



## Online Workshop on

# The Magic of $\text{\LaTeX}$ : Using Overleaf Part(1)



**By**  
**Osama Mohamed Taha**

**Assistant lecture of Mathematics Dep.**  
**Faculty of Science, Sohag University.**

July 25, 2023







"Take the first step towards mastering L<sup>A</sup>T<sub>E</sub>X and elevate your document creation skills to new heights!"

Do you get frustrated trying to format mathematical equations for papers and thesis/dissertation chapters? Do you wish you could focus more on your writing and less on formatting? Then this workshop is for you! Learn how to use Overleaf, a free online tool for L<sup>A</sup>T<sub>E</sub>X formatting, to create documents that look exactly as you want them to look.

# Purpose of this Workshop

# Purpose of this Workshop

This workshop is a general overview of a document preparation system L<sup>A</sup>T<sub>E</sub>X . L<sup>A</sup>T<sub>E</sub>X is a high-quality typesetting system; it includes features designed for the production of technical and scientific documentation. It covers the topics such as file types, latex editor, how to use latex, symbols, lists, fonts, table,format, etc.

# Learning Objectives

## 1 An Overview of L<sup>A</sup>T<sub>E</sub>X

# Learning Objectives

- 1 An Overview of L<sup>A</sup>T<sub>E</sub>X
  - What is L<sup>A</sup>T<sub>E</sub>X ?



# Learning Objectives

- 1 An Overview of L<sup>A</sup>T<sub>E</sub>X
  - What is L<sup>A</sup>T<sub>E</sub>X ?
  - Why L<sup>A</sup>T<sub>E</sub>X ?

# Learning Objectives

- 1 An Overview of L<sup>A</sup>T<sub>E</sub>X
  - What is L<sup>A</sup>T<sub>E</sub>X ?
  - Why L<sup>A</sup>T<sub>E</sub>X ?
  - The L<sup>A</sup>T<sub>E</sub>X Editors


# Learning Objectives

## 1 An Overview of L<sup>A</sup>T<sub>E</sub>X

- What is L<sup>A</sup>T<sub>E</sub>X ?
- Why L<sup>A</sup>T<sub>E</sub>X ?
- The L<sup>A</sup>T<sub>E</sub>X Editors

## 2 An Overview of Overleaf

# Learning Objectives

- 1 An Overview of L<sup>A</sup>T<sub>E</sub>X
  - What is L<sup>A</sup>T<sub>E</sub>X ?
  - Why L<sup>A</sup>T<sub>E</sub>X ?
  - The L<sup>A</sup>T<sub>E</sub>X Editors
- 2 An Overview of Overleaf 
  - What is Overleaf ?

# Learning Objectives

## 1 An Overview of L<sup>A</sup>T<sub>E</sub>X

- What is L<sup>A</sup>T<sub>E</sub>X ?
- Why L<sup>A</sup>T<sub>E</sub>X ?
- The L<sup>A</sup>T<sub>E</sub>X Editors

## 2 An Overview of Overleaf

- What is Overleaf ?
- How to Create an Overleaf account & Registration?

# Learning Objectives

## 1 An Overview of L<sup>A</sup>T<sub>E</sub>X

- What is L<sup>A</sup>T<sub>E</sub>X ?
- Why L<sup>A</sup>T<sub>E</sub>X ?
- The L<sup>A</sup>T<sub>E</sub>X Editors

## 2 An Overview of Overleaf

- What is Overleaf ?
- How to Create an Overleaf account & Registration?
- How to Create a New Project in Overleaf ?

# Learning Objectives

## 1 An Overview of L<sup>A</sup>T<sub>E</sub>X

- What is L<sup>A</sup>T<sub>E</sub>X ?
- Why L<sup>A</sup>T<sub>E</sub>X ?
- The L<sup>A</sup>T<sub>E</sub>X Editors

## 2 An Overview of Overleaf

- What is **Overleaf** ?
- How to Create an **Overleaf** account & Registration?
- How to Create a New Project in **Overleaf** ?
- How to add a project from a shared link in **Overleaf** ?

# Learning Objectives

## 1 An Overview of L<sup>A</sup>T<sub>E</sub>X

- What is L<sup>A</sup>T<sub>E</sub>X ?
- Why L<sup>A</sup>T<sub>E</sub>X ?
- The L<sup>A</sup>T<sub>E</sub>X Editors

## 2 An Overview of Overleaf

- What is Overleaf ?
- How to Create an Overleaf account & Registration?
- How to Create a New Project in Overleaf ?
- How to add a project from a shared link in Overleaf ?
- How to copy a project in Overleaf ?



# Learning Objectives

## 1 An Overview of L<sup>A</sup>T<sub>E</sub>X

- What is L<sup>A</sup>T<sub>E</sub>X ?
- Why L<sup>A</sup>T<sub>E</sub>X ?
- The L<sup>A</sup>T<sub>E</sub>X Editors

## 2 An Overview of Overleaf

- What is **Overleaf** ?
- How to Create an **Overleaf** account & Registration?
- How to Create a New Project in **Overleaf** ?
- How to add a project from a shared link in **Overleaf** ?
- How to copy a project in **Overleaf** ?
- How to do collaborative work in **Overleaf** ?


# Outline

## 1 An Overview of $\text{\LaTeX}$

- What is  $\text{\LaTeX}$  ?
- Why  $\text{\LaTeX}$  ?
- The  $\text{\LaTeX}$  Editors

## 2 An Overview of Overleaf

# What is L<sup>A</sup>T<sub>E</sub>X ?

 L<sup>A</sup>T<sub>E</sub>X is pronounced as « lah-tech » or « lay-tech » .






# What is L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X is pronounced as « lah-tech » or « lay-tech » .
- ✍ It is based on T<sub>E</sub>X , a typesetting language designed for science and math.







# What is $\text{\LaTeX}$ ?

-   $\text{\LaTeX}$  is pronounced as « lah-tech » or « lay-tech » .
-  It is based on  $\text{T}_{\text{E}}\text{X}$  , a typesetting language designed for science and math.
-  Both  $\text{\LaTeX}$  and  $\text{T}_{\text{E}}\text{X}$  contain a variety of font styles, such as serif, typewriter, and a set of mathematical functions.



# What is $\text{\LaTeX}$ ?

-   $\text{\LaTeX}$  is pronounced as  $\ll$  lah-tech  $\gg$  or  $\ll$  lay-tech  $\gg$  .
-  It is based on  $\text{T}_{\text{E}}\text{X}$  , a typesetting language designed for science and math.
-  Both  $\text{\LaTeX}$  and  $\text{T}_{\text{E}}\text{X}$  contain a variety of font styles, such as serif, typewriter, and a set of mathematical functions.
-  It is an open-source and powerful document preparation system. It is high-quality typesetting, which can be used for any publishing.



# What is L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X is pronounced as « lah-tech » or « lay-tech » .
- ✍ It is based on T<sub>E</sub>X , a typesetting language designed for science and math.
- ✍ Both L<sup>A</sup>T<sub>E</sub>X and T<sub>E</sub>X contain a variety of font styles, such as serif, typewriter, and a set of mathematical functions.
- ✍ It is an open-source and powerful document preparation system. It is high-quality typesetting, which can be used for any publishing.
- ✍ It is often used for scientific publications and medium to large technical documents.



# What is L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X is pronounced as « lah-tech » or « lay-tech » .
- ✍ It is based on T<sub>E</sub>X , a typesetting language designed for science and math.
- ✍ Both L<sup>A</sup>T<sub>E</sub>X and T<sub>E</sub>X contain a variety of font styles, such as serif, typewriter, and a set of mathematical functions.
- ✍ It is an open-source and powerful document preparation system. It is high-quality typesetting, which can be used for any publishing.
- ✍ It is often used for scientific publications and medium to large technical documents.
- ✍ It is not a word processor or any word document, but it is an efficient way for the publishers and the authors to organize their materials.





# What is L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X is pronounced as « lah-tech » or « lay-tech » .
- ✍ It is based on T<sub>E</sub>X , a typesetting language designed for science and math.
- ✍ Both L<sup>A</sup>T<sub>E</sub>X and T<sub>E</sub>X contain a variety of font styles, such as serif, typewriter, and a set of mathematical functions.
- ✍ It is an open-source and powerful document preparation system. It is high-quality typesetting, which can be used for any publishing.
- ✍ It is often used for scientific publications and medium to large technical documents.
- ✍ It is not a word processor or any word document, but it is an efficient way for the publishers and the authors to organize their materials.
- ✍ It gives a unique appearance to the system. It saves the time for designing as well as the efforts used for the documents.



# What is L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X is pronounced as « lah-tech » or « lay-tech » .
- ✍ It is based on T<sub>E</sub>X , a typesetting language designed for science and math.
- ✍ Both L<sup>A</sup>T<sub>E</sub>X and T<sub>E</sub>X contain a variety of font styles, such as serif, typewriter, and a set of mathematical functions.
- ✍ It is an open-source and powerful document preparation system. It is high-quality typesetting, which can be used for any publishing.
- ✍ It is often used for scientific publications and medium to large technical documents.
- ✍ It is not a word processor or any word document, but it is an efficient way for the publishers and the authors to organize their materials.
- ✍ It gives a unique appearance to the system. It saves the time for designing as well as the efforts used for the documents.
- ✍ You must remember that L<sup>A</sup>T<sub>E</sub>X is not a word processor! Don't expect it to behave like one.




# What is L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X is pronounced as « lah-tech » or « lay-tech » .
- ✍ It is based on T<sub>E</sub>X , a typesetting language designed for science and math.
- ✍ Both L<sup>A</sup>T<sub>E</sub>X and T<sub>E</sub>X contain a variety of font styles, such as serif, typewriter, and a set of mathematical functions.
- ✍ It is an open-source and powerful document preparation system. It is high-quality typesetting, which can be used for any publishing.
- ✍ It is often used for scientific publications and medium to large technical documents.
- ✍ It is not a word processor or any word document, but it is an efficient way for the publishers and the authors to organize their materials.
- ✍ It gives a unique appearance to the system. It saves the time for designing as well as the efforts used for the documents.
- ✍ You must remember that L<sup>A</sup>T<sub>E</sub>X is not a word processor! Don't expect it to behave like one.





# What is L<sup>A</sup>T<sub>E</sub>X ?

 L<sup>A</sup>T<sub>E</sub>X can be used for...




# What is L<sup>A</sup>T<sub>E</sub>X ?



 L<sup>A</sup>T<sub>E</sub>X can be used for...

 Text formatting.




# What is L<sup>A</sup>T<sub>E</sub>X ?




 L<sup>A</sup>T<sub>E</sub>X can be used for...

-  Text formatting.
-  Producing high-quality, structured documents with complex mathematical equations.




# What is L<sup>A</sup>T<sub>E</sub>X ?





 L<sup>A</sup>T<sub>E</sub>X can be used for...

-  Text formatting.
-  Producing high-quality, structured documents with complex mathematical equations.
-  Creating graphics (2D and 3D).



# What is L<sup>A</sup>T<sub>E</sub>X ?


 L<sup>A</sup>T<sub>E</sub>X can be used for...






-  Text formatting.
-  Producing high-quality, structured documents with complex mathematical equations.
-  Creating graphics (2D and 3D).
-  Producing PDF animations.






# What is L<sup>A</sup>T<sub>E</sub>X ?







 L<sup>A</sup>T<sub>E</sub>X can be used for...

-  Text formatting.
-  Producing high-quality, structured documents with complex mathematical equations.
-  Creating graphics (2D and 3D).
-  Producing PDF animations.
-  Creating special documents, e.g. scientific reports, curriculum vitae.




# What is L<sup>A</sup>T<sub>E</sub>X ?








 L<sup>A</sup>T<sub>E</sub>X can be used for...

-  Text formatting.
-  Producing high-quality, structured documents with complex mathematical equations.
-  Creating graphics (2D and 3D).
-  Producing PDF animations.
-  Creating special documents, e.g. scientific reports, curriculum vitae.
-  Typesetting mathematics.




# What is $\text{\LaTeX}$ ?








  $\text{\LaTeX}$  can be used for...

-  Text formatting.
-  Producing high-quality, structured documents with complex mathematical equations.
-  Creating graphics (2D and 3D).
-  Producing PDF animations.
-  Creating special documents, e.g. scientific reports, curriculum vitae.
-  Typesetting mathematics.
-  Creating presentations.



# What is $\text{\LaTeX}$ ?

  $\text{\LaTeX}$  can be used for...

-  Text formatting.
-  Producing high-quality, structured documents with complex mathematical equations.
-  Creating graphics (2D and 3D).
-  Producing PDF animations.
-  Creating special documents, e.g. scientific reports, curriculum vitae.
-  Typesetting mathematics.
-  Creating presentations.

# Why L<sup>A</sup>T<sub>E</sub>X ?



# Why L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X significantly reduces the effort and time needed to prepare complex and large documents, making it more efficient than other word processors used for simpler tasks.



# Why L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X significantly reduces the effort and time needed to prepare complex and large documents, making it more efficient than other word processors used for simpler tasks.
- ✍ With L<sup>A</sup>T<sub>E</sub>X you can direct your attention towards content creation, leaving behind worries about typesetting, layout, references, citations, figures, equation / figure numbering, and formatting, as L<sup>A</sup>T<sub>E</sub>X handles it all seamlessly.



# Why L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X significantly reduces the effort and time needed to prepare complex and large documents, making it more efficient than other word processors used for simpler tasks.
- ✍ With L<sup>A</sup>T<sub>E</sub>X you can direct your attention towards content creation, leaving behind worries about typesetting, layout, references, citations, figures, equation / figure numbering, and formatting, as L<sup>A</sup>T<sub>E</sub>X handles it all seamlessly.
- ✍ By using L<sup>A</sup>T<sub>E</sub>X you have the ability to produce documents with professional-grade typesetting quality.





# Why L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X significantly reduces the effort and time needed to prepare complex and large documents, making it more efficient than other word processors used for simpler tasks.
- ✍ With L<sup>A</sup>T<sub>E</sub>X you can direct your attention towards content creation, leaving behind worries about typesetting, layout, references, citations, figures, equation / figure numbering, and formatting, as L<sup>A</sup>T<sub>E</sub>X handles it all seamlessly.
- ✍ By using L<sup>A</sup>T<sub>E</sub>X you have the ability to produce documents with professional-grade typesetting quality.
- ✍ Easy to handle large documents.



# Why L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X significantly reduces the effort and time needed to prepare complex and large documents, making it more efficient than other word processors used for simpler tasks.
- ✍ With L<sup>A</sup>T<sub>E</sub>X you can direct your attention towards content creation, leaving behind worries about typesetting, layout, references, citations, figures, equation / figure numbering, and formatting, as L<sup>A</sup>T<sub>E</sub>X handles it all seamlessly.
- ✍ By using L<sup>A</sup>T<sub>E</sub>X you have the ability to produce documents with professional-grade typesetting quality.
- ✍ Easy to handle large documents.
- ✍ L<sup>A</sup>T<sub>E</sub>X is freely available and open-source.



# Why L<sup>A</sup>T<sub>E</sub>X ?

- ✍ L<sup>A</sup>T<sub>E</sub>X significantly reduces the effort and time needed to prepare complex and large documents, making it more efficient than other word processors used for simpler tasks.
- ✍ With L<sup>A</sup>T<sub>E</sub>X you can direct your attention towards content creation, leaving behind worries about typesetting, layout, references, citations, figures, equation / figure numbering, and formatting, as L<sup>A</sup>T<sub>E</sub>X handles it all seamlessly.
- ✍ By using L<sup>A</sup>T<sub>E</sub>X you have the ability to produce documents with professional-grade typesetting quality.
- ✍ Easy to handle large documents.
- ✍ L<sup>A</sup>T<sub>E</sub>X is freely available and open-source.
- ✍ It runs on all operating systems (Linux/Unix, Mac, and Windows).



# Why L<sup>A</sup>T<sub>E</sub>X ?

 Major Differences between MS Word and L<sup>A</sup>T<sub>E</sub>X .



# Why L<sup>A</sup>T<sub>E</sub>X ?

## Major Differences between MS Word and L<sup>A</sup>T<sub>E</sub>X .

MS Word

# Why $\text{\LaTeX}$ ?

## Major Differences between MS Word and $\text{\LaTeX}$ .

MS Word

$\text{\LaTeX}$

---




# Why L<sup>A</sup>T<sub>E</sub>X ?

## Major Differences between MS Word and L<sup>A</sup>T<sub>E</sub>X .

MS Word

L<sup>A</sup>T<sub>E</sub>X


 Word becomes slow when handling either very large texts or texts with large graphics.




# Why L<sup>A</sup>T<sub>E</sub>X ?

## Major Differences between MS Word and L<sup>A</sup>T<sub>E</sub>X .

### MS Word

 Word becomes slow when handling either very large texts or texts with large graphics.

### L<sup>A</sup>T<sub>E</sub>X

 LaTeX is faster because you write down only the contents and software wastes no time thinking about layout.







# Why L<sup>A</sup>T<sub>E</sub>X ?


## Major Differences between MS Word and L<sup>A</sup>T<sub>E</sub>X .

### MS Word

 Word becomes slow when handling either very large texts or texts with large graphics.

 Word type setting quality is ok for most purposes but its far from professional.

### L<sup>A</sup>T<sub>E</sub>X


 LaTeX is faster because you write down only the contents and software wastes no time thinking about layout.




# Why L<sup>A</sup>T<sub>E</sub>X ?


## Major Differences between MS Word and L<sup>A</sup>T<sub>E</sub>X .


### MS Word

 Word becomes slow when handling either very large texts or texts with large graphics.

 Word type setting quality is ok for most purposes but its far from professional.

### L<sup>A</sup>T<sub>E</sub>X

 LaTeX is faster because you write down only the contents and software wastes no time thinking about layout.


 Provides you with professional layout out of the box. If you want to get into the nitty-gritty, you can adapt the default to your own taste but the standard is already very high without any customisations.





# Why L<sup>A</sup>T<sub>E</sub>X ?

## Major Differences between MS Word and L<sup>A</sup>T<sub>E</sub>X .


### MS Word


 Word becomes slow when handling either very large texts or texts with large graphics.

 Word type setting quality is ok for most purposes but its far from professional.

 Here the main shortcoming is that Word does not include a citation utility. You will need to use additional software to fill the gap.

### L<sup>A</sup>T<sub>E</sub>X

 LaTeX is faster because you write down only the contents and software wastes no time thinking about layout.


 Provides you with professional layout out of the box. If you want to get into the nitty-gritty, you can adapt the default to your own taste but the standard is already very high without any customisations.





# Why L<sup>A</sup>T<sub>E</sub>X ?

## Major Differences between MS Word and L<sup>A</sup>T<sub>E</sub>X .


### MS Word


 Word becomes slow when handling either very large texts or texts with large graphics.


 Word type setting quality is ok for most purposes but its far from professional.

 Here the main shortcoming is that Word does not include a citation utility. You will need to use additional software to fill the gap.

### L<sup>A</sup>T<sub>E</sub>X

 LaTeX is faster because you write down only the contents and software wastes no time thinking about layout.

 Provides you with professional layout out of the box. If you want to get into the nitty-gritty, you can adapt the default to your own taste but the standard is already very high without any customisations.

 is open source many generations of scientists have written the extensions they needed. You will be able to find all commonly and most rarely used features. References are handled by BibTeX .


# The $\text{\LaTeX}$ Editors



# The $\text{\LaTeX}$ Editors

There are many open-source text editors developed specifically for preparing  $\text{\LaTeX}$  input files. There are two types of them, offline and online, as shown.

## 1 Best offline LaTeX editors.


- TeXmaker 



# The $\text{\LaTeX}$ Editors

There are many open-source text editors developed specifically for preparing  $\text{\LaTeX}$  input files. There are two types of them, offline and online, as shown.

## 1 Best offline LaTeX editors.

- TeXmaker 


<https://www.xmlmath.net/texmaker/>.



# The $\text{\LaTeX}$ Editors

There are many open-source text editors developed specifically for preparing  $\text{\LaTeX}$  input files. There are two types of them, offline and online, as shown.

## 1 Best offline LaTeX editors.

- TeXmaker 

<https://www.xmlmath.net/texmaker/>.

- TeXnicCenter 






# The L<sup>A</sup>T<sub>E</sub>X Editors

There are many open-source text editors developed specifically for preparing L<sup>A</sup>T<sub>E</sub>X input files. There are two types of them, offline and online, as shown.

## 1 Best offline LaTeX editors.

- TeXmaker 

<https://www.xmlmath.net/texmaker/>.

- TeXnicCenter 


<https://www.texniccenter.org/>.




# The L<sup>A</sup>T<sub>E</sub>X Editors

There are many open-source text editors developed specifically for preparing L<sup>A</sup>T<sub>E</sub>X input files. There are two types of them, offline and online, as shown.


## 1 Best offline LaTeX editors.

- TeXmaker 

<https://www.xmlmath.net/texmaker/>.

- TeXnicCenter 

<https://www.texniccenter.org/>.


- LyX 



# The L<sup>A</sup>T<sub>E</sub>X Editors

There are many open-source text editors developed specifically for preparing L<sup>A</sup>T<sub>E</sub>X input files. There are two types of them, offline and online, as shown.


## 1 Best offline LaTeX editors.

- TeXmaker 

<https://www.xmlmath.net/texmaker/>.

- TeXnicCenter 

<https://www.texniccenter.org/>.

- LyX 


<https://www.lyx.org/Home>.



# The L<sup>A</sup>T<sub>E</sub>X Editors

There are many open-source text editors developed specifically for preparing L<sup>A</sup>T<sub>E</sub>X input files. There are two types of them, offline and online, as shown.


## 1 Best offline LaTeX editors.

- TeXmaker 

<https://www.xmlmath.net/texmaker/>.

- TeXnicCenter 

<https://www.texniccenter.org/>.

- LyX 

<https://www.lyx.org/Home>.


- TeXstudio 



# The L<sup>A</sup>T<sub>E</sub>X Editors

There are many open-source text editors developed specifically for preparing L<sup>A</sup>T<sub>E</sub>X input files. There are two types of them, offline and online, as shown.


## 1 Best offline LaTeX editors.

- TeXmaker 


<https://www.xmlmath.net/texmaker/>.

- TeXnicCenter 

<https://www.texniccenter.org/>.

- LyX 

<https://www.lyx.org/Home>.

- TeXstudio 


<https://www.lyx.org/Home>.



# The L<sup>A</sup>T<sub>E</sub>X Editors

There are many open-source text editors developed specifically for preparing L<sup>A</sup>T<sub>E</sub>X input files. There are two types of them, offline and online, as shown.


## 1 Best offline LaTeX editors.

- TeXmaker 


<https://www.xmlmath.net/texmaker/>.

- TeXnicCenter 

<https://www.texniccenter.org/>.


- LyX 

<https://www.lyx.org/Home>.


- TeXstudio 

<https://www.lyx.org/Home>.

# The L<sup>A</sup>T<sub>E</sub>X Editors

- TeXworks 

# The L<sup>A</sup>T<sub>E</sub>X Editors

- TeXworks 

<https://www.tug.org/texworks/>.





# The L<sup>A</sup>T<sub>E</sub>X Editors

- TeXworks 

<https://www.tug.org/texworks/>.

## 2 Best online LaTeX editors.

- Overleaf + ShareLaTeX  + 



# The L<sup>A</sup>T<sub>E</sub>X Editors

- TeXworks 

<https://www.tug.org/texworks/>.

## 2 Best online LaTeX editors.

- Overleaf + ShareLaTeX  +   
Overleaf ShareLaTeX

<https://www.overleaf.com/>

<https://www.sharelatex.com/>



# The L<sup>A</sup>T<sub>E</sub>X Editors

- TeXworks 


<https://www.tug.org/texworks/>.

## 2 Best online LaTeX editors.

- Overleaf + ShareLaTeX  + 

<https://www.overleaf.com/>

<https://www.sharelatex.com/>

- Papeeria 



# The L<sup>A</sup>T<sub>E</sub>X Editors

- TeXworks 


<https://www.tug.org/texworks/>.

## 2 Best online LaTeX editors.

- Overleaf + ShareLaTeX  + 

<https://www.overleaf.com/>

<https://www.sharelatex.com/>

- Papeeria 

<https://papeeria.com/landing>.



# The L<sup>A</sup>T<sub>E</sub>X Editors

- TeXworks 


<https://www.tug.org/texworks/>.

## 2 Best online LaTeX editors.


- Overleaf + ShareLaTeX  + 

<https://www.overleaf.com/>

<https://www.sharelatex.com/>

- Papeeria 

<https://papeeria.com/landing>.

- Authorea  Authorea



# The L<sup>A</sup>T<sub>E</sub>X Editors

- TeXworks 


<https://www.tug.org/texworks/>.

## 2 Best online LaTeX editors.


- Overleaf + ShareLaTeX  + 

<https://www.overleaf.com/>

<https://www.sharelatex.com/>

- Papeeria 

<https://papeeria.com/landing>.

- Authorea 

<https://www.authorea.com/>.

# Outline

## 1 An Overview of L<sup>A</sup>T<sub>E</sub>X

- What is L<sup>A</sup>T<sub>E</sub>X ?
- Why L<sup>A</sup>T<sub>E</sub>X ?
- The L<sup>A</sup>T<sub>E</sub>X Editors

## 2 An Overview of Overleaf



# What is Overleaf ?






# What is Overleaf ?

- ✍ Overleaf is an online L<sup>A</sup>T<sub>E</sub>X editor. It requires no installation, allows real-time collaboration, has version control, has hundreds of L<sup>A</sup>T<sub>E</sub>X templates, and more.

# What is Overleaf ?

-  Overleaf is an online  $\text{\LaTeX}$  editor. It requires no installation, allows real-time collaboration, has version control, has hundreds of  $\text{\LaTeX}$  templates, and more.
-  Overleaf is a collaborative cloud-based  $\text{\LaTeX}$  editor used for writing, editing and publishing scientific documents. It partners with a wide range of scientific publishers to provide official journal  $\text{\LaTeX}$  templates, and direct submission links.

# What is Overleaf ?

-  Overleaf is an online  $\text{\LaTeX}$  editor. It requires no installation, allows real-time collaboration, has version control, has hundreds of  $\text{\LaTeX}$  templates, and more.
-  Overleaf is a collaborative cloud-based  $\text{\LaTeX}$  editor used for writing, editing and publishing scientific documents. It partners with a wide range of scientific publishers to provide official journal  $\text{\LaTeX}$  templates, and direct submission links.
-  It 'compiles' your  $\text{\LaTeX}$  automatically to show you the results.




# What is Overleaf ?



- ✍ Overleaf is an online L<sup>A</sup>T<sub>E</sub>X editor. It requires no installation, allows real-time collaboration, has version control, has hundreds of L<sup>A</sup>T<sub>E</sub>X templates, and more.
- ✍ Overleaf is a collaborative cloud-based L<sup>A</sup>T<sub>E</sub>X editor used for writing, editing and publishing scientific documents. It partners with a wide range of scientific publishers to provide official journal L<sup>A</sup>T<sub>E</sub>X templates, and direct submission links.
- ✍ It 'compiles' your L<sup>A</sup>T<sub>E</sub>X automatically to show you the results.
- ✍ LaTeX and Overleaf Help Resources
  - 👉 <https://www.overleaf.com/learn>

# Why use Overleaf ?




# Why use Overleaf ?

 cloud based product that only needs a web browser.

# Why use Overleaf ?

-  cloud based product that only needs a web browser.
-  compiles your project in the background, so you can see the output PDF right away.

# Why use Overleaf ?

-  cloud based product that only needs a web browser.
-  compiles your project in the background, so you can see the output PDF right away.
-  real-time commenting and integrated chat, you can discuss your work without having to switch to email, printed versions or any other tool.





# Why use Overleaf ?

- ✍ cloud based product that only needs a web browser.
- ✍ compiles your project in the background, so you can see the output PDF right away.
- ✍ real-time commenting and integrated chat, you can discuss your work without having to switch to email, printed versions or any other tool.
- ✍ Overleaf shows you errors and warnings as you go, so you can catch them early, and it shows them inline, so you don't have to find them in the L<sup>A</sup>T<sub>E</sub>X log.

# Why use Overleaf ?

- ✍ cloud based product that only needs a web browser.
- ✍ compiles your project in the background, so you can see the output PDF right away.
- ✍ real-time commenting and integrated chat, you can discuss your work without having to switch to email, printed versions or any other tool.
- ✍ Overleaf shows you errors and warnings as you go, so you can catch them early, and it shows them inline, so you don't have to find them in the L<sup>A</sup>T<sub>E</sub>X log.
- ✍ Write your thesis, create a calendar, make amazing presentations with the beamer package and create posters to showcase your work, all from a wide selection of popular templates.



# Why use Overleaf ?

- ✍ cloud based product that only needs a web browser.
- ✍ compiles your project in the background, so you can see the output PDF right away.
- ✍ real-time commenting and integrated chat, you can discuss your work without having to switch to email, printed versions or any other tool.
- ✍ Overleaf shows you errors and warnings as you go, so you can catch them early, and it shows them inline, so you don't have to find them in the L<sup>A</sup>T<sub>E</sub>X log.
- ✍ Write your thesis, create a calendar, make amazing presentations with the beamer package and create posters to showcase your work, all from a wide selection of popular templates.
- ✍ The real-time preview also helps when you're working with complicated tables, tikz figures and pgfplots graphs.

# How to Create an **Overleaf** account & Registration?

Setting up an Overleaf account is relatively easy:

# How to Create an **Overleaf** account & Registration?


Setting up an Overleaf account is relatively easy:

 to Create an **Overleaf** account:

# How to Create an **Overleaf** account & Registration?

Setting up an Overleaf account is relatively easy:

 to Create an **Overleaf** account:


 Open your web browser and go to the Overleaf website:

<https://www.overleaf.com/>.


# How to Create an **Overleaf** account & Registration?

Setting up an Overleaf account is relatively easy:

 to Create an **Overleaf** account:

 Open your web browser and go to the Overleaf website:

<https://www.overleaf.com/>.




 Click on the « Sign Up » button located in the upper-right corner of the website.



# How to Create an **Overleaf** account & Registration?

Setting up an Overleaf account is relatively easy:

 to Create an **Overleaf** account:

-  Open your web browser and go to the Overleaf website:  
<https://www.overleaf.com/>.
-  Click on the « Sign Up » button located in the upper-right corner of the website.
-  You will be presented with different options to sign up. You can either create an account using your « Google account », « GitHub account », or by « providing your email and a password ». Choose the method you prefer.









# How to Create an **Overleaf** account & Registration?

Setting up an Overleaf account is relatively easy:

 to Create an **Overleaf** account:

-  Open your web browser and go to the Overleaf website:  
<https://www.overleaf.com/>.
-  Click on the « Sign Up » button located in the upper-right corner of the website.
-  You will be presented with different options to sign up. You can either create an account using your « Google account », « GitHub account », or by « providing your email and a password ». Choose the method you prefer.
-  If you choose to sign up with your « email and password » , enter your email address, choose a secure password, and click on « Create Account ».



# How to Create an **Overleaf** account & Registration?

Setting up an Overleaf account is relatively easy:

👉 to Create an **Overleaf** account:

- 👉 Open your web browser and go to the Overleaf website:  
<https://www.overleaf.com/>.
- 👉 Click on the « Sign Up » button located in the upper-right corner of the website.
- 👉 You will be presented with different options to sign up. You can either create an account using your « Google account », « GitHub account », or by « providing your email and a password ». Choose the method you prefer.
- 👉 If you choose to sign up with your « email and password », enter your email address, choose a secure password, and click on « Create Account ».
- 👉 After completing the sign up process, you should receive a verification email. Open the email and click on the verification link to activate your Overleaf account.

# How to Create an **Overleaf** account & Registration?

Setting up an Overleaf account is relatively easy:

👉 to Create an **Overleaf** account:

- 👉 Open your web browser and go to the Overleaf website:  
<https://www.overleaf.com/>.
- 👉 Click on the « Sign Up » button located in the upper-right corner of the website.
- 👉 You will be presented with different options to sign up. You can either create an account using your « Google account », « GitHub account », or by « providing your email and a password ». Choose the method you prefer.
- 👉 If you choose to sign up with your « email and password », enter your email address, choose a secure password, and click on « Create Account ».
- 👉 After completing the sign up process, you should receive a verification email. Open the email and click on the verification link to activate your Overleaf account.
- 👉 Once your account is verified, you can log in to Overleaf using your credentials.


# How to Create an **Overleaf** account & Registration?

# How to Create an **Overleaf** account & Registration?

 to Register an **Overleaf** account:

# How to Create an **Overleaf** account & Registration?

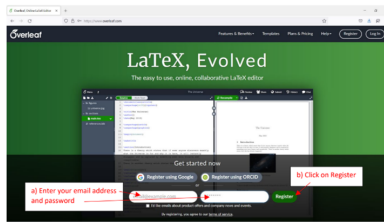
 to Register an **Overleaf** account:

-  Enter your email address and a safe password and click on register (see screenshot below). Alternatively, register using Google or ORCID by clicking on the respective buttons.

# How to Create an **Overleaf** account & Registration?

🖋️ to Register an **Overleaf** account:

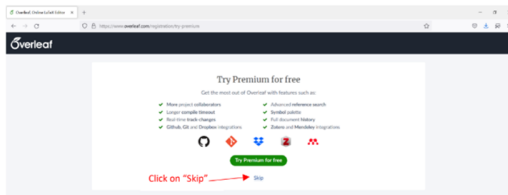
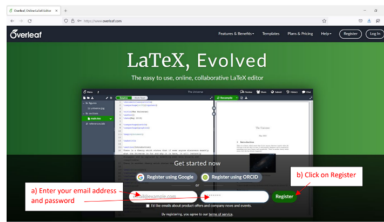
- 👉 Enter your email address and a safe password and click on register (see screenshot below). Alternatively, register using Google or ORCID by clicking on the respective buttons.



# How to Create an Overleaf account & Registration?

📌 to Register an **Overleaf** account:

- 👉 Enter your email address and a safe password and click on register (see screenshot below). Alternatively, register using Google or ORCID by clicking on the respective buttons.



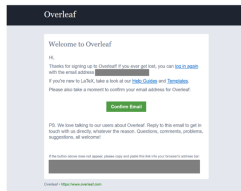


# How to Create an **Overleaf** account & Registration?

- ✍ Overleaf will send you an email that asks you to confirm your email address (by clicking on the green “Confirm Email” button). It will look like this.

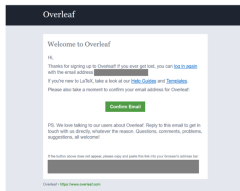
# How to Create an Overleaf account & Registration?

- ✍ Overleaf will send you an email that asks you to confirm your email address (by clicking on the green “Confirm Email” button). It will look like this.



# How to Create an Overleaf account & Registration?

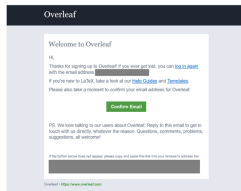
- Overleaf will send you an email that asks you to confirm your email address (by clicking on the green “Confirm Email” button). It will look like this.



- Your Overleaf project overview page will look very similar to the screenshot below.

# How to Create an Overleaf account & Registration?

- Overleaf will send you an email that asks you to confirm your email address (by clicking on the green “Confirm Email” button). It will look like this.



- Your Overleaf project overview page will look very similar to the screenshot below.





# How to Create a New Project in Overleaf ?

# How to Create a New Project in Overleaf ?

 Click on New Project in the left sidebar.

# How to Create a New Project in Overleaf ?

-  Click on New Project in the left sidebar.
-  Choose from

# How to Create a New Project in Overleaf ?

- ✍ Click on New Project in the left sidebar.
- ✍ Choose from
  - 👉 **Blank Project** : Start with a empty .tex file.




# How to Create a New Project in Overleaf ?

 Click on New Project in the left sidebar.

 Choose from

 [Blank Project](#) : Start with a empty .tex file.


 [Example Project](#) : Start with an example article that overleaf provides.


# How to Create a New Project in Overleaf ?

 Click on New Project in the left sidebar.

 Choose from

 **Blank Project** : Start with a empty .tex file.

 **Example Project** : Start with an example article that overleaf provides.

 **Upload Project** : Upload a zip file containing an existing L<sup>A</sup>T<sub>E</sub>X project  
i.e. at least one .tex file.

# How to Create a New Project in Overleaf ?

👉 Click on New Project in the left sidebar.

👉 Choose from

- 👉 **Blank Project** : Start with a empty .tex file.
- 👉 **Example Project** : Start with an example article that overleaf provides.
- 👉 **Upload Project** : Upload a zip file containing an existing LATEX project i.e. at least one .tex file.
- 👉 **Import from Github** : Import an existing LATEX project from your Github account.



# How to add a project from a shared link in **Overleaf** ?

# How to add a project from a shared link in **Overleaf** ?

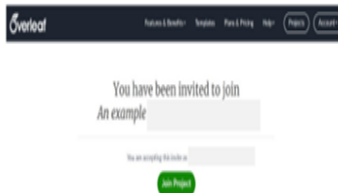
 Click on the shared link.

# How to add a project from a shared link in **Overleaf** ?

-  Click on the shared link.
-  Click on the green “Join Project” button (see screenshot below).

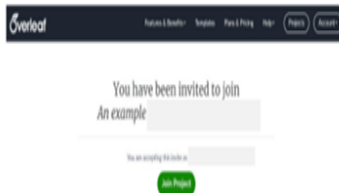
# How to add a project from a shared link in **Overleaf** ?

- Click on the shared link.
- Click on the green “Join Project” button (see screenshot below).



# How to add a project from a shared link in **Overleaf** ?

- 🖱️ Click on the shared link.
- 🖱️ Click on the green “Join Project” button (see screenshot below).



- 🖱️ You will get to the respective shared Overleaf project that will look similar to the following screenshot. I will explain the different screens/panels and icons at the beginning at the workshop so you should not worry too much about this now.




# How to add a project from a shared link in **Overleaf** ?


- Click on the “house” icon in the top left menu to get to your project overview (highlighted by a red circle in the screenshot above). The shared project should have been added to your project overview (big red cycle in the screenshot below).

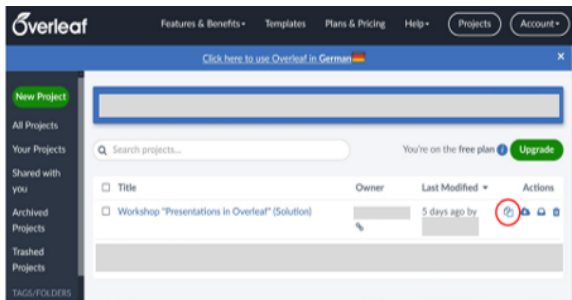
# How to copy a project in Overleaf ?

# How to copy a project in Overleaf ?

-  You can make a copy of the project by clicking on the copy symbol (little red cycle in the screenshot below). You can then edit/change the copy version; these changes will not appear in the original file. Please do not change the “original” Overleaf projects I share with you unless I explicitly encourage you to do so during the workshop practice sessions!

# How to copy a project in Overleaf ?

 You can make a copy of the project by clicking on the copy symbol (little red cycle in the screenshot below). You can then edit/change the copy version; these changes will not appear in the original file. Please do not change the “original” Overleaf projects I share with you unless I explicitly encourage you to do so during the workshop practice sessions!

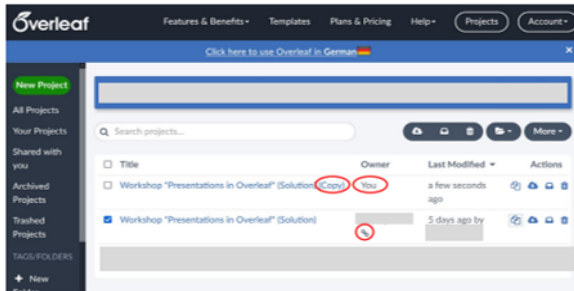


# How to copy a project in Overleaf ?

- ✍ Once you have copied the project, it will appear in your project overview. Note that this project is not shared (there is no “shared” symbol in the column “Owner”) and you will be the project owner (see screenshot below).


# How to copy a project in Overleaf ?

Once you have copied the project, it will appear in your project overview. Note that this project is not shared (there is no “shared” symbol in the column “Owner”) and you will be the project owner (see screenshot below).





# How to do collaborative work in Overleaf ?

# How to do collaborative work in Overleaf ?



 Sharing document for collaboratif writing.

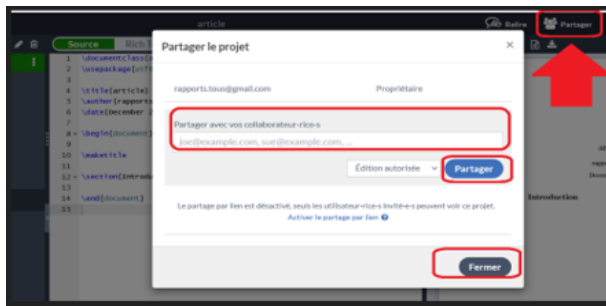


# How to do collaborative work in Overleaf ?


-  Sharing document for collaborative writing.
-  Send mails to your collaborators.

# How to do collaborative work in Overleaf ?

-  Sharing document for collaborative writing.
-  Send mails to your collaborators.



# How to do collaborative work in Overleaf ?


-  Show flow changes takes in shared documents > Live writing —> pdf of synchronization ?

# How to do collaborative work in Overleaf ?

✍ Show flow changes takes in shared documents > Live writing —> pf of synchronization ?




# How to do collaborative work in Overleaf ?

 Show flow changes takes in shared documents > Live writing —> pf of synchronization ?



 Also, you can make a live discussion with your collaborators .

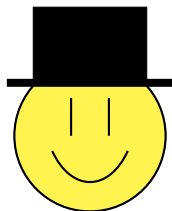
# How to do collaborative work in Overleaf ?

 Show flow changes takes in shared documents > Live writing —> pf of synchronization ?



 Also, you can make a live discussion with your collaborators .





*Thank you!*