Cuti Demo & Doc

Introduction

Cuti is a package that simulates fake bold weight for fonts by utilizing the `stroke` attribute of `text`. This package is typically used on fonts that do not have a `bold` weight, such as "SimSun".

This package uses 0.02857em as the parameter for stroke. In Microsoft Office software, enabling fake bold will apply a border of about 0.02857em to characters. This is where the value of 0.02857em is derived from. (In fact, the exact value may be $\frac{1}{35}$.)

---

fakebold

`#fakebold[]` with no parmerter will apply the **fakebold** effect to characters.

```
1  Fakebold: #fakebold[#lorem(5)] \
2  Bold: #text(weight: "bold", lorem(5)) \
3  Bold + Fakebold: #fakebold[#text(weight: "bold", lorem(5))]
```

> Fakebold: **Lorem ipsum dolor sit amet.**
> Bold: **Lorem ipsum dolor sit amet.**
> Bold + Fakebold: **Lorem ipsum dolor sit amet.**

`#fakebold[]` has a `base-weight` parameter that can be used to specify a certain weight as the base weight for fake bold. By default, or when `base-weight` is `none`, the base weight will be inherited from the above context.

```
1  Bold + Fakebold: #fakebold(base-weight: "bold")[#lorem(5)] \
2  #set text(weight: "bold")
3  Bold + Fakebold: #fakebold[#lorem(5)]
```

> Bold + Fakebold: **Lorem ipsum dolor sit amet.**
> **Bold + Fakebold: Lorem ipsum dolor sit amet.**

---

regex-fakebold

The `#regex-fakebold` is designed to be used in multilingual and multi-font scenarios. It allows the use of a RegExp string as the `reg-exp` parameter to match characters that will have the fake bold effect applied. It also accepts the `base-weight` parameter.

```
1  + RegExp `[a-k]`: #regex-fakebold(reg-exp: "[a-o]")[#lorem(5)]
2  + RegExp `\p{script=Han}`: #regex-fakebold(reg-exp: "\p{script=Han}")[衬衫的价格是 9
   磅 15 便士。] \
3  #set text(weight: "bold")
4  + RegExp `\p{script=Han}`: #regex-fakebold(reg-exp: "\p{script=Han}")[衬衫的价格是 9
   磅 15 便士。]
```

> 1. RegExp [a-k]: **Lorem ipsum dolor** sit **amet**.
> 2. RegExp \p{script=Han}: **衬衫的价格是** 9 **磅** 15 **便士。**
> 3. **RegExp \p{script=Han}: 衬衫的价格是 9 磅 15 便士。**

In Example #3, 9 and 15 are the real bold characters from the font file, while the other characters are simulated as "fake bold" based on the regular weight.

---

show-fakebold

In multilingual and multi-font scenarios, different languages often utilize their own fonts, but not all fonts contain the bold weight. It can be inconvenient to use #fakebold or #regex-fakebold each time we require strong or bold effects. Therefore, the #show-fakebold function is introduced for show rule.

The show-fakebold function shares the same parameters as regex-fakebold. By default, show-fakebold will apply the RegExp ".", which means all characters with the strong or weight: "bold" property will be fakebolded if the corresponding show rule has been set.

show text rule and show strong rule should be set seperately.

```
1  #show text: show-fakebold
2  Regular: #lorem(10) \
3  #text(weight: "bold")[Bold: #lorem(10)]
```

Regular: Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.
Bold: Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

Typically, the combination of bold + fakebold is not the desired effect. It is usually necessary to specify the RegExp to indicate which characters should utilize the fakebold effect.

```
1  #show strong: it => show-fakebold(reg-exp: "\p{script=Han}", it)
2  Regular: 我正在使用 Typst 排版。 \
3  Strong: *我正在使用 Typst 排版。*
```

Regular: 我正在使用 Typst 排版。
Strong: **我正在使用 Typst 排版。**

It also accepts the base-weight parameter.

---

cn-fakebold & show-cn-fakebold

cn-fakebold and show-cn-fakebold are encapsulations of the above regex-fakebold and show-fakebold, pre-configured for use with Chinese text. Please refer to the Chinese documentation for usage instructions.