

Project Lightning

- Quick Start Guide -

What it is

Project Lightning tries to speed up your daily computer interaction when working with an eye tracker by analysing your mouse and keyboard input, your eye movements and the screen's content. The current release features two enhancements: smart text cursor positioning and mouse warping.

While mouse warping (moving the mouse to the location of gaze when coherent input is detected) has basically been around for some time, smart text cursors are something you might want to test more closely, especially when you type a lot. Its principle idea works like this:

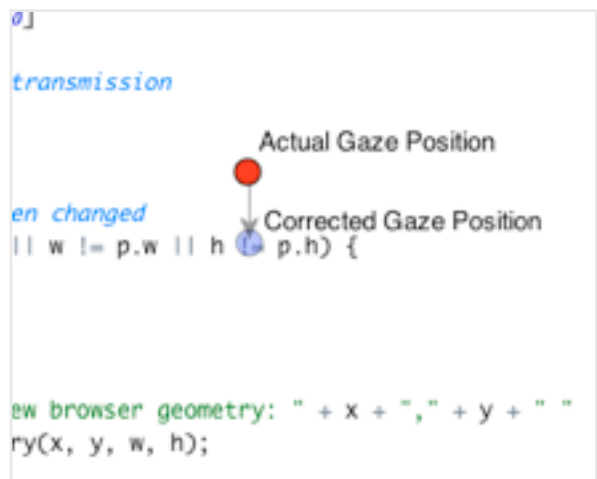
Smart Text Cursors

When editing, positioning the text cursor usually takes plenty of time and effort (in terms of hand movement and fine motor control). Time also increases the further away the new location is.

If you have your hands on the keyboard, you either have to grab the mouse, move and steer, and take your hands back to the keyboard again. If you don't grab the mouse then often you need to navigate around with the arrow keys extensively.

This is where Lightning kicks in.

When you press the navigation hotkey (e.g., CTRL-ARROWKEY), the software considers your current gaze location on the screen, but it does not take that position directly. Instead, the content of the screen around the current location is scanned for salient information, especially textual content. The position of the best match is then returned and taken instead.



This allows for fast and precise positioning, the time to reposition becomes independent of the distance to the new position, and even in case a wrong line or position was matched, the intended location is usually only a very few key-presses away.

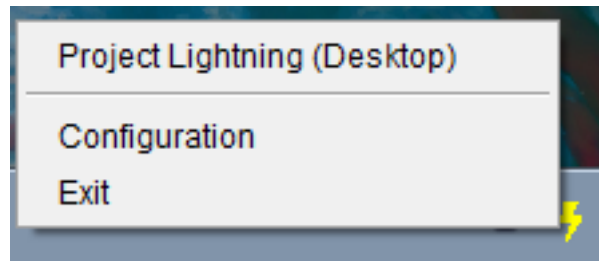
But the best thing is, it works with any text in any application, on your whole desktop. Let it be Word, Mail or Eclipse. Just try it.

Installation

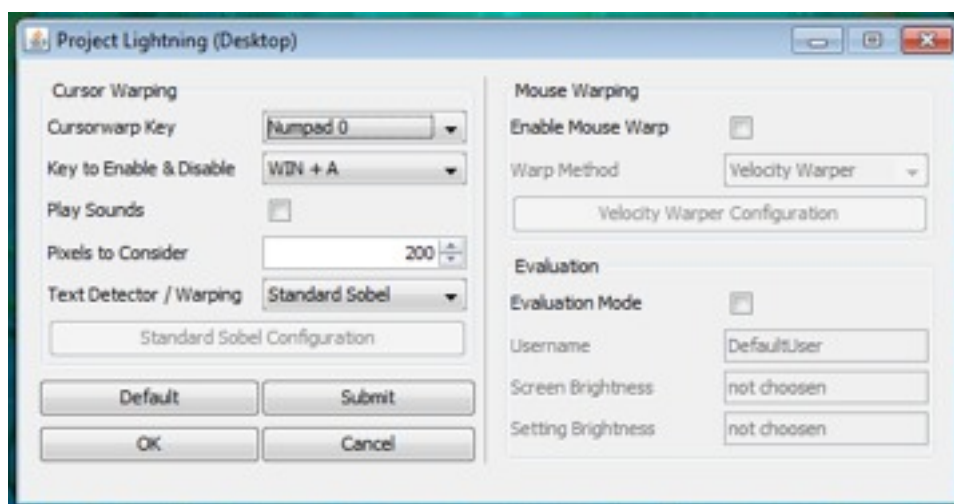
1. Make sure you configured and started the „Tracking Server“. The following icon should appear in your tray, the traffic light should be green, your eye tracker should be on.



2. Start Project Lightning. After some time you should see another icon in the tray (a, well, small yellow lightning). Right clicking the icon allows you to configure it.



3. Set your preferred parameters. Most likely you want to change the warp key. Also note that mouse warping is disabled by default (still a bit experimental). Note that not every key mixes well with every application. For example, if you mostly work in Eclipse, you wouldn't want to use a combo that is based on CTRL.



4. Edit some text, look at another location, press the warp key and enjoy :-).

Feedback

We would really like to hear what you think. Please don't hesitate to send whatever feedback you would like to give to: lightning@text20.net