTeX we can see a reference to table 3.

NB: references may not work if knitting PDFs in Rstudio.

## Testing corner cases

### Heights and padding

```
ht <- ht_orig

row_height(ht) <- c(.4, .2, .2, .2)
# top_padding(ht) <- 10
# bottom_padding(ht) <- 20
ht
```

Parsley	100
Sage	1000
Rosemary	10000
Thyme	1e+05