

Carleton

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Many thanks to SIGCSE for the Special Projects Grant for our Git tool, Elegit. We used the funding from this grant to pay for a student to work during the summer of 2016 doing development on the tool, and as a result we were able to make significant progress. Elegit is now available at elegit.org for download and use by the community.

Here are some of the specific tasks we accomplished this summer.

New user interface. In the prototype that we showed off in our proposal, we had a user interface that focused on two source code trees: a local and a remote. Through user and developer testing this summer, we discovered (to our surprise!) that a single combined tree, annotated correctly, makes significantly more sense. We did significant redevelopment of the interface to represent this, while continuing to retain the idea that data flows between a local machine and a remote server. We believe that Elegit is a much better tool as a result, and better helps students understand how Git actually works.

User study. We watched a number of students try out Elegit, and we learned about some aspects that work well as well as others that need improvement.

Robustness. Before the summer of 2016, Elegit could best be described as a working prototype. It is now much more reliable and quite usable.

Speed. Some aspects of Elegit were painfully slow to use, and we did some significant re-engineering to address this. It is notably faster in a number of ways.

Looking forward:

We are happy to report that our proposal to demonstrate Elegit was accepted as a demo for SIGCSE 2017, and we will be showing it off in Seattle.

We plan to continue working intensively on Elegit: there's still much to do. One set of features we mentioned in our proposal was tools to help instructors organize Git usage within a course. We're still very much committed to doing that, though that is still in the queue of things to come. We also are aware that we need to provide a set of tools to help people learn how to use Elegit, such as help screens, on-boarding, or other related structures. Those are up next in our continued development process.

Thanks again to SIGCSE for this funding. While we have much more work to do, this funding made all the difference for us to be able to deliver a usable product for the community in the time frame that we have.

