

Rationales for creating GtkSourceView 300

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Update: June 2022

Update: the GtkSourceView 300 project has been canceled, it is no longer necessary. Things have been resolved, and I will improve GtkSourceView 4 instead (that version targets GTK 3, which is still currently my focus¹).

Recently I've started the development of GtkSourceView 300. I expect that for a while the version number will be 299.x.y, but the goal is to release a 300 version. The “3” reflects the fact that it targets GTK 3. And 300 is to clearly distinguish it from the GNOME's versions of GtkSourceView (3, 4 and 5 currently), to have something distant enough. GtkSourceView 300 will be installable in parallel to the other versions of GtkSourceView.

The main reason is simply to continue the development where I've left it.

I've done a lot of work in the past to the “official” GtkSourceView repository, I was one of the co-maintainers, but then I stopped contributing because of stress/burnout.

Then the GtkSourceView project didn't evolve in a direction that I like, with different development priorities.

I don't want to bash the project, a lot of work has been done, including a port to GTK 4.

I will just list the priorities that I prefer to follow:

- Correctness first: quality, having as few bugs as possible. It means devoting more time to existing features, and developing fewer new features. It also means to test well the solution (unit tests, and interactive mini test programs).
- Simple code: it greatly helps the first item, correctness.
- Don't prioritize performances. Fix performance issues when it's really a problem.

A simple example of divergence

In the past, some unit tests located at `testsuite/test-language.c` passed, but it was by chance, the logic to test some of the GtkSourceLanguage API was wrong. Then an implementation detail changed in an underlying library (in GHashTable, part of GLib), which caused the mentioned unit tests to fail.

¹For the projects that I develop, GTK 4 is not yet under the radar.

In GNOME's version of GtkSourceView, the code of `testsuite/test-language.c` was modified in order to make the unit tests to pass again. But, although the unit tests pass, the logic was still wrong. It didn't test well the GtkSourceLanguage API.

On GtkSourceView 300's side, it's correctly fixed. I won't explain in all details why, you can look at the commits on both sides with a command like:

In GtkSourceView 300 (there are several commits):

```
git log -p a399d7d1880212b1f342253f93acd2b6b778cd18
```

Or:

```
git log -p testsuite/test-language.c
```

Is it an isolated problem?

No, I don't think so. The simple example above is not an isolated problem. It's more general, in my opinion.

But we are human beings, we make mistakes, we are not perfect, I acknowledge it. And in the open-source world, I've seen some projects with a far worse stability (outside of GNOME, to reassure you)².

The URLs

- GtkSourceView 300: <https://gitlab.gnome.org/swilmet/gtksourceview>
- GNOME's GtkSourceView: <https://gitlab.gnome.org/GNOME/gtksourceview>

²Also in the research field, some researchers are convinced that other of their peers work too fast, make too many mistakes and their results are not reproducible. Because of deadlines to publish papers and a constant pressure to publish more.