

DIARY

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Date/Day/Time

1. 10/10/2014 , Friday 2.15 PM-3.30 PM

This was our first meeting in which we finalized and tried to resolve our confusions regarding the project. We discussed the possible basic structures of the program and shared views on what we can do about it, what features it can have and what are our limitations. I suggested about making various functions for each of the basic polynomials like a function for square root, trigonometric, logarithmic etc. It was decided together that each of the respective functions would compute the values of y corresponding to the values of x and these values (x,y) would be sent to the function which would plot the function. We also discussed about the idea of using a two dimensional array for the values of (x,y) which we haven't finalized yet though.

2. 14/10/2014, Tuesday 8.10 PM-8-50 PM

The big challenge we faced even before starting our program was how should we make the computer understand the string of the function given by the user. For this we came together this day to meet our TA who told us about parsing and the files we can use for it in our program. There was some confusion about a file `matheval` which we later came to know that it doesn't work on C++. We also decided to first implement it to plot the graph of a very basic function like the equation of a line. We were also given a little idea of what structures are in C++.

3. 18/10/2014, Saturday

8.00 PM-8.30 PM

I went to our TA to discuss about the library `expirt.tk` which is used for parsing. He told me more about it and another file `fparser` which does the same work. For the graphics part he told me about two files `Ezwindows` and `simplecpp`. I have still not checked `Ezwindows` though. Our TA also guided me to understand the format of the SRS.

I met Jaykant Mandal, my team member at 8.45 PM to discuss about the above mentioned files. We decided to immediately install Ubuntu on our systems plus learn and try all the files we will be using.

1.00 AM-5.30 AM

We tried to run the `fparser` file successfully. We tried it for various functions like sine and log giving x various values with different intervals. We found it very interesting. Although using `fparser` didn't consume much of the time but it was quite a job using `simplecpp` in Ubuntu. Although we consumed quite a time but we finally learnt something about the `fparser` file as well about `simplecpp`.

4. 30/10/2014

9 PM-10PM

Read material on vectors and classes but couldn't find it much of use in the program.

5. 22/10/2014

Thought about the various ideas which could be used so as to bring statistics alongwith graph. Wrote the basic functions of finding mean, variance, covariance, etc of a random variable. Also developed a function to calculate KarlPearsons Coefficient of Correlation.

6.19/11/2014

7.30-9 PM

Helped my group in understanding how statistics can be brought along with graphics. Suggested the idea of plotting Normal, Chi Sq distns, etc on the graph. Also wrote the function for finding the equation of line of regression of Y on X and vice versa. Discussed with them how would they work on the graphics part and tried to understand the working of simplecpp.

7. 22/11/2014

Experimented with different while loops and do while loops so as to create a user friendly program which doesnt go off after one output i.e to have an infinite loop which keeps asking for input and various features to be entered bu user untill he himself wills to exit the program.

Also used the concept of structures, pointers and dynamic memory allocation so as to pass the parameters of the regression line

8. 24/11/2014

Updated the SRS alongwith other members, integrated my own statistical feature program with the graphical program and tried to fix all the bugs along with others. Discussed in detail about the anomilies of our project. Also called the TA to discuss a major problem about the termination of the program abruptly without any reason. It was an initialization problem most probably, it solved somehow but not to the satisfaction. But last but not the least we started from zero and ended up with some 800 lines of an interesting program with a rigorous and cooperative team work in which the work load was divided very equally. The project has certain limitations but still it was a good medium to understand how real programming works.