

Labeling and tracking samples with *baRcodeR* (v 0.1.2)

CHEAT SHEET



yihanwu/baRcodeR



@ColauttiLab

|| I || Quick Start | || III

Make sequential identifier codes with custom string:

Prefix

```
Labels
1 example005
2 example006
3 example007
4 example008
5 example009
6 example010
```

```
IDcodes <- uniqID_maker(string = "example",
                        level = 5:10,
                        digits = 3)
```

Make hierarchical IDs:

Prefix
for
level

Start
Number

End
Number

```
Labels
1 a1-b1-c1
2 a1-b1-c2
3 a1-b2-c1
4 a1-b2-c2
5 a2-b1-c1
6 a2-b1-c2
7 a2-b2-c1
8 a2-b2-c2
9 a3-b1-c1
10 a3-b1-c2
11 a3-b2-c1
12 a3-b2-c2
```

```
level_one <- c("a", 1, 3)
level_two <- c("b", 1, 2)
level_three <- c("c", 1, 2)
hier_list <- list(level_one, level_two,
                 level_three)
```

```
IDcodes <- uniqID_hier_maker(hierarchy =
                             hier_list, digits=1)
```

Make PDF with QR barcodes from IDcodes:

```
IDcodes<-uniqID_maker(string="example", digits=1, level=1:2)
create_PDF(Labels=IDcodes, name="example_pdf")
```



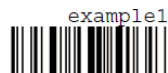
example1



example2

Make PDF with linear barcodes from IDcodes:

```
create_PDF(Labels=IDcodes, type="linear", Fsz=12)
```



example1



example2

|| I || User Interaction | || III

All functions can be run interactively by specifying user=T

uniqID_maker(user=T)

Prompts will guide user through options in the console.

Alternatively, access the add-in and create codes and labels from the 'Addins' menu in RStudio

|| I || Options | || III

uniqID_maker():

user: run in interactive mode (T/F)

string: prefix for ID codes, ("ABC", "Pop1", "1")

level: sequence for ID codes (1:3, c(1,3,5:8), 100:0)

digits: number of digits (string1, string01, string001 ...)

uniqID_hier_maker():

user: run in interactive mode (T/F)

hierarchy: list of levels containing c("string", start, end)

end: string to append as suffix (string01-01-suffix)

digits: number of digits (string1, string01, string001 ...)

create_pdf():

user: run in interactive mode (T/F)

Labels: vector or data frame of ID codes

name: name of output PDF file

type: type of label, "matrix" or "linear"

ErrCorr: error correction level; one of L, M, Q, and H

Fsz: font size, between 2.2 and 4.7

Advanced options for pdf layout on pg 2

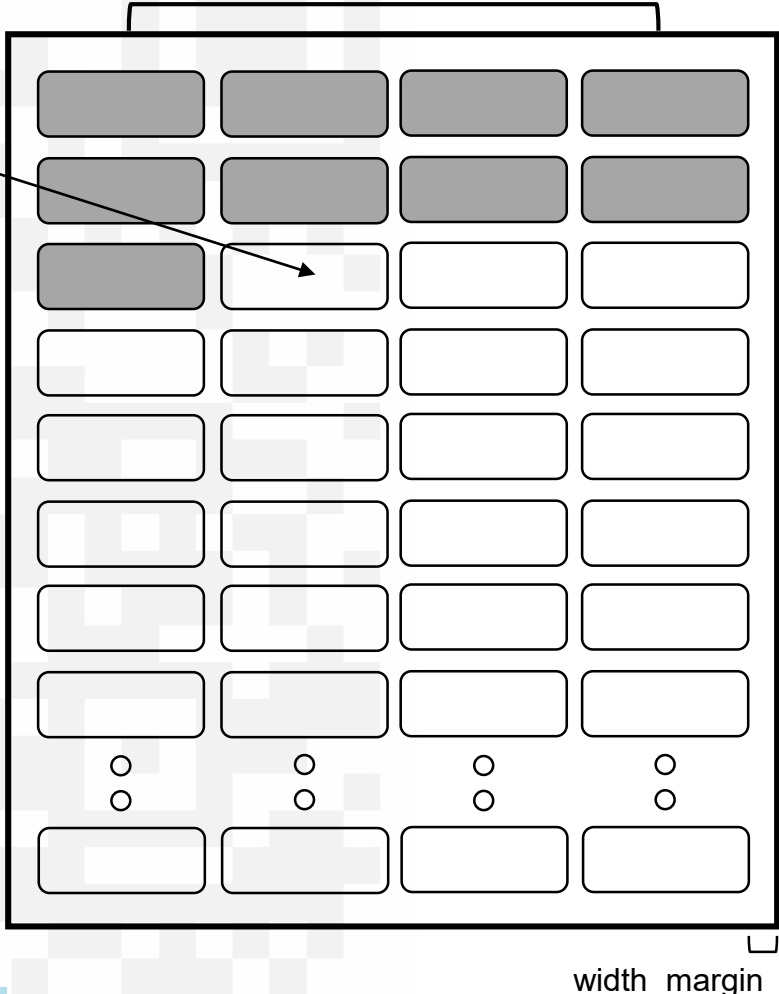
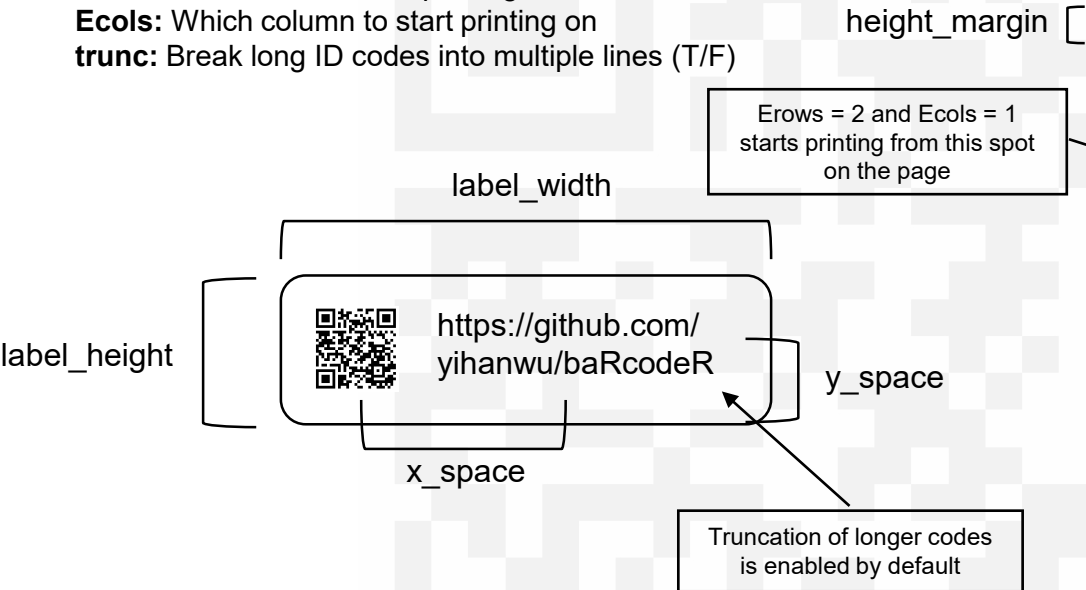
II | II baRcodeR | II III – Advanced PDF Output Options

Advanced options in `create_PDF()` allow customized layouts.

Default layout is for 1.75" x 1/2" WEATHER RESISTANT LABEL for 8.5" x 11" laser printer (80 labels/sheet). Item # S-19297 (uline.ca or uline.com)

Printing Options

- Across:** Print across rows (T), or print down columns (F)
- Erows:** Which row to start printing on
- Ecols:** Which column to start printing on
- trunc:** Break long ID codes into multiple lines (T/F)



Page Layout Options

- numrow:** number of rows on page (default 20)
- numcol:** number of columns on page (default 4)
- height_margin:** space added above and below labels
- width_margin:** space added to left and right of labels
- label_width:** width of label (in inches)
- label_height:** height of label (in inches)
- x_space:** value between 0 and 1, distance between qrcode and text
- y_space:** value between 0 and 1, vertical height of text on label, default 0.5

IMPORTANT: When printing from PDF, use the option "actual size" rather than "fit to page" and do not use "image aliasing" or "save ink" options.