E-Mails concerning the diagramm issue with prof:  
  
**ME TO PROF**

Good evening,

[…]

I completely finished the diagramm according to the document you put up *[into an internet platform for the course]* (Except for the zoom in, zoom out, reset and Autoscale buttons). I have placed the default zoom value in the frmEinstellungen and set it to 100, however.

Now the problem is that the graph doesn’t show dots *[Cillian: hope you know what is meant, “Punkte” means dots, “Linie” means line. One has the option to let the graph show the sinus curves with dots or as a line. The line builds up on the dots of course, as it basicly is a connection between them]*, and then of course, a line/lines are impossible to be shown anyways.

I would be extremely grateful if you could help me with this matter yet, because I do not know where the fault is. The attached screenshots are titled after the Forms, numbered in order.

[…]

Best Regards

Joshua Maier

**PROFS ANSWER**

Hello Mr. Maier,

in the Screen Shots of your programs I saw no abnormalities that would lead to a direct solution to your problem. I noticed, or recommendation of mine would be:

1) […]

2.) The frmStart lacks the supply of the variable timercount (timercount = timercount + 1 in front of the three differential equations to calculate acceleration, velocity and displacement. Perhaps it is helpful to program the measured-values program *[form]*; so it may be possible to identify which values ​​are calculated and should be translated into the diagram.

3.) In the frmDiagramm you should *[ausgeben/herausgeben; please translate both at dict.cc for example and see which possible word of them all makes most sense]* the zoom factor. Again, as in 2.), that might show, what is being calculated.

4.) If the program does not do, what it should do, debugging (with the use of breakpoints *[holding points?]* to check the state of the relevant variables, etc.) is a good help. Debugging can sometimes be quite bulky in handling, so I recommend to first try points 2.) and 3.).

Best Regards  
Rainer Heiligenstadt

Alright I think the mails sum up the problem with the diagram fairly well. About the measured-values form, it’s supposed to show acceleration, speed, amplitude and current zoom in %. So basically everything possible, if I missed something, please add. Really, his only comment, or direction, about that was the we should create a measured values form and that it would be our own task.  
Also I will send you a program of a classmate of mine, which is mostly working. His Sinus curves don’t scale to the graph and go through roof and ground, which is wrong of course, but it might give you an idea and maybe hints if you should need some and are able to extract something from all the German. Because as you said, you can read (and speak) math fluently.

Concerning the all of the zoom buttons: they still need doing as well, shouldn’t be a big problem though, I think.  
  
What also needs to be added are friction values (no friction, very little, little, moderate/normal, sort of strong, strong). Here is what he wrote about that:

* Combo box chkReibung (Reibung=friction) in frmEinstellungen
* Programming of friction values *[adding them to the code]*, defining a default value *[none]*; *[linear progression of 0.5]*
* Assigning values leading to reduction of acceleration accordingly;
* *[WinkelSpeed \* 0.1 \* Reibung is a hint that he gave us]*