An Introduction to LaTeX

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What is LaTeX?

LaTeX is a document preparation typesetting system that uses markup tags to create structure within a document.

LaTeX internally uses TeX is its typesetting engine and supports use of various packages.

A Package named "BEAMER" was used to create this presentation.

Features of LaTeX

LaTeX is primarily known for its rich set of features that allow you to format text in specials ways to create objects such as ...

- Blocks
- Tables
- Formulas
- Theorems
- Bullets
- Numbered Bullets
- Figures

Blocks

Block Syntax

\begin {block} {Block Name}

Text Within Block

\end {block}

Block Usage

Blocks can be used to place emphases on a certain formula or point

Pythagorean Theorem

$$A^2 + B^2 = C^2$$

Tables

Here is an example of a table in LaTeX

Day1	Day2	Day3	Day4
100F	91F	88F	86F
87F	83F	84F	83F
80F	77F	75F	79F

Table: Temperatures Throughout The Day

Formulas

LaTeX allows you to write simple, yet elegant formulas

Theorem (Albert Einsteins Famous Formula)

$E = mc^2$

How To Add Theorems

Theorems allow for longer formulas and text blocks, even allowing native TeX code to be represented!

This verbatim box allows us to see the code used to create the previous Theorem slide

Example (Theorem Slide Code)

```
\begin{frame}
\frametitle{Theorem}
\begin{theorem}[Albert Einsteins Famous Formula]
$E = mc^2$
\end{theorem}
\end{frame}
```

Bullets

Inserting bullets in LaTeX is easy.

Bullet Code

```
\begin{itemize}
      \item First Item
      \item Second Item
\end{itemize}
```

Example (Bullet)

- First Item
- Second Item

Numbered Bullets

Inserting numbered bullets in LaTeX uses similar syntax as bullets.

Numbered Bullet Code

```
\begin{enumerate}
    \item First Item
    \item Second Item
\end{enumerate}
```

Example (Numbered Bullet)

1. First Item

2. Second Item

Figures

You can insert figures into LaTeX

Inserting Figure Code

\begin{figure}
    centering
    includegraphics {name of the figure file}
    caption{Put the caption in here}
\end{figure}

Example (Figure)

fig.png . `Sample fig.png`

Figure: This is a sample figure