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] <- '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

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
```

Parsley	**100**
Sage	1000
Rosemary	*10000*
Thyme	1e+05

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

Converting other objects to huxtables

```
defaults <- function(ht) {
  bottom_border(ht)[1,] <- 1
  background_color(ht)[seq(1, nrow(ht), 2), ] <- grey(.9)
  ht
}
```

```
defaults(as_hux(letters[1:5]))
```

a
b
c
d
e

```
defaults(as_hux(matrix(letters[1:10], 2)))
```

a	c	e	g	i
b	d	f	h	j

```
data(mtcars)
defaults(as_hux(mtcars[1:10,]))
```

21	6	160	110	3.9	2.62	16.46	0	1	4	4
21	6	160	110	3.9	2.875	17.02	0	1	4	4
22.8	4	108	93	3.85	2.32	18.61	1	1	4	1
21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
18.7	8	360	175	3.15	3.44	17.02	0	0	3	2
18.1	6	225	105	2.76	3.46	20.22	1	0	3	1
14.3	8	360	245	3.21	3.57	15.84	0	0	3	4
24.4	4	146.7	62	3.69	3.19	20	1	0	4	2
22.8	4	140.8	95	3.92	3.15	22.9	1	0	4	2
19.2	6	167.6	123	3.92	3.44	18.3	1	0	4	4

```
car_table <- xtabs(~ cyl + gear, mtcars)
defaults(as_hux(car_table))
```

1	8	2
2	4	1
12	0	2

```
car_ft <- ftable(cyl ~ gear + vs, mtcars)
defaults(as_hux(car_ft))
```

		cyl	4	6	8
gear	vs				
3	0		0	0	12
	1		1	2	0
4	0		0	2	0
	1		8	2	0
5	0		1	1	2
	1		1	0	0

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
Parsley	*100*
Sage	*1000*
Rosemary	*10000*
Thyme	*1e+05*

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

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

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

Parsley	100	*Parsley*	*100*
Sage	1000	*Sage*	*1000*
Rosemary	10000	*Rosemary*	*10000*
Thyme	1e+05	*Thyme*	*1e+05*

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	101.598605083754
Sage	999.95
Rosemary	010001.0486
Thyme	100,000.7

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(.2, .1, .1, .1)
# top_padding(ht) <- 10
# bottom_padding(ht) <- 20
ht
```

Parsley	100
Sage	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