Report of the Workshop on LaTeX

organized by

Open Source Technologies Clubs of Gujarat Technological University &

GTU PG SCHOOL

at

GTU PG SCHOOL, BISAG, Gandhinagar

on

21st March-2015

With the guidance of our honorable Vice Chancellor Dr. Akshai Aggrawal and our research advisor, Dr. P. K. Srivastava, the Open Source Technologies Club of Gujarat Technological University (GTU OSTC) and GTU PG SCHOOL organized a workshop on LaTeX on 21st March-2015. LaTeX is a document preparation system and markup language. The Resource Persons for the workshop were Prof. Vijay Ukani from Nirma University and Prof. Ishaq Sheikh from GCET, Vallabh Vidyanagar. GCET is affiliated with GTU.

The workshop was initiated by welcoming the experts. Dr. P. K. Srivastava delivered the keynote address and explained the significance of LATEX. He also give some advantages of LATEX in preparation of technical and scientific documentation.

The first session on LaTeX was taken by Prof. Vijay Ukani. The topics during this session were: 'What is TEX?', 'What is LaTeX?', 'Why LaTeX?' and 'Limitations of LaTeX'. He also explained basics of LaTeX including basic commands, document structure, running and viewing LaTeX.

What is LATEX?

- Pronounced as Lah-tek, or Lay-tek
- A typesetting program, not a word-processor
- Macros of TeX (Donald E. Knuth)
- Designed for producing beautiful Books, Thesis, Papers, Articles...
- De facto standard for writing academic papers

Limitations of LATEX.

- LaTeX is not WYSIWYG you have to compile your files before you can see the changes. Rather it is WYMIWYG (What You Mean is What You Get)
- If you are trying to produce a document for which there is no pre-defined layout, it requires a fair bit of knowledge to design a new layout
- You cannot easily exchange LaTeX files with colleagues who are unfamiliar with it
- Inflexible formatting (difficult to change position of figures); Requires compilation

He compared Microsoft Word and LaTeX. Then he explained the LaTeX Compilers & Editor.
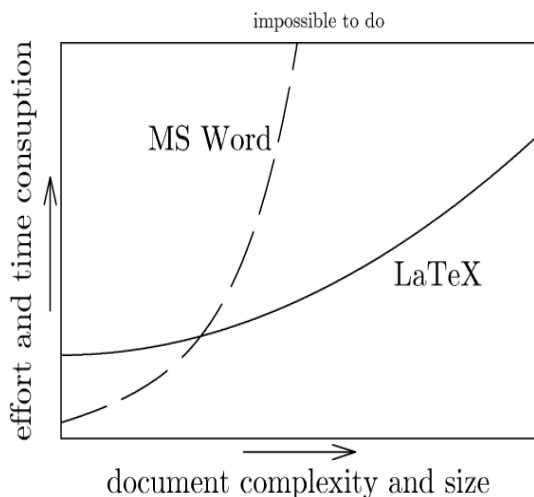
Expert Prof. Vijay Ukani Delivering his lecture.

Prof. Vijay Ukani conducted hands-on learning exercises on controlling appearance of LaTeX like numbering list, bullet point list, description list, basic text formatting (fonts, symbols, quotations, footnotes). He explained paragraphs indentation & new lines and changing font style & size. He also explained the following:

- Including figures
- Adding Tables
- Adding basic math building blocks & equations

After completion of the hands-on session, he explained common mistakes done by LaTeX users.

The second session was by Prof. Ishaq Sheikh. He explained Beamer for LaTeX, where Beamer is a LaTeX class for creating presentations that are held using a projector, but it can also be used to create transparency slides. A Beamer presentation is created like any other LaTeX document: It has a preamble and a body, the body contains \sections and \subsections, the different slides (called frames in Beamer) are put in environments, they are structured using itemize and enumerate environments, and so on.


Expert Prof. Ishaq Sheikh Delivering his lecture.

Then he explained how to use beamer and the important features of beamer as follows:

- You can use Beamer both with pdflatex and latex+dvips.
- You can easily create overlays and dynamic effects.
- Themes allow you to change the appearance of your presentation.
- The themes are designed to be usable in practice, they are not just for show. You will not find such nonsense as a green body text on a picture of a green meadow.
- The layout, the colors, and the fonts used in a presentation can easily be changed globally, but you still also have control over the most minute detail.
- A special style file allows you to use the LaTeX source of a presentation directly in other LaTeX classes like article or book. This makes it easy to create presentations out of lecture notes or lecture notes out of presentations.
- The final output is typically a PDF file. Viewer applications for this format exist for virtually every platform.

The workshop ended by presenting a vote of thanks to experts, participants and students of the GTU PG School for their valuable support.
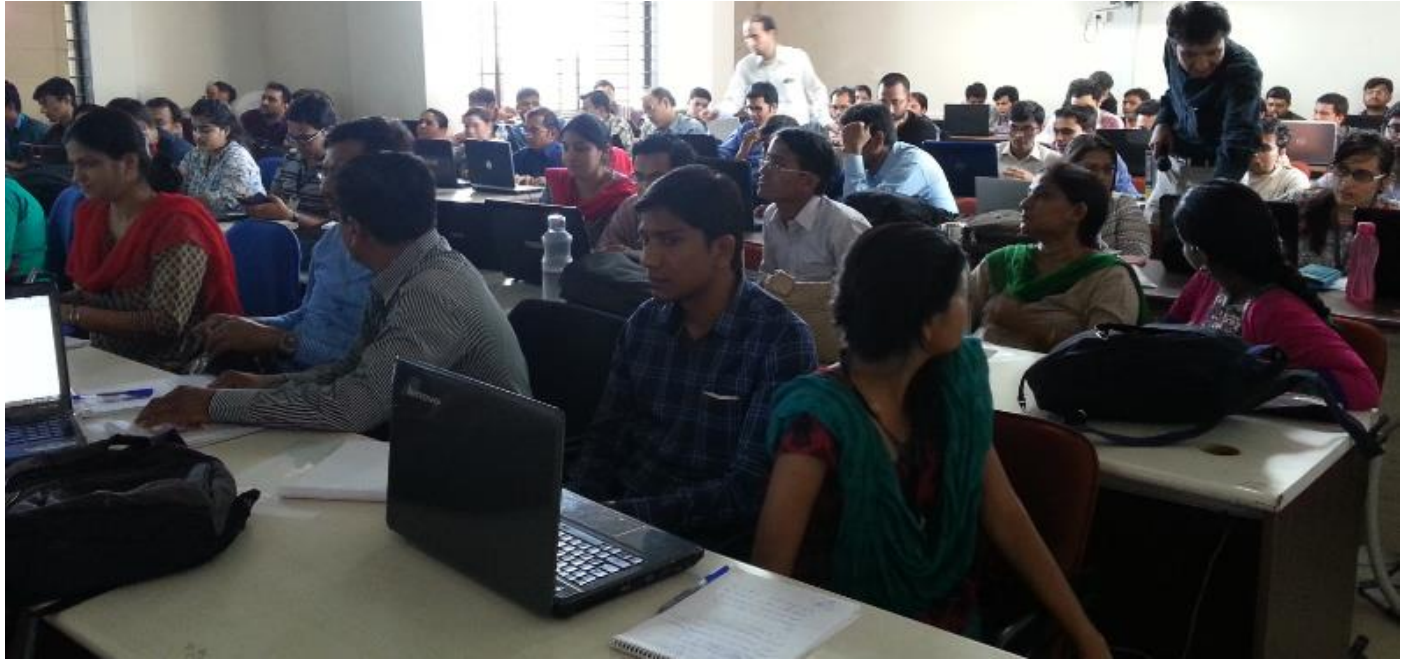
Expert solving queries of participant whole hands on session
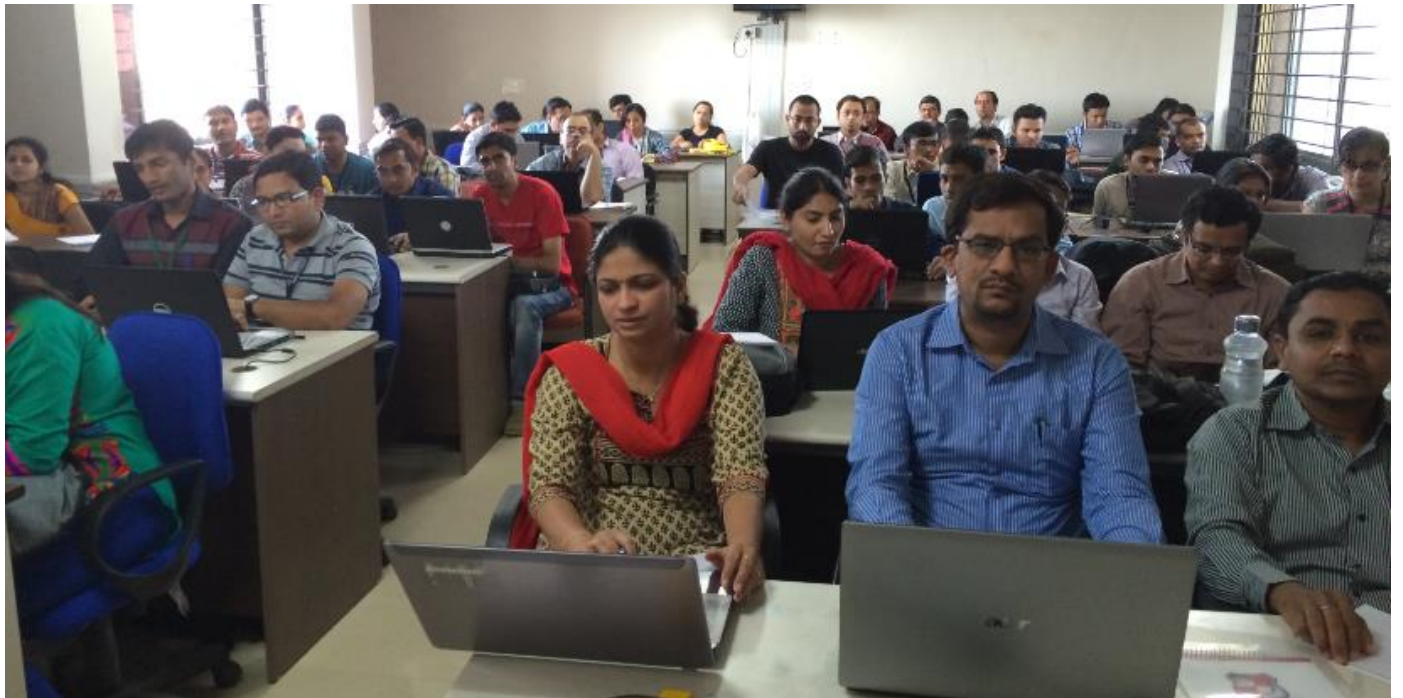
Participants doing hands on in their systems

Participants Group Photo after completion of Workshop

Legend:
- ■ Strongly in Favor
- ■ Moderately in Favor

Categories:
- Workshop Content
- Expectation Satisfied
- Practical Coverage
- Tool /Kits/ Software Demonstration
- Expert's knowledge on subject
- Experts ability to handle queries
- Expert's communication skill
- Encouragement of class participation
- Overall Rating
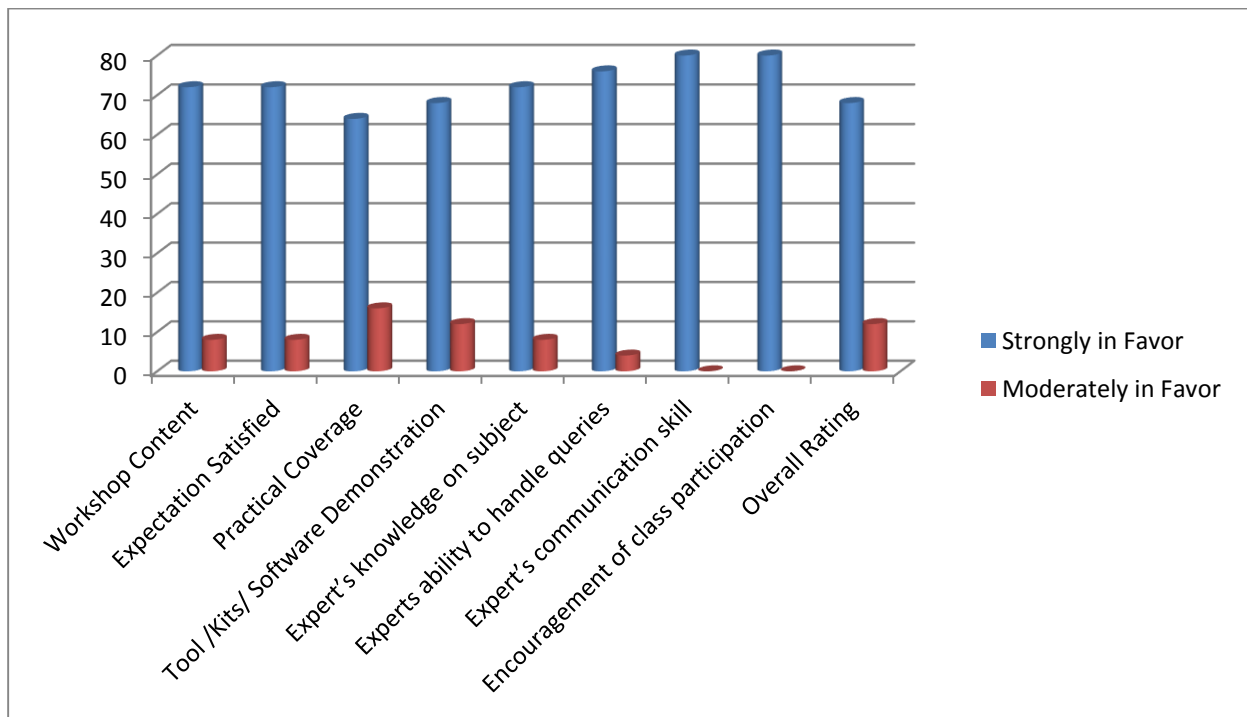
Workshop Feedback Analysis from Participants

List of Participants:

No.	Participants Name	No.	Participants Name
1	Prof. Paresh Ravindra Modha	39	Prof. Nirav Raghajibhai Patel
2	Mr. Ronakkumar Nareshbhai Patel	40	Prof. Kavita Rutul Patel
3	Mr. Krishnarajsinh Ajaykumar Jadav	41	Mr. Jayeshkumar Harishbhai Chauhan
4	Mr. Nirmal Ramanbhai Parmar	42	Mr. Nayankumar Rameshbhai Patel
5	Prof. Ketan Bharat Rathod	43	Mr. Bhupeshbhai Khodabhai Katariya
6	Prof. Saurabh A Shah	44	Ms. Kadiya Vijeshree Vinodkumar
7	Ms. Parul Hareshbhai Panchal	45	Mr. Parth Bhadreshbhai Panchal
8	Ms. Kaushika Dahyabhai Patel	46	Prof. Darshan Bhupeshbhai Patel
9	Dr. Sandip Rajnikant Unadkat	47	Prof. Bela Anall Shah
10	Ms. Ami Maheshbhai Mistry	48	Prof. Bhargav Parixitray Majmundar
11	Ms. Vishwa Parikshit Vaghela	49	Ms. Hina Devshibhai Khuman
12	Ms. Kinjal Dharmendrasinh Parmar	50	Mr. Mandip Rohitkumar Patel
13	Ms. Lipi Maheshbhai Shah	51	Tarun B. Patel
14	Mr. Viral Hareshbhai Borisagar	52	Bhavik J. Patel
15	Prof. Hardik P Jagad	53	Divyesh T. Patel
16	Mr. Maulikkumar Jagdishchandra Bhensdadiya	54	Rajendra T. Patel
17	Mr. Ileshbhai Dineshbhai Gamit	55	Brahmbhatt Pritesh m.
18	Mr. Abdul Mohmadarif Kachwala	56	Bipin Vyas
19	Mr. Dipak Babubhai Ankoliya	57	Disha A. Shah
20	Mr. Ambrish B. Nasit	58	Rakesh B. Shah
21	Mr. Vishalkumar Girishbhai Barot	59	Swati D. Chudhari
22	Ms. Ankita Mohandas Thadani	60	Shah Hely S.
23	Ms. Jinal D Parmar	61	Bhavesh B. Rana
24	Ms. Viral V Jethava	62	Bhavik B. Jethi
25	Mr. Jayesh N Diwan	63	Vatsal M. Bhavsar
26	Prof. Rutul Anilkumar Patel	64	N. D. Mehta
27	Mr. Shah Priyank Kanaiyalal	65	Jignesh B. Pujara
28	Prof. Tushar M Patel	66	Rupan R. Patel
29	Mr. Mehul Pravinchandra Barot	67	Parita R. Patel
30	Mr. Manojbhai Ramanbhai Patel	68	Nikita A. Desai
31	Ms. Rathod Shruti Raghubhai	69	Vijay P. Kukadia
32	Ms. Pratiksha Deepak Mandavia	70	Pooja Thakkar
33	Dr. Manjul Kumar Bishambharsingh	71	Kamesh R. Raval
34	Mr. Chirag Karasanbhai Patel	72	Yash Patil
35	Mr. Sagar K Jasani	73	Mazin Mohamed
36	Prof. Mary Grace Shajan	74	Phan Thai Sihn
37	Mr. Pravin Kumar Bhikhabhai Prajapati	75	Rajesh C. Malan
38	Prof. Mahesh Ashokbhai Yeolekar		

---Report prepared by- Prof Darshan Patel