

GNU Hackers Meeting 2020



Libtextstyle Recent and future work

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(GNU) Libtextstyle

- Easy way of styling of text sent to stdout
- The programmer defines styling classes
 - e.g. integer, comment, warning, errorand activates these classes for specific output operations.
- A style file (CSS) translates these styling classes to text attributes (color, font attributes, underlining).
- Currently part of GNU gettext.
Will be proposed as a GNU package.



Example

```
ostream_write_str (stream, "Hello ");

/* Associate the entire full name in CSS class 'name'. */
styled_ostream_begin_use_class (stream, "name");

ostream_write_str (stream, "Dr. ");
styled_ostream_begin_use_class (stream, "boy-name");
/* Start a hyperlink. */
styled_ostream_set_hyperlink (stream, "https://en.wikipedia.org/wiki/Linus_Pauling", NULL);
ostream_write_str (stream, "Linus");
styled_ostream_end_use_class (stream, "boy-name");
ostream_write_str (stream, " Pauling");
/* End the current hyperlink. */
styled_ostream_set_hyperlink (stream, NULL, NULL);

/* Terminate the name. */
styled_ostream_end_use_class (stream, "name");

ostream_write_str (stream, "!\n");
```

```
.name { text-decoration : underline; }
.boy-name { background-color : rgb(123,201,249); }
.girl-name { background-color : rgb(250,149,158); }
```

```
$ ./hello
Hello Dr. Linus Pauling!
```



Major features

- Text attributes are restored when the program is interrupted (Ctrl-C, Ctrl-Z).
- Users can create and use their own style files.
- Support for hyperlinks
 - connects a run of text with a URL
 - gnome-terminal \geq 3.26, KDE konsole
 - most useful with an `app: URL` protocol



Data pretty-printer



- Make structured data more readable by inserting white-space in specific places
- Controlled through a C API, that is orthogonal to the C API for styling classes