Re: What Software to Type Math In?

Source: http://sci.tech−archive.net/Archive/sci.math/2006−02/msg01195.html

- *From*: hrubin@xxxxxxxxxxxxxxxxxxx (Herman Rubin)

- *Date*: 7 Feb 2006 13:36:57 −0500

In article <44plshF3d0f8U1@xxxxxxxxxxxxxx>,
Marc Olschok <invalid@xxxxxxxxxxx> wrote:

> Herman Rubin <hrubin@xxxxxxxxxxxxxxxxxxx> wrote:
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> > In article <ds3l1c$4at$1@xxxxxxxxxxxxxxxxxxxx>, Justin
> > <no@xxxxxxxx> wrote:
> >
> > > LuckyOne <gwlucky@xxxxxxxxxx> wrote:
> > >
> > > : Did LaTex put something in everyone's coffee? You folks
> > > remind me of
> > > : religious converts who constantly have to convince
> > > themselves they like
> > > : their new religion. You protest and protect far too much.
> > > Use what
> > > : you like and I'll get on with my life never having had a
> > > problem with
> > > : the equation editor I have.
> > >
> > > The difference being that religions are all relative whereas
> > > with
> > > typesetting there are some tangible measurements.
> > >
> > > Latex is more powerful and more flexible than any other
> > > typesetting method
> > > out there. That's not to say that others won't fit the bill in
> > > small
> > > applications or if your needs are fairly limited, but if you
> > > need the
> > > maximum amount of kick it's Latex or bust, basically. This is
> > > why it's
> > > grown to be the default in mathematics, and this is what the

> original
> poster was asking anyway.

> > The problem is that Latex, and the others, are typeSETTIMG
> > methods, and this is always complicated. Very often, one
> > wants typing methods which do not necessarily produce good
> > looking output, but produce readable output quickly, and
> > without using horrible notational strings. Typing 100
> > characters when 10 will do is not a good idea. I frequently
> > type mathematics without writing it first, and TeX, which I
> > have used, and its derivative Latex, which I have not, just
> > require too much window−dressing.

> I wonder, what an alternative "typing method" should be and which
> "horrible notational strings" you have met. Alternating between keyboard and
> mouse−driven menues does not strike me as particular timesaving alternative.

On this, I will agree; in fact, I think the mouse should be
replaced by a "keyboard mouse" instead.

> Of course, I do not know what you use now; you may well feel that none of
> the currently available systems meets your needs.

I use TeX now. The only system I have seen which came at all
close to meeting my needs was a multifont system with fixed
width characters, and with the property that the user could
replace fonts; also, the user could even modify characters in
fonts. It did not have enough, but then at that time PCs with
640 kbytes were "large".

> The more fundamental point is, to what extent you can take advantage of the
> division of labour in the process of typesetting your document.

> If there is somebody else available who can take care of the typesetting
> aspect of your document, you may as well say "I just want to type it quickly,
> the _final_appearance_ of the document is not _my_ business". And of course
> this makes sense. The same applies, if the final appearance does not matter
> as such, e.g. in a personal not for yourself.
> (even in this case, I would feel _very_ uncomfortable with a format that
> is not plain text and where readability depends on the existence of a
> particular version of a particular software)

What is "plain text"? To me, mixing Latin, Greek, and
Cyrillic characters in a text is "plain text". Put in
subscripts and superscripts with full or reduced size
and crude "half−spacing", and recognizable mathematical
symbols, and you have LOTS of power. I want to be able
to put the characters on the screen exactly where I want
them, and I want it to be read by a fixed−width "editor"
which has the relevant fonts. I would settle for a
"super−ASCII" with the "gazillions" of characters.

The old Apples has a way to put the typewriter decoding for
a particular font in a corner of the screen. One did not
have to mouse the character in, but knew how to type it.

> If instead, the final appearance matters and can not be delegated to somebody
> else, one may as well start right away with the real thing. As far as I
> could see, this is to be the situation of the OP.

In many cases, fixed width typing is much easier to read
than typeset material.

> > Another advantage of at typewriter rather than a typesetter
> > is that the author has easy control of line breaks. Also,
> > fixed width fonts are necessary for easy communication.
> > This goes completely against the typesetting mentality.

> Depending on the final format it might also go completely against
> the idea of readability. Nobody suggested that you typeset your e−mail.

I still use Berkeley mail for sending email or responding.
The email with this newsreader is like that as well. Email
sent by many of the fancier mailers lacks line breaks, and
can be difficult to handle.

> In fact, easy documentation depends on plain text format.
> This is one of the reasons for using TeX and LaTeX, even if all the
> fine points of typesetting are ignored.

I am asking for a plain text format, with a huge character
set. This is feasible. TeX and LaTeX use plain text
CHARACTERS, but not a plain text FORMAT.

> But of course, I have no interest in missionising anybody. You will know
> much better than I, what you want.
>
> Marc

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This address is for information only. I do not claim that these views
are those of the Statistics Department or of Purdue University.
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