CS101 GROUP DIARY

Group no. 8,Slot : 6B

HARIT KUMAR-14B030022
PANKAJ GANGWAR-14I320002
AMRITESH SHARMA-14D260012
SIDDHARTH KSHATRIYA-145060002

Meeting no: 1
Date : 10th Oct 2014
Time: 7:30 pm to 8:40pm
Duration: 1Hr & 10 mins
Venue : Hostel 5 , Computer Room
Everyone Present

- A Rough idea about the software was pitched by every team member.
- There was a big discussion on the use of graphics and the outlook of the calculator.
- Team decided to feature various advanced functions in the software like Matrices operations, Calculus: Integrator and Differentiator, 2D Graph representation(if time permits).
-All team members decided to research on the various functions and figure out the algorithm and discuss it in the next meet.

Meeting no: 2
Date: 12th Oct 2014
Time: 9:00pm to 10:20pm
Dur ation: 1 hr 20 mins
Venue : Hostel 5 , Computer Room
Everyone Present

- Algorithm of Matrices were discussed by pankaj. He explained the addition, subtraction, multiplication, and inverse of the matrices.
- Algorithm for Determinants were also discussed.
- The further algorithms were decided to be discussed in the later meetings.
-Harit and Amritesh provided some different functions which will be taken into consideration
-Harit made a suggestion that each team member should be given equal work load.

Meet no: 3
Date: 14th Oct 2014
Time: 8:30pm to 10:00pm
Dur ation: 1 hr 30 mins
Venue : OSL
Everyone Present

- Discussion about the working of the calculator was being thought. Our TA Vaibhav Tripathi suggessted that we should use Infix to postfix algorithm which helps to take the input expression as a string and converts it in a postfix string which obeys BODMAS precedence.
- Vaibhav taught all of us how the infix to postfix algorithm works.
- It was finalized that we should use this algorithm for the arithmetic input operations for our software which we hoped will work best.

Meet 4:
Date: 16th Oct 2014
Time: 9:00pm to 11:00pm
Dur ation: 2hrs
Venue : Hostel 5 , Computer Room
Everyone Present

- Pankaj presented his code for matrices. There were a few bugs but were resolved in a few attempts and the program was running successfully.
- Siddharth,Harit,Amritesh spoke about the SRS document .
- Amritesh and Harit had worked on the algorithm for quadratic equation and presented the code. The code only worked for real roots.
- We all discussed and try to made the program work for real as well as complex roots.
- Team also decided to work on graphics if time permits.

Meet 5:
Date: 17th Oct 2014
Time: 9:00pm to 12:00pm
Dur ation: 3hrs
Venue : Hostel 5 , Computer Room
Everyone Present

- Discussed about the structure of the calculator.
- Discussed on Classes and objects and structures.
- Siddharth presented the code for infix to postfix algorithm. He made it applying classes. It used <cctype>,<cstring> library. The code worked fine but it was giving wrong outputs for expression having decimal points.
- Pankaj wrote a code for Definite Intregration and Differentiation by using Numerical Methods. It worked for some particular functions like trigonometric,, exponential, algebraic, logarithmic,etc

Meet 6:
Date: 18th Oct 2014
Time: 10:00pm to 3:00pm
Dur ation: 5hrs
Venue : Hostel 5 , Computer Room
Everyone Present

- Finalized SRS document: Harit, Amritesh,Siddharth had wrote the SRS doc.We spent time in making the Diagram(flow chart), and finalizing the key(buttons) list and the structure of the calculator.
- The code for infix to postfix for decimal value was presented again and the problem of decimal point was brought to notice. After much discussion, the problem was resolved by

adding few more conditions in the code.
- We wrote a code for evaluation of the postfix string. It worked succesfully in a few tries. It worked only for arithmetic expressions.
-It is a challenge for us to make the code work for other functions as well, so that it works like a normal calculator accepting any function in the input string and evaluating it simultaneously.
- Amritesh and Harit discussed about the challenges about using the graphics. They talked about simple cpp, gtk and Qt. It was decided that we will work on Qt.