

Project Diary

Project name – Mash (Mathematical shell)

Name – Animesh Patel

Group – 16

Slot – 11

Team no. – 11-16-T3

Meeting - 1:

Date: 09-10-2014

Venue : Hostel-4

Duration: 2 hrs

- Everyone put their Project Idea and 1 among them is selected for the Project to be done and that was shell. Abhishek gave us the brief introduction about the shell since the Idea of shell is of Abhishek's, and Project name has been finalised and that was "Mash".
- We discussed about what the other things we can include in shell and then I come up with the idea of making a mathematical shell. This will do mathematical computation and operation also.
- Than it was decided that the mathematical codes will be written by me and Neeran.

Meeting – 2:

Date: 16-10-2014

Venue: OSL

Duration: 2 hrs

- Neeran have written the code of basic computation like addition, multiplication, subtraction and division. I want to add some more features like differentiation and integration in it but I don't know how to make computer read the polynomial and other functions so in

lab discussion I asked to TA how we can do that, than I came to know about the parser.in the whole discussion I understood the parser only.

Meeting-3:

Date: 17-10-2014

Venue: Hostel 4

Duration: 2hrs

- In 3rd meeting we have discussed about the complete main function's design.
- I have written the basic code of differentiation at a point but it has many errors so Abhishek helped me to correct it.
- We have discussed about including password in the shell.
- It was decided that I will write the code of password.

Meeting-4:

Date: 30-10-2014

Venue: OSL

Duration: 2hrs

- In this meeting we decided that Niran will write code for password.
- Now I have to concentrate only on mathematical functions.
- I have completed my code of differentiation and a big thanks to fparser. Since without that it would have not been possible.
I just used first principle of Differentiation and work has done.
- Previously I have written the code for Differentiation but it also give the approximate value for non differentiable function at given point.
- But now it prints error on such situation.

Meeting-5:

Date: 06-11-2014

Venue: OSL

Duration: 2hrs

- I have written the code for integration by using **Trapezoidal rule** and it's working properly.
- I also wrote the code for finding one root of any function given the approximate root using **Newton Raphson method**.
- I gave these codes to Abhishek.

Meeting-6:

Date: 22-11-2014

Venue: Hostel-4

Duration: 3hrs

- I have written the code for value of the function at any point and written a code for GCD & LCM of 'n' numbers.
- I have submitted these codes to Abhishek.
- We discussed about the remaining Documentation.