LaTeX

2024 FALL BLOCK WEEK

JOHN BROSZ – VISUALIZATION COORDINATOR, PHD (HAS WRITTEN A THESIS W/ LATEX)

JENNIFER LEE – COLLECTIONS, INTERIM HEALTH KNOWLEDGE NETWORK LIBRARIAN

Slides available at: brosz.ca/slides

The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the peoples of Treaty 7, which include the Blackfoot Confederacy (comprised of the Siksika, the Piikani, and the Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda (including Chiniki, Bearspaw, and Goodstoney First Nations). The City of Calgary is also home to the Métis Nation of Alberta (Districts 5 and 6).

Why you are here . . .

- Getting started on a thesis
- Writing papers with LaTeX
- Bibliographies
- Something else entirely?

Learning Objectives

01

Become familiar with and know how to use the Overleaf interface for LaTeX

02

Be able to use the University of Calgary thesis template

03

Use LaTeX to include figures, tables, and generate a bibliography

What is LaTeX?

LaTeX is a typesetting system that uses markup tagging to:

- Structure the document
- Stylize text
- Create citations and cross-references

How does it work?

1. You create a plain text file encoding the LaTeX markup language
2. You use a compiler (e.g., MikTeX) process your text file and create your output document
3. You end up with a PDF file (or PS, dvi, html, rtf)

1 Text file (.tex)

```
\documentclass{article}
\usepackage{amsmath}
\title{\LaTeX}

\begin{document}
  \maketitle
  \LaTeX{} is a document preparation system for
  the \TeX{} typesetting program. It offers
  programmable desktop publishing features and
  extensive facilities for automating most
  aspects of typesetting and desktop publishing,
  including numbering and  cross-referencing,
  tables and figures, page layout,
  bibliographies, and much more. \LaTeX{} was
  originally written in 1984 by Leslie Lamport
  and has become the  dominant method for using
  \TeX; few people write in plain \TeX{} anymore.
  The current version is \LaTeXe.

  % This is a comment, not shown in final output.
  % The following shows typesetting  power of LaTeX:
  \begin{align}
    E_0 &= mc^2 \\
    E &= \frac{mc^2}{\sqrt{1-\frac{v^2}{c^2}}}
  \end{align}
\end{document}
```

2 Compil

3 Resulting PDF

LaTeX

LaTeX is a document preparation system for the TeX typesetting program. It offers programmable desktop publishing features and extensive facilities for automating most aspects of typesetting and desktop publishing, including numbering and cross-referencing, tables and figures, page layout, bibliographies, and much more. LaTeX was originally written in 1984 by Leslie Lamport and has become the dominant method for using TeX; few people write in plain TeX anymore. The current version is LaTeX 2_ε.

$$E_0 = mc^2 \tag{1}$$

$$E = \frac{mc^2}{\sqrt{1-\frac{v^2}{c^2}}} \tag{2}$$

Example from Wikipedia (https://en.wikipedia.org/wiki/LaTeX)

Why is this Better Than MS-Word?

- Bibliography and cross-references become simple
- Figures & captions are better handled
- Easier for complex mathematical equations
- Reformatting documents
- Separation of content and formatting can make working on a document easier
- Easier to maintain consistent formatting
- Vector graphics
- Free, Open Source, & Stable (1994)

Where is MS-Word better?

Track changes / Revisions & Commenting

Easier to learn, WYSIWYG (what you see is what you get)

You don’t have to learn LaTeX error messages

Custom layout changes can be challenging in LaTeX

You're working with someone who does not want to learn LaTeX.

Getting Started

1. You need an editor for your text files
   - Notepad, VIM, emacs will be fine
   - Can get a purpose-built LaTeX editor such as TEXnicCenter (https://www.texniccenter.org/)
2. You need the LaTeX compiler
   - MikTEX (https://miktex.org/) is a great version
     - Includes a package manager to install and use packages (packages add additional features to LaTeX)
3. Use a Browser or Adobe Reader to view the resulting PDFs
4. Use the UCalgary thesis formatting package

OR

1. Do this all online using Overleaf (other are available including LyX, Papeeria, LaTeX Base, TexOnline)


Overleaf

What is Overleaf?

LaTeX editor

- Rich-text / WYSIWYG mode

Online

View PDF output

Many document types and journal templates

Other features, depending on subscription level

Features (free & paid)

(https://www.overleaf.com/user/subscription/plans)

Free features

- Unlimited private projects, real-time collaboration, templates, LaTeX editor

Paid features (optional)

- Everything above plus: (real-time track changes), reference search, reference manager sync, full document history, Dropbox and GitHub integration, priority support

Sharing

- Free: One collaborator
- Paid: 6 for student plans; 10 (“Standard”) or unlimited (“Professional”)

Subscription models summary

	Monthly	Annual	# you can share with
Free	$0	$0	1*
Student	$10	$99	6
Standard	$25	$229	10
Professional	$48	$449	Unlimited

* Login and see user bonuses (https://www.overleaf.com/user/bonus)

Your account

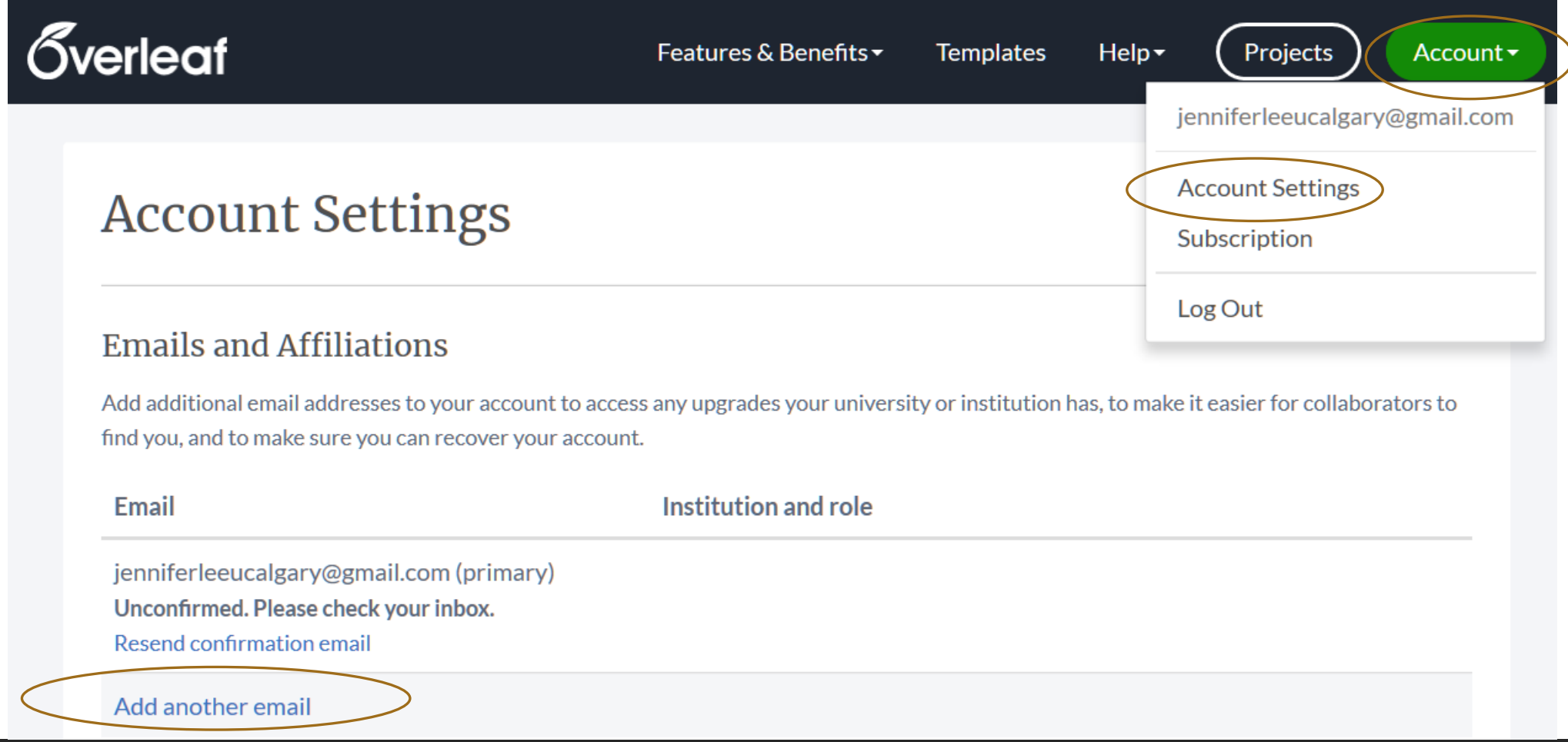
(Create one now! Overleaf.com)

Registration

- Register with any email
- ShareLaTeX: use existing account information

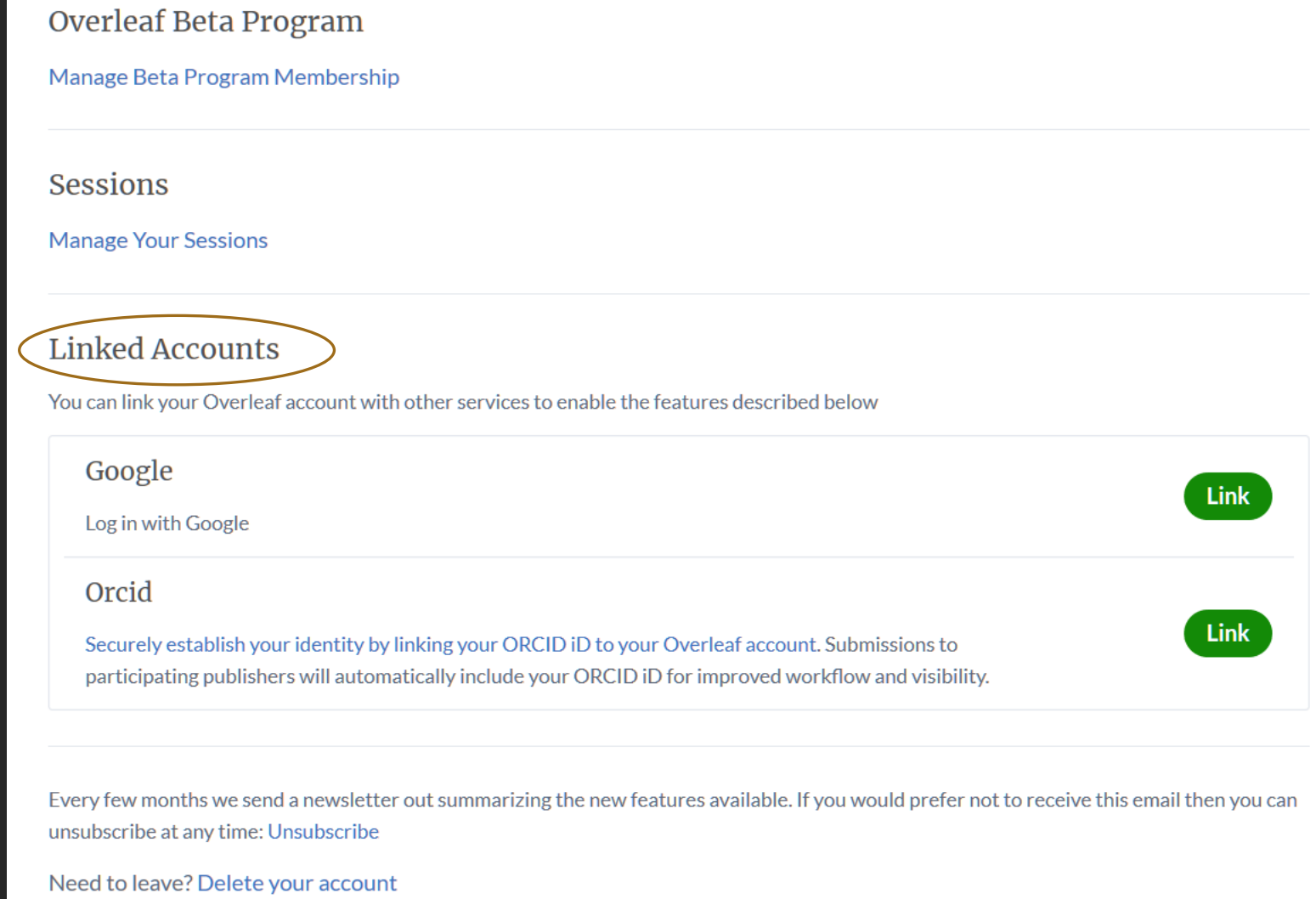
Integrations and account linking include:

- ORCID ID
- GitHub (paid)
- Mendeley / Zotero (paid)

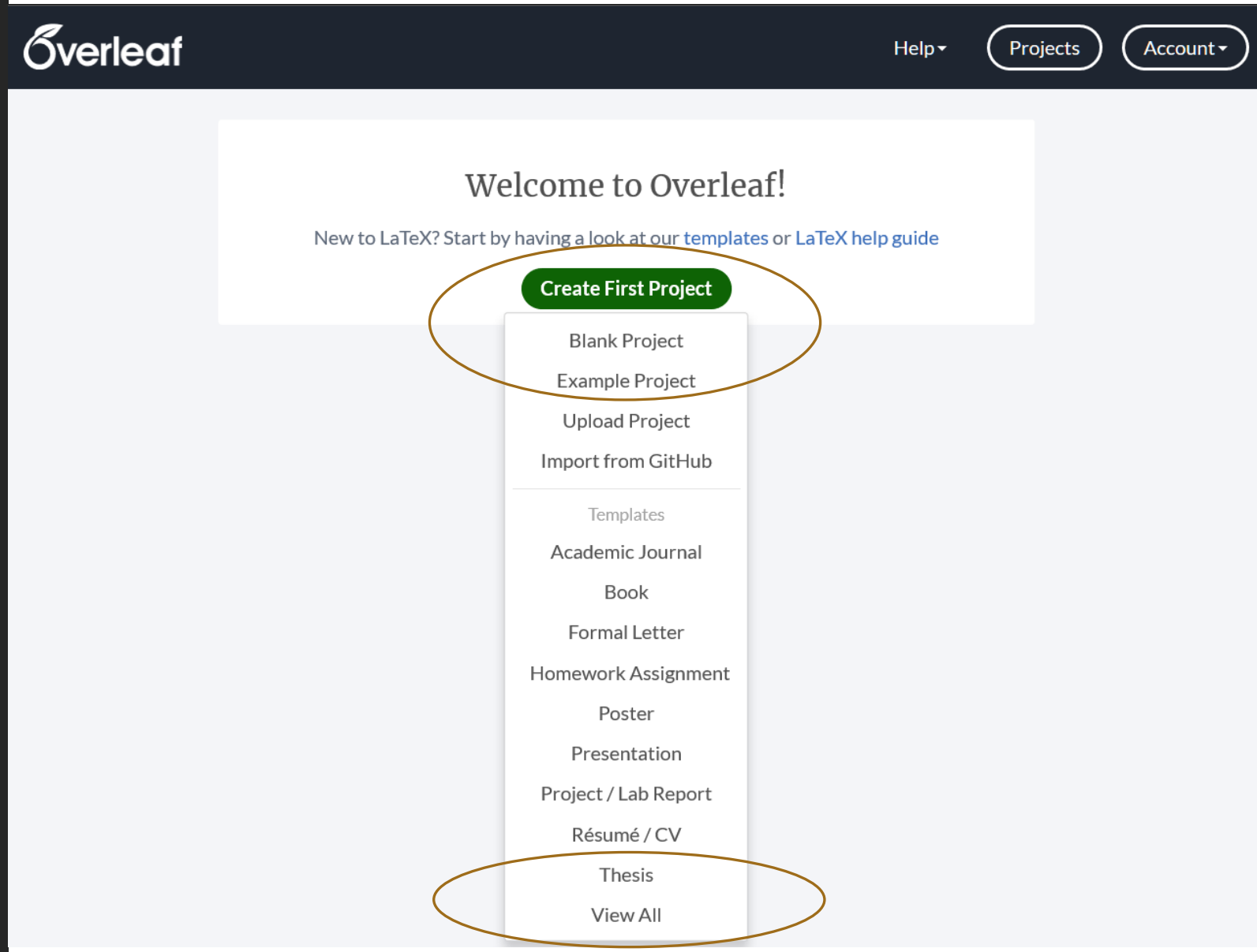


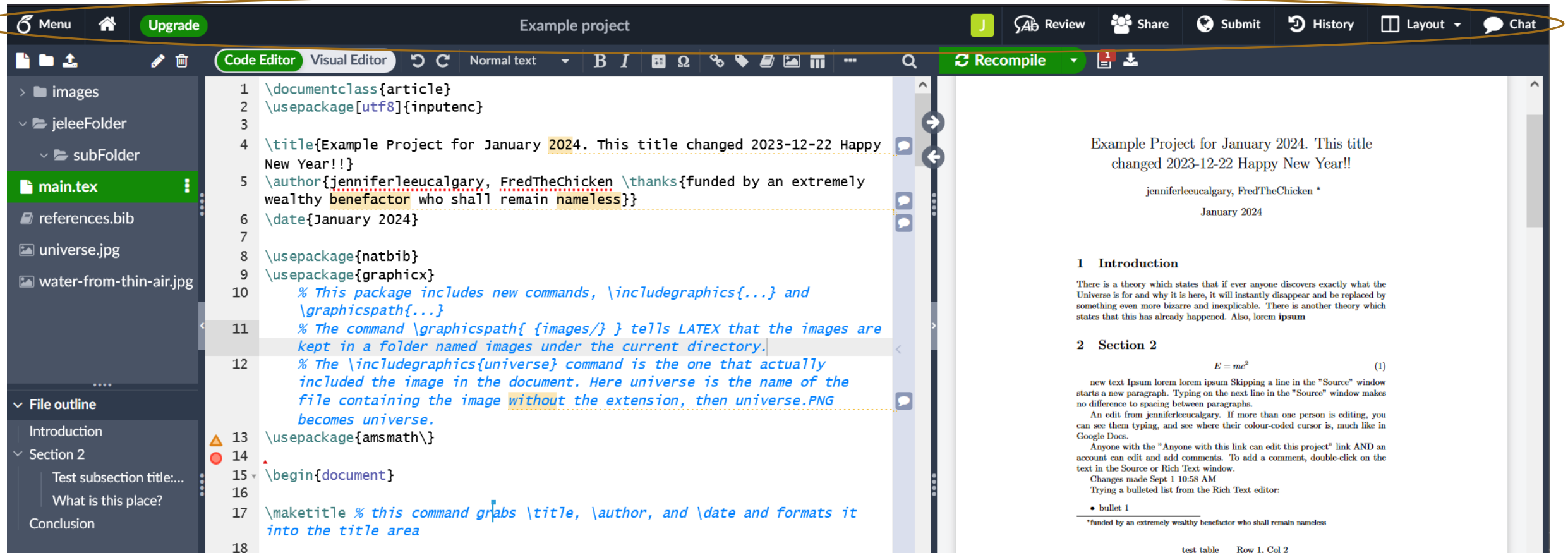
Account settings

Linking accounts (optional)



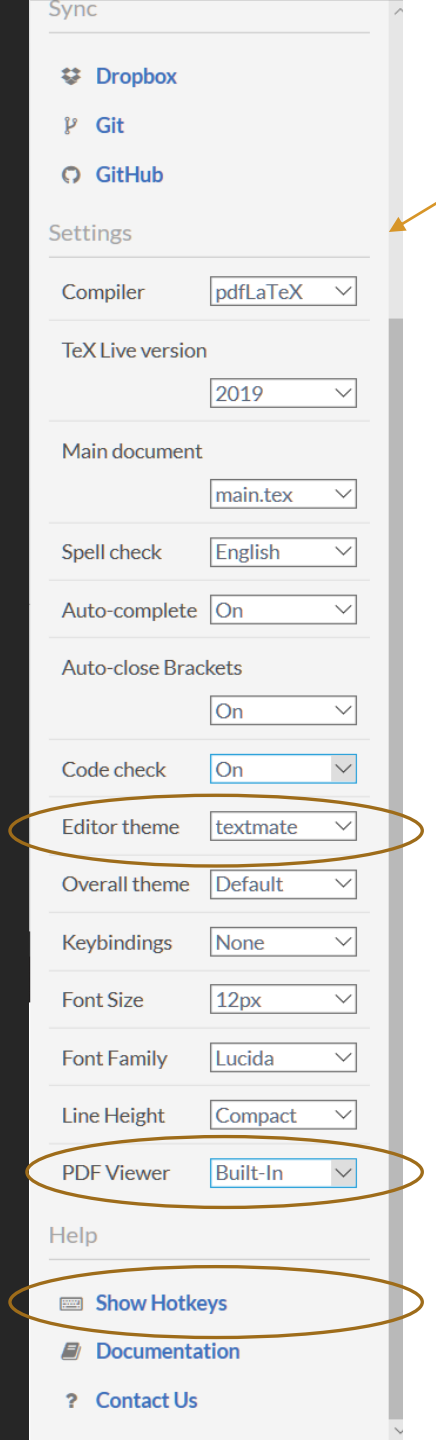
Create a new project

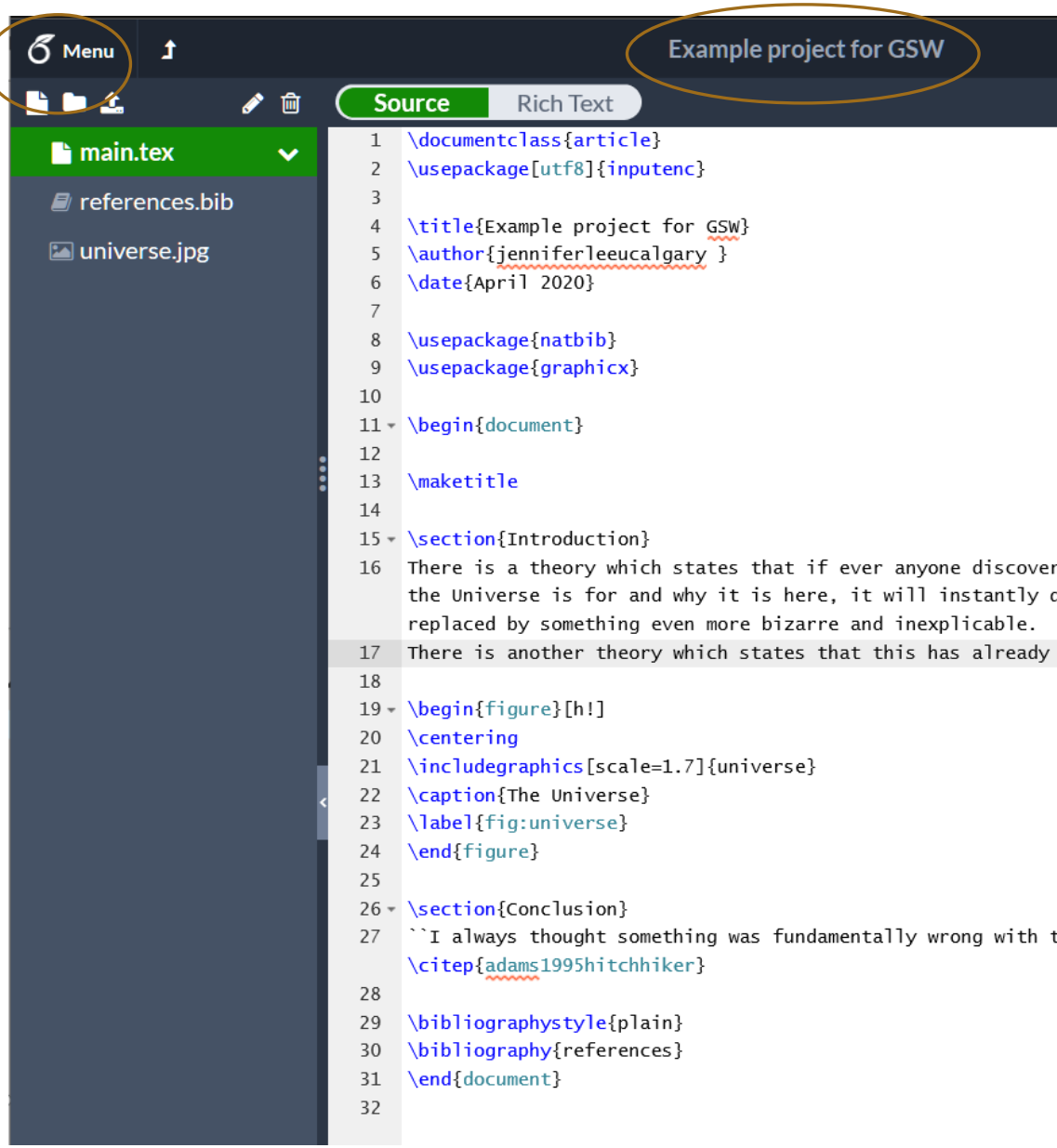


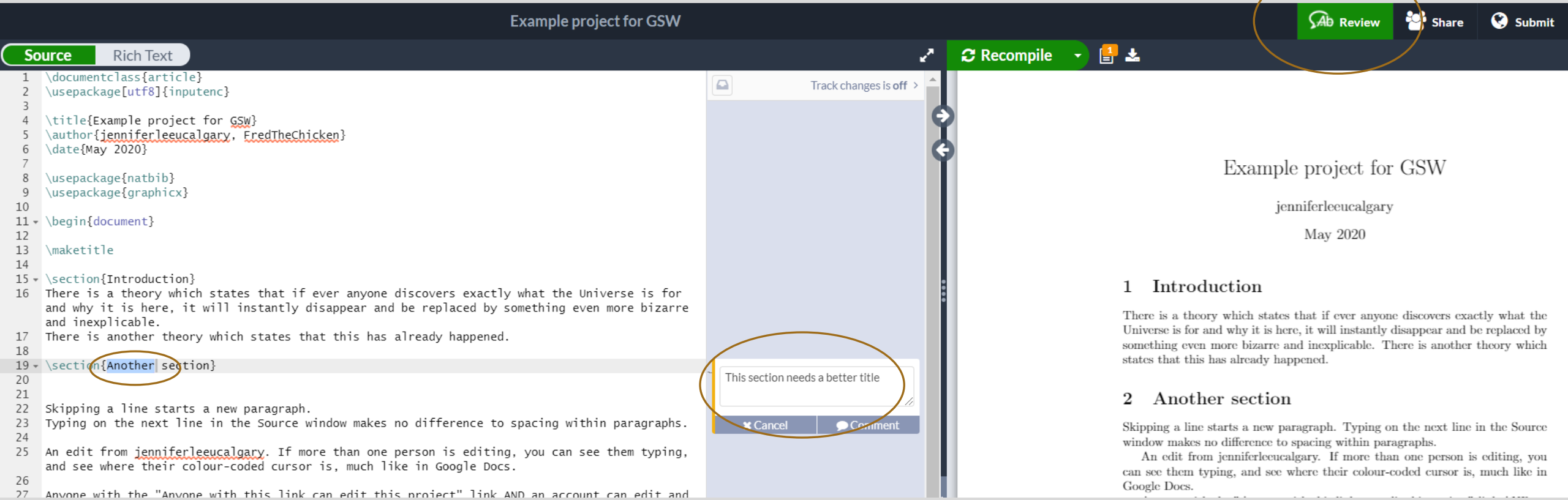


The project window

Menu


Sync
Dropbox
Git
GitHub
Settings
Compiler
pdfLaTeX
TeX Live version
2019
Main document
main.tex
Spell check
English
Auto-complete
On
Auto-close Brackets
On
Code check
On
Editor theme
textmate
Overall theme
Default
Keybindings
None
Font Size
12px
Font Family
Lucida
Line Height
Compact
PDF Viewer
Built-In
Help
Show Hotkeys
Documentation
Contact Us

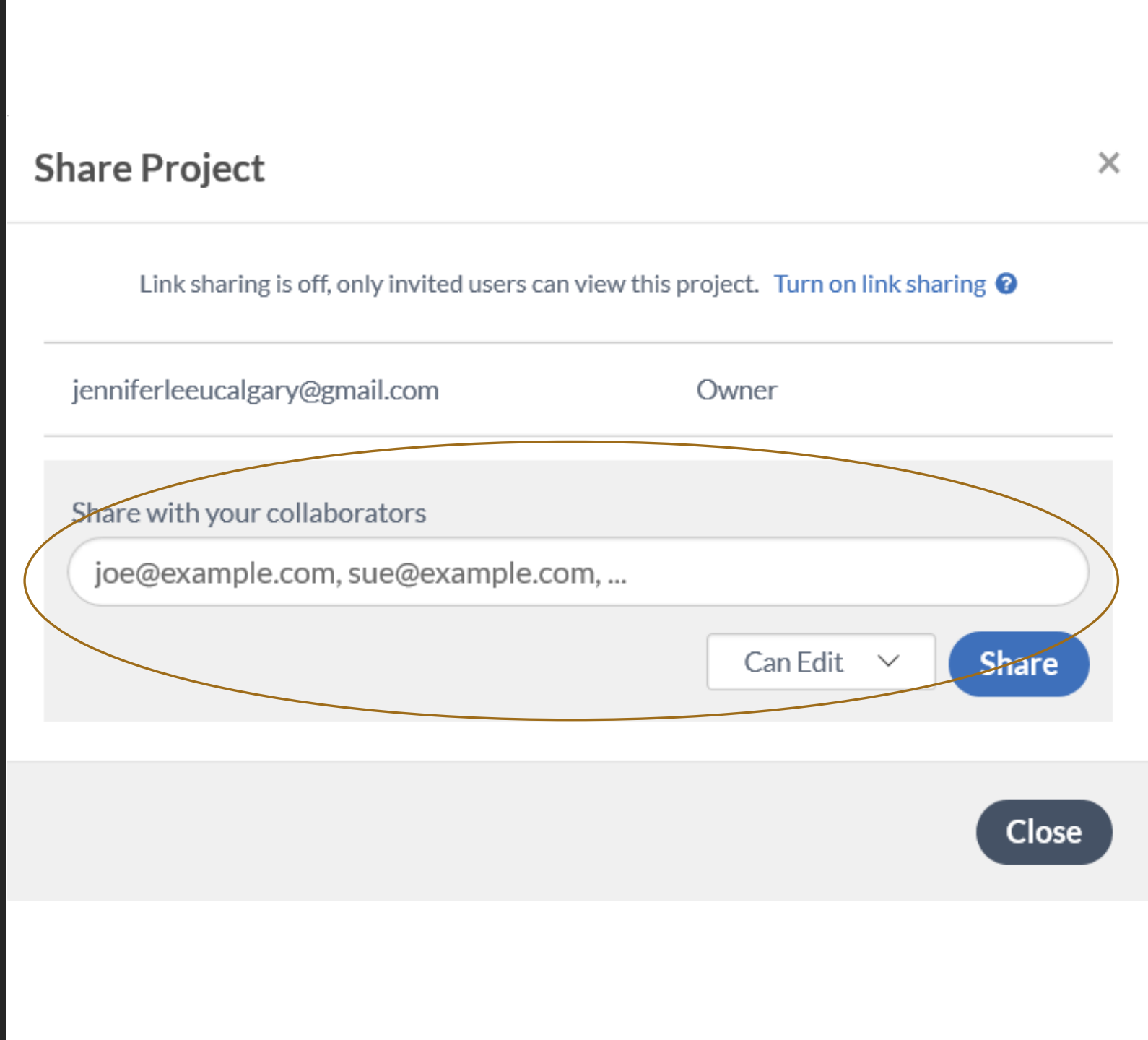

Menu
Example project for GSW
Source
Rich Text
main.tex
references.bib
universe.jpg
\documentclass{article}
\usepackage[utf8]{inputenc}
\title{Example project for GSW}
\author{jenniferleeucalgary }
\date{April 2020}
\usepackage{natbib}
\usepackage{graphicx}
\begin{document}
\maketitle
\section{Introduction}
There is a theory which states that if ever anyone discover
the Universe is for and why it is here, it will instantly c
replaced by something even more bizarre and inexplicable.
There is another theory which states that this has already
\begin{figure}[h!]
\centering
\includegraphics[scale=1.7]{universe}
\caption{The Universe}
\label{fig:universe}
\end{figure}
\section{Conclusion}
``I always thought something was fundamentally wrong with t
\citep{adams1995hitchhiker}
\bibliographystyle{plain}
\bibliography{references}
\end{document}

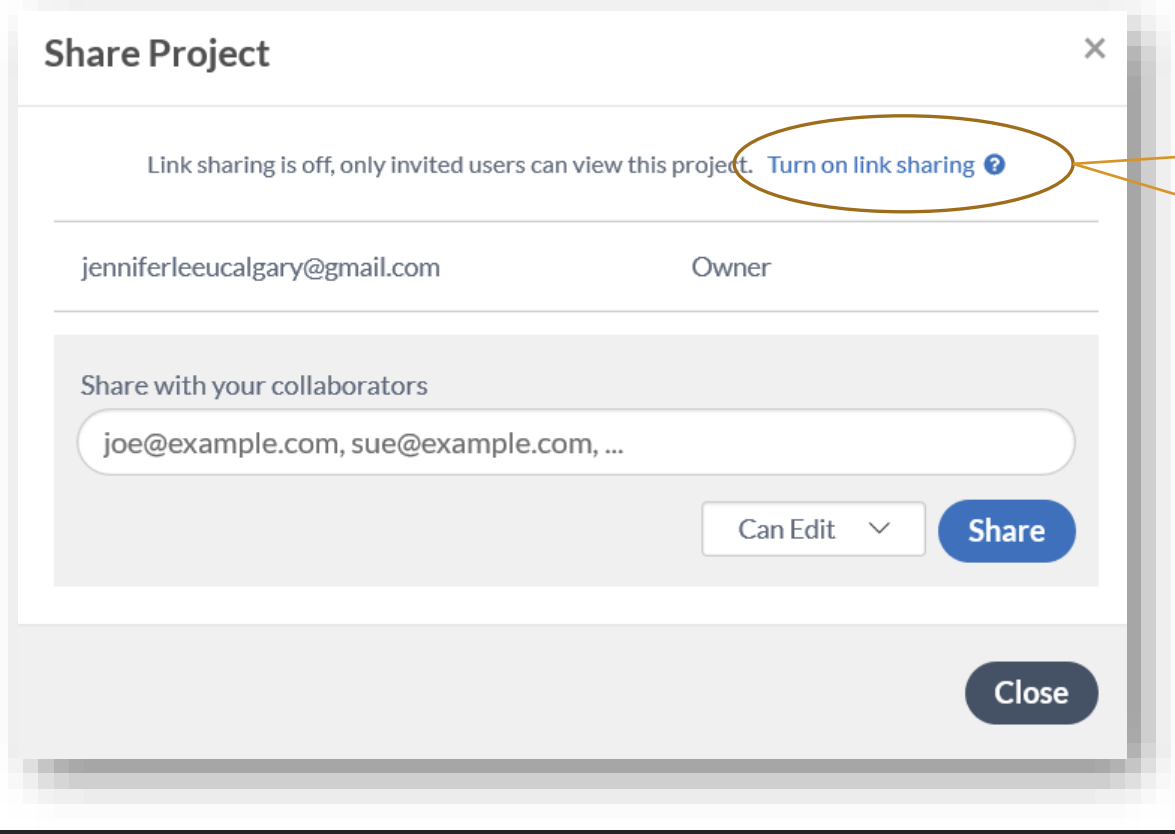


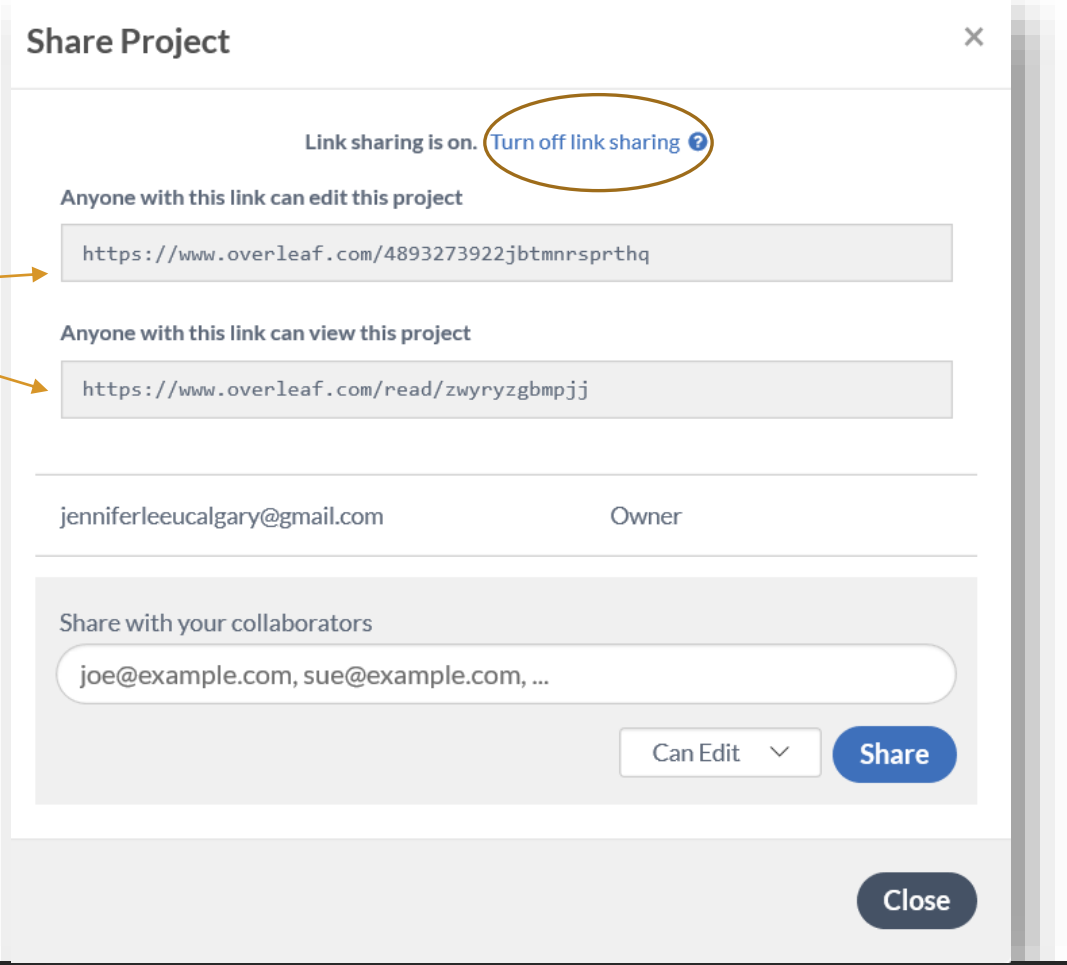
Review button

Click Review → highlight text → click Add Comment

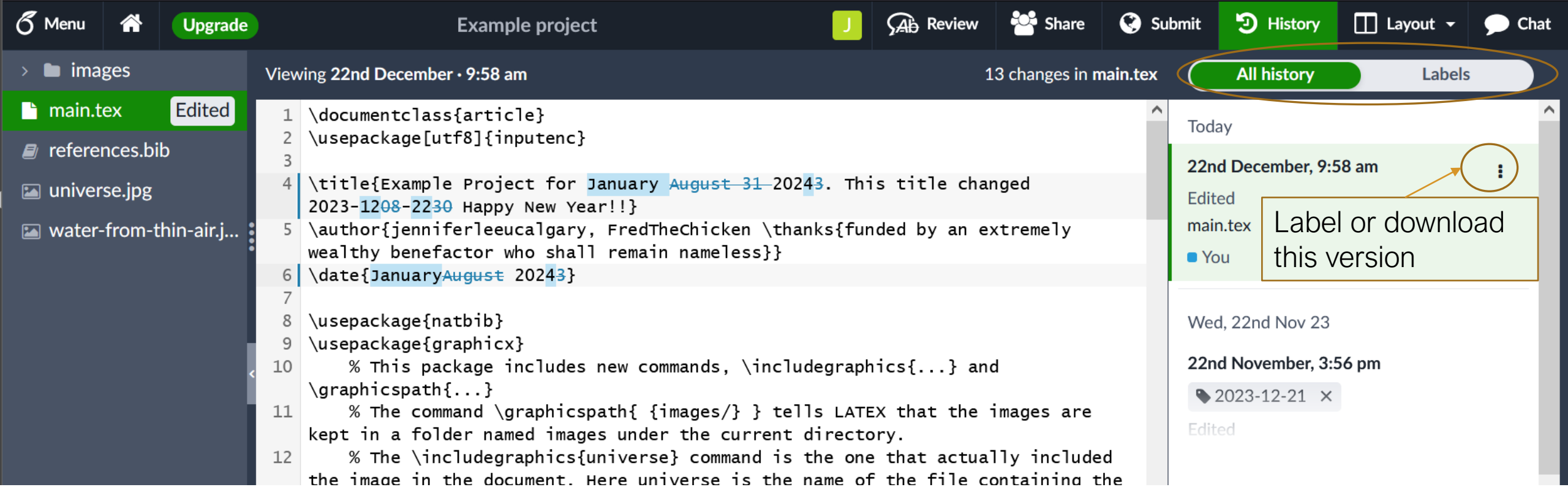
Share Project window via collaborator(s)



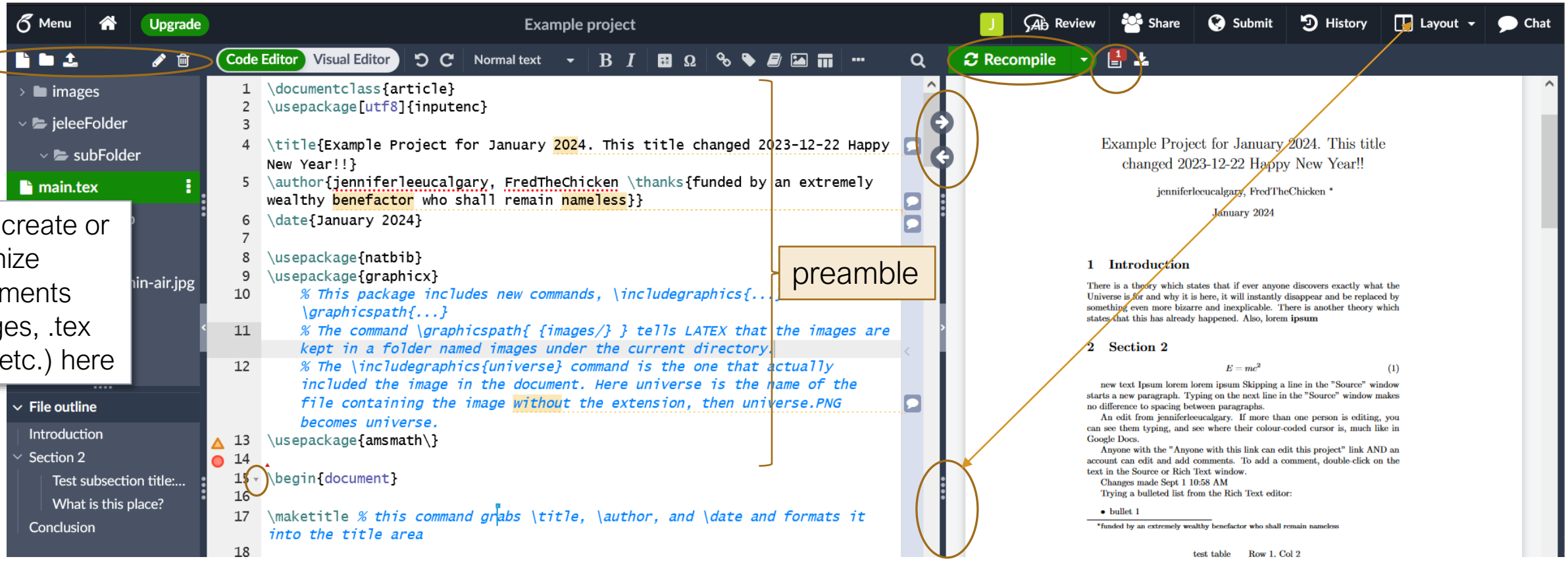




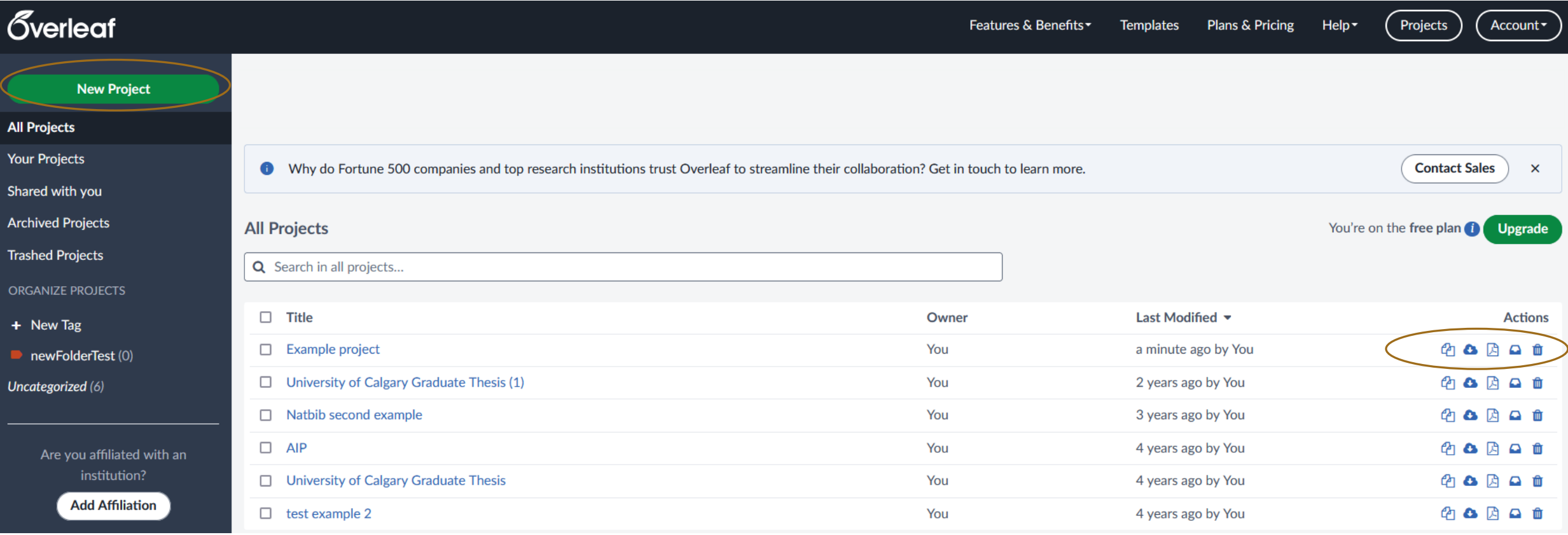
Share Project window via links


Menu
Upgrade
Example project
J
Review
Share
Submit
History
Layout
Chat
images
main.tex
Edited
references.bib
universe.jpg
water-from-thin-air.j...
Viewing 22nd December · 9:58 am
13 changes in main.tex
All history
Labels
\documentclass{article}
\usepackage[utf8]{inputenc}
\title{Example Project for January August 31 2024. This title changed 2023-1208-2230 Happy New Year!!}
\author{jenniferleeucalgary, FredTheChicken \thanks{funded by an extremely wealthy benefactor who shall remain nameless}}
\date{JanuaryAugust 2024}
\usepackage{natbib}
\usepackage{graphicx}
% This package includes new commands, \includegraphics{...} and \graphicspath{...}
% The command \graphicspath{ {images/} } tells LATEX that the images are kept in a folder named images under the current directory.
% The \includegraphics{universe} command is the one that actually included the image in the document. Here universe is the name of the file containing the
Today
22nd December, 9:58 am
Edited
main.tex
You
Label or download this version
Wed, 22nd Nov 23
22nd November, 3:56 pm
2023-12-21
Edited

History


Menu
Upgrade
Example project
Review
Share
Submit
History
Layout
Chat
Code Editor
Visual Editor
Normal text
Recompile
images
jeleeFolder
subFolder
main.tex
Add, create or organize documents (images, .tex files, etc.) here
File outline
Introduction
Section 2
Test subsection title:...
What is this place?
Conclusion
preamble
\documentclass{article}
\usepackage[utf8]{inputenc}
\title{Example Project for January 2024. This title changed 2023-12-22 Happy New Year!!}
\author{jenniferleeucalgary, FredTheChicken \thanks{funded by an extremely wealthy benefactor who shall remain nameless}}
\date{January 2024}
\usepackage{natbib}
\usepackage{graphicx}
% This package includes new commands, \includegraphics{...} \graphicspath{...}
% The command \graphicspath{ {images/} } tells LATEX that the images are kept in a folder named images under the current directory.
% The \includegraphics{universe} command is the one that actually included the image in the document. Here universe is the name of the file containing the image without the extension, then universe.PNG becomes universe.
\usepackage{amsmath\}
\begin{document}
\maketitle % this command grabs \title, \author, and \date and formats it into the title area
Example Project for January 2024. This title changed 2023-12-22 Happy New Year!!
jenniferleeucalgary, FredTheChicken *
January 2024
1 Introduction
There is a theory which states that if ever anyone discovers exactly what the Universe is for and why it is here, it will instantly disappear and be replaced by something even more bizarre and inexplicable. There is another theory which states that this has already happened. Also, lorem ipsum
2 Section 2
$E = mc^2$ (1)
new text Ipsum lorem lorem ipsum Skipping a line in the "Source" window starts a new paragraph. Typing on the next line in the "Source" window makes no difference to spacing between paragraphs.
An edit from jenniferleeucalgary. If more than one person is editing, you can see them typing, and see where their colour-coded cursor is, much like in Google Docs.
Anyone with the "Anyone with this link can edit this project" link AND an account can edit and add comments. To add a comment, double-click on the text in the Source or Rich Text window.
Changes made Sept 1 10:58 AM
Trying a bulleted list from the Rich Text editor:
• bullet 1
*funded by an extremely wealthy benefactor who shall remain nameless
test table
Row 1, Col 2

Editing



Project management page

LaTeX Commands

Files

Text file

- This is where all of your document and LaTeX commands go. E.g., thesis.tex

Bib file

- This is where you provide all of your bibliography information. E.g., thesis.bib

Pictures / Images

- Useful to put all of your image files for anything you want to include in the document in a folder. E.g., pictures\

Output

- Usually a PDF

Basic Structure of your tex file

```
\documentclass{article}
\usepackage[utf8]{inputenc}
\title{TutorialExample}
\author{John Brosz}
\date{May 2020}

\begin{document}
\maketitle
\section{Introduction}
This is a first example.
% This is a sentence that I'm not sure if I want to
delete so I've just commented it out instead.
\end{document}
```

Preamble (document setup)

Document body (text)

Basic File Structure

```
\documentclass{article}
\usepackage[utf8]{inputenc}
\title{TutorialExample}
\author{John Brosz}
\date{May 2020}

\begin{document}
\maketitle
\section{Introduction}
This is a first example.
% This is a sentence that I'm not sure if I want to
delete so I've just commented it out instead.
\end{document}
```

TutorialExample

John Brosz

May 2020

1 Introduction

This is a first example.

Basic File Structure

```
\documentclass{article}
\usepackage[utf8]{inputenc}
\title{TutorialExample}
\author{John Brosz}
\date{May 2020}

\begin{document}
\maketitle
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This is a first example.
% This is a sentence that I'm not sure if I want to
delete so I've just commented it out instead.
\end{document}
```

Document class

Package

Specifying authorship metadata

Instruction to create a title

Section heading

Commented out text. Does not appear in the final document but useful for notes to self, keeping old versions, etc.

Classes

Class – controls the overall layout and structure (e.g., document template)

- UCalgary thesis class (more on this two slides from now)

How to find classes:

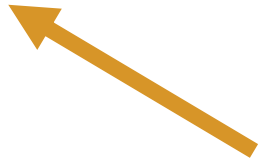
- Overleaf templates: https://www.overleaf.com/latex/templates
- CTAN (Comprehensive TeX Archive Network) https://www.ctan.org/ is a comprehensive listing of 5800+ packages

Classes

\documentclass[12pt, letterpaper]{article}

Only appears once,
must be in preamble

Options



Class name: *article*

Look-up options in CTAN
E.g., documentation for the *article* class

```
74 ⟨*article⟩
75 \ExecuteOptions{letterpaper,10pt,oneside,onecolumn,final}
76 ⟨/article⟩
77 ⟨*report⟩
78 \ExecuteOptions{letterpaper,10pt,oneside,onecolumn,final,openany}
79 ⟨/report⟩
80 ⟨*book⟩
81 \ExecuteOptions{letterpaper,10pt,twoside,onecolumn,final,openright}
82 ⟨/book⟩
```

from https://mirror.its.dal.ca/ctan/macros/latex/base/classes.pdf

University of Calgary Thesis Class

Template from the Faculty of Science (based on 2014 thesis guidelines)
https://science.ucalgary.ca/sites/default/files/teams/7/ucalgary-thesis-master.zip
https://www.overleaf.com/latex/templates/university-of-calgary-thesis-template/zgjghsjjhmnj

Version with some improvements by Mark Girard, now a Post-Doc at University of Waterloo (2016)
https://github.com/markwgirard/ucalgarythesis
https://www.overleaf.com/latex/templates/university-of-calgary-thesis-template/jddnhskkgpms

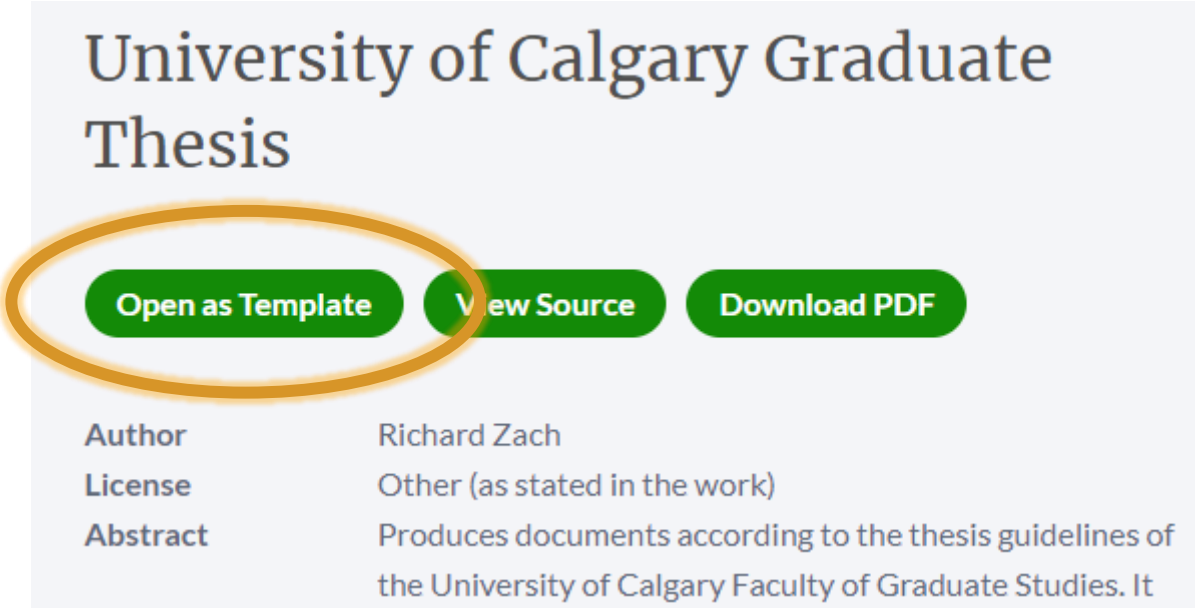
More readable template version created by Richard Zach, UCalgary Professor (Philosophy) (2018, 2023)
https://richardzach.org/2018/03/26/a-new-university-of-calgary-latex-thesis-class-based-on-memoir/
-> website provides a description of what has been improved
https://www.overleaf.com/latex/templates/university-of-calgary-graduate-thesis/hwksvncryfzn

Overleaf

Go to https://www.overleaf.com/latex/templates/university-of-calgary-graduate-thesis/hwksvncryfzn

Pick the thesis template by Richard Zach

Open as Template



Commands and Environments

commandname[*options*]{*arguments*}

Examples:

\itemize First ingredient

\center

\textbf{Make it so!}

\begin{*environmentname*}[*options*]{*arguments*}

Content goes here.

\end{*environmentname*}

Examples:

\begin{center}
text
\end{center}

\begin{textit}
This text is italicized.
\end{textit}

Common Commands & Environments

Font size
- \tiny
- \small
- \normalsize
- \large
- \huge
- \section*{*title*}

Font Properties
- Bold: \textbf{}
- Italics: \textit{}
- Underline: \underline{}
- Small caps: \textsc{}

Structure
- \part{*title*}
- \section{*title*}
- \subsection{*title*}
- \chapter{*title*}

Justification
- Center: \centering
  \begin{center}
  - \end{center}
- Align left: \raggedright
  \begin{flushleft}
- Align right: \raggedleft
  \begin{flushright}

Symbols: precede with \
- & \&
- $ \$
- % \%
- … \ldots
- \ \textbackslash
- } \}
- { \}
- “quotes”

Paragraphs & Comments

This is the first paragraph.
This is still in the first paragraph.

Finally, the second paragraph.

% This is a comment

% /command that doesn't work

% remember to insert a figure here

% This is the old version of paragraph 2, I'm keeping it because maybe I still want it. Paragraph 2 is awesome.

Figures

```
\usepackage{graphicx}
% can use \graphicspath{ {./images/} } so you don't
have to provide the image path every time
\begin{document}
The universe is immense and it seems to be
homogeneous, in a large scale, everywhere we look at.

\includegraphics{images/universe.jpg}

There's a picture of a galaxy above
\end{document}
```

The universe is immense and it seems to be homogeneous, in a large scale, everywhere we look at.

There's a picture of a galaxy above

Works for jpg, png, and pdf.

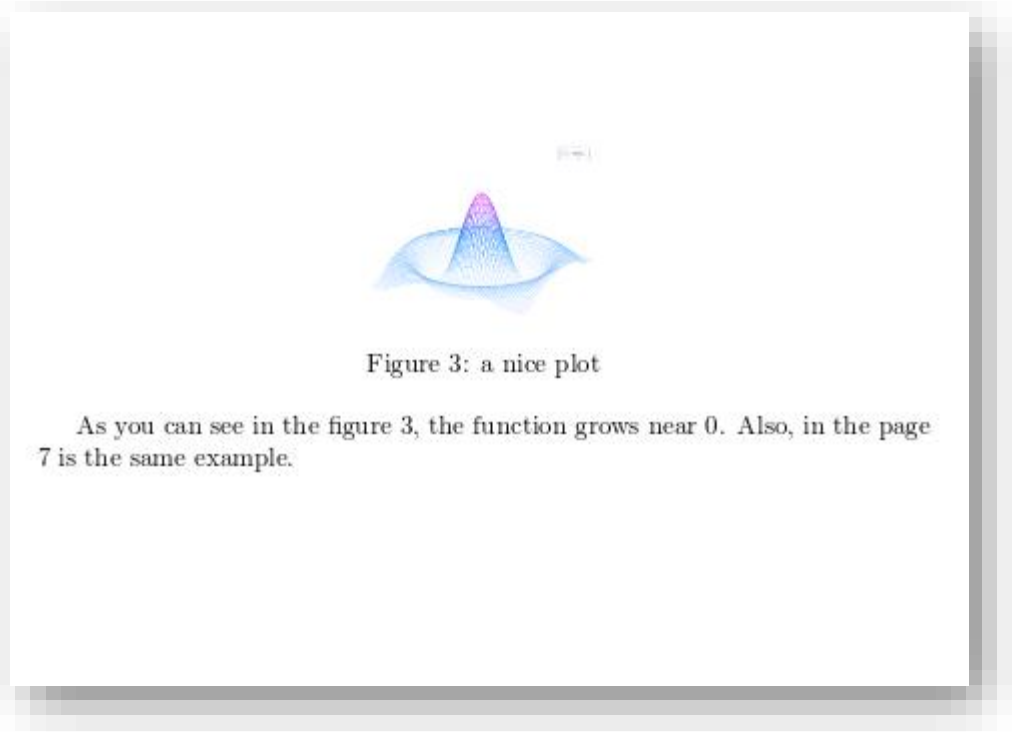
Figures

We don't just want an image, usually we want a number Figure with a caption that we can position in our document

h = here p = own page
t = top !
b = bottom

```
\begin{figure}[h]
    \centering
    \includegraphics[width=0.25\textwidth]{mesh.jpg}
    \caption{a nice plot}
    \label{fig:mesh1}
\end{figure}

As you can see in the figure \ref{fig:mesh1}, the
function grows near 0. Also, in the page \pageref{fig:mesh1}
is the same example.
```



Figures

We don’t just want an image, usually we want a number Figure with a caption that we can position in our document

```
\begin{figure}[h]
    \centering
    \includegraphics[width=0.25\textwidth]{mesh.jpg}
    \caption{a nice plot}
    \label{fig:mesh1}
\end{figure}
```

Center everything that follows, otherwise left justified

How big? Set the width to ¼ of a line of text

As you can see in the figure \ref{fig:mesh1}, the function grows near 0. Also, in the page \pageref{fig:mesh1} is the same example.

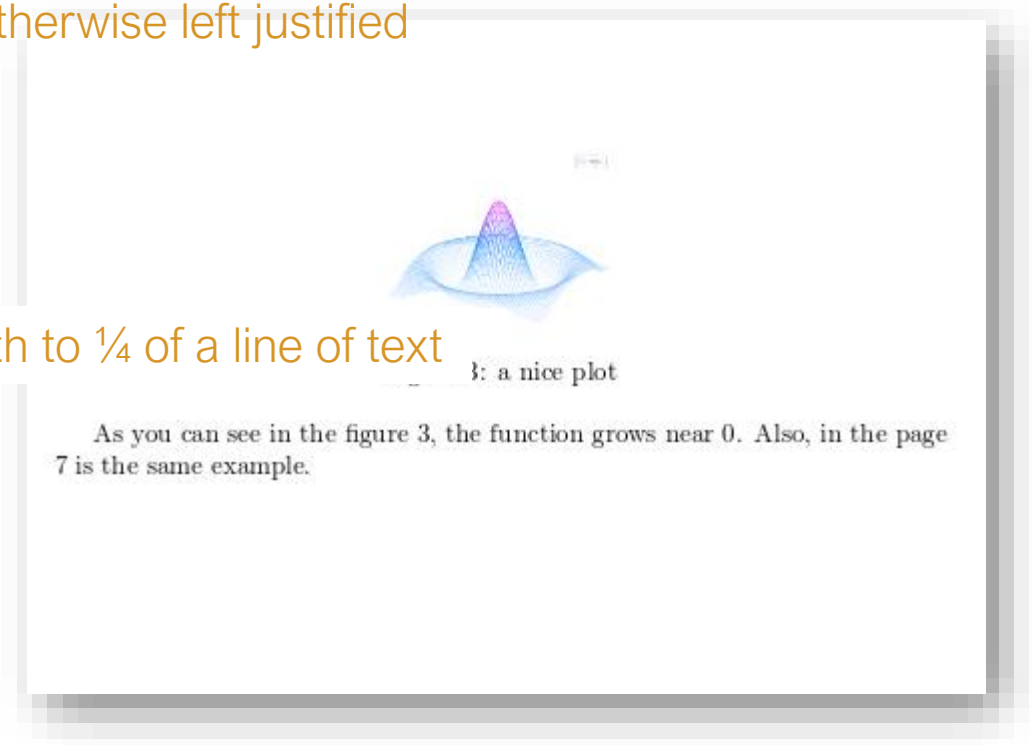


Figure Sizes

[width=3cm] 3cm wide, calculate height to maintain aspect ratio

- Also: pt, mm, cm, in, em (width of the m character in current font), ex (height of the x character)

[width=\textwidth] use the space available for a singe line of text at this point in the document

- Also: \columnwidth \columnsep \linewidth \textheight \paperheight \paperwidth

[width=3cm; height=2cm] overrides the image's aspect ratio to give exact dimensions.

Figures

We don't just want an image, usually we want a number Figure with a caption that we can position in our document

```
\begin{figure}[h]
    \centering
    \includegraphics[width=0.25\textwidth]{mesh.jpg}
    \caption{a nice plot}
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\end{figure}

As you can see in the figure \ref{fig:mesh1}, the
function grows near 0. Also, in the page \pageref{fig:mesh1}
is the same example.
```
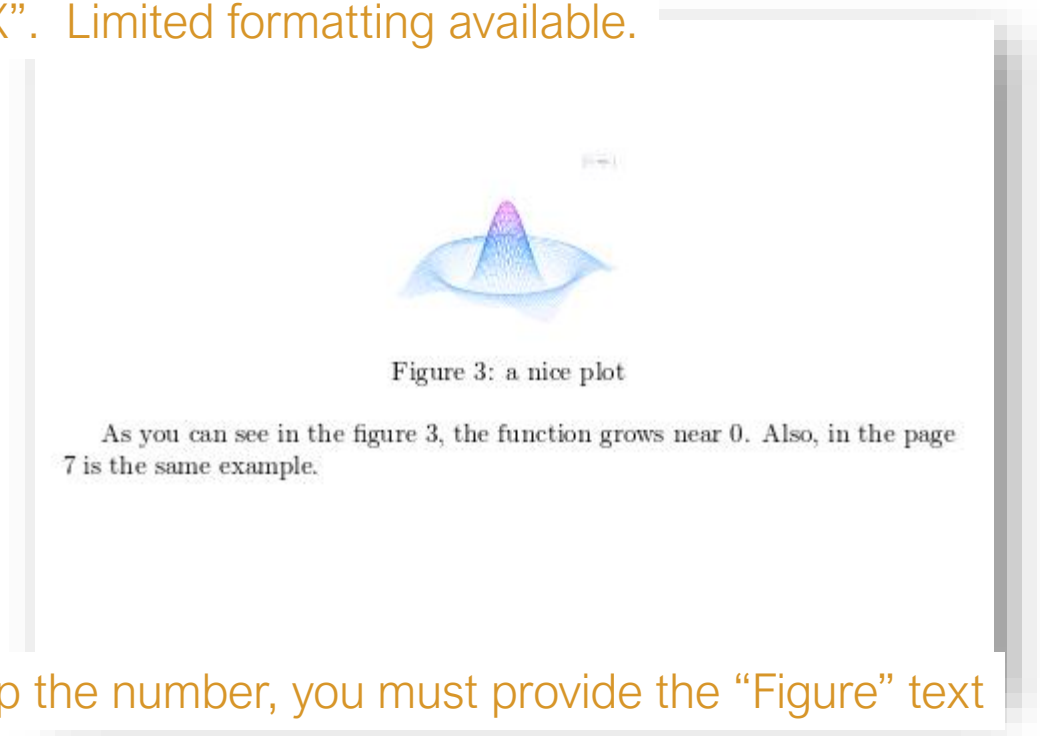

Caption. Auto-add the "Figure X". Limited formatting available.

A name you'll remember.



Ref = reference. It will lookup the number, you must provide the "Figure" text

Bullet Lists

Bulleted list:

```
\begin{itemize}
  \item apples
  \item bananas
  \item oranges
\end{itemize}
```

Numbered list:

```
\begin{enum}
```

Mathematical Equations

Inline

In physics, the mass-energy equivalence is stated by the equation $E=mc^2$, discovered in 1905 by Albert Einstein.

In physics, the mass-energy equivalence is stated by the equation $E = mc^2$, discovered in 1905 by Albert Einstein.

Stand alone

The mass-energy equivalence is described by the famous equation
\[E=mc^2 \]
discovered in 1905 by Albert Einstein.

In natural units ($c = 1$), the formula expresses the identity
\begin{equation}
E=m
\end{equation}

The mass-energy equivalence is described by the famous equation

$$E = mc^2$$

discovered in 1905 by Albert Einstein. In natural units ($c = 1$), the formula expresses the identity

$$E = m \tag{1}$$

Mathematical Equations

Subscripts in math mode are written as a_b and superscripts are written as a^b. These can be combined an nested to write expressions such as

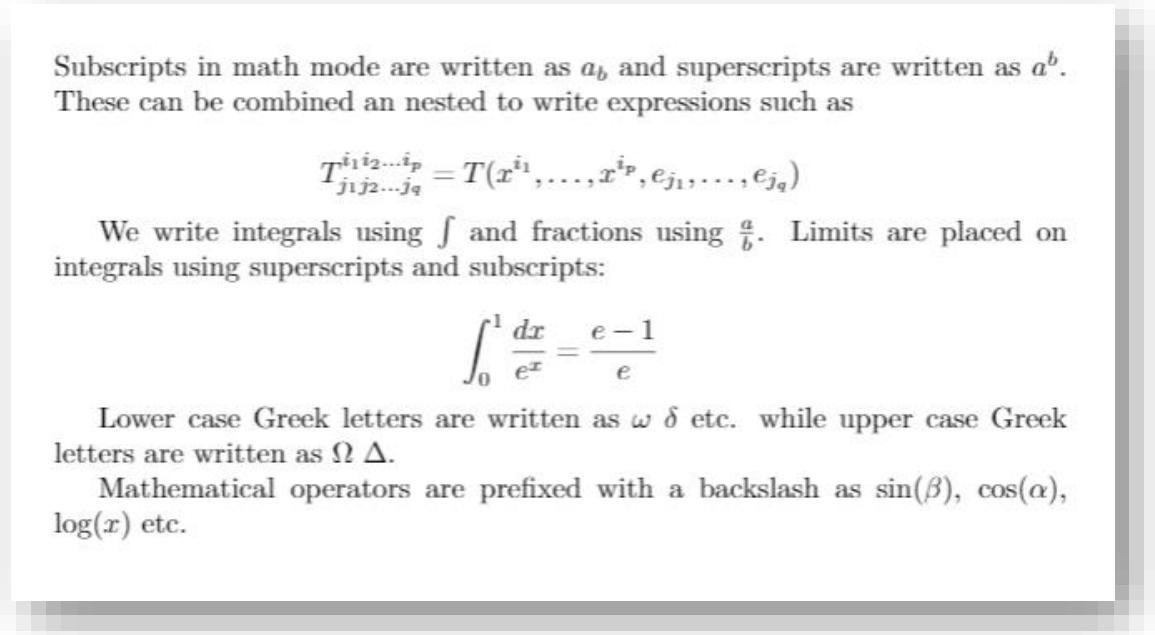
\[T^{i_1 i_2 \dots i_p}_{j_1 j_2 \dots j_q} = T(x^{i_1},\dots,x^{i_p},e_{j_1},\dots,e_{j_q}) \]

We write integrals using $\int$ and fractions using $\frac{a}{b}$. Limits are placed on integrals using superscripts and subscripts:

\[\int_0^1 \frac{dx}{e^x} = \frac{e-1}{e} \]

Lower case Greek letters are written as ω δ etc. while upper case Greek letters are written as Ω Δ.

Mathematical operators are prefixed with a backslash as $\sin(\beta)$, $\cos(\alpha)$, $\log(x)$ etc.



Subscripts in math mode are written as a_b and superscripts are written as a^b. These can be combined an nested to write expressions such as

$$T^{i_1 i_2 \dots i_p}_{j_1 j_2 \dots j_q} = T(x^{i_1},\dots,x^{i_p},e_{j_1},\dots,e_{j_q})$$

We write integrals using $\int$ and fractions using $\frac{a}{b}$. Limits are placed on integrals using superscripts and subscripts:

$$\int_0^1 \frac{dx}{e^x} = \frac{e-1}{e}$$

Lower case Greek letters are written as ω δ etc. while upper case Greek letters are written as Ω Δ.

Mathematical operators are prefixed with a backslash as $\sin(\beta)$, $\cos(\alpha)$, $\log(x)$ etc.

Tables: A Sample Table

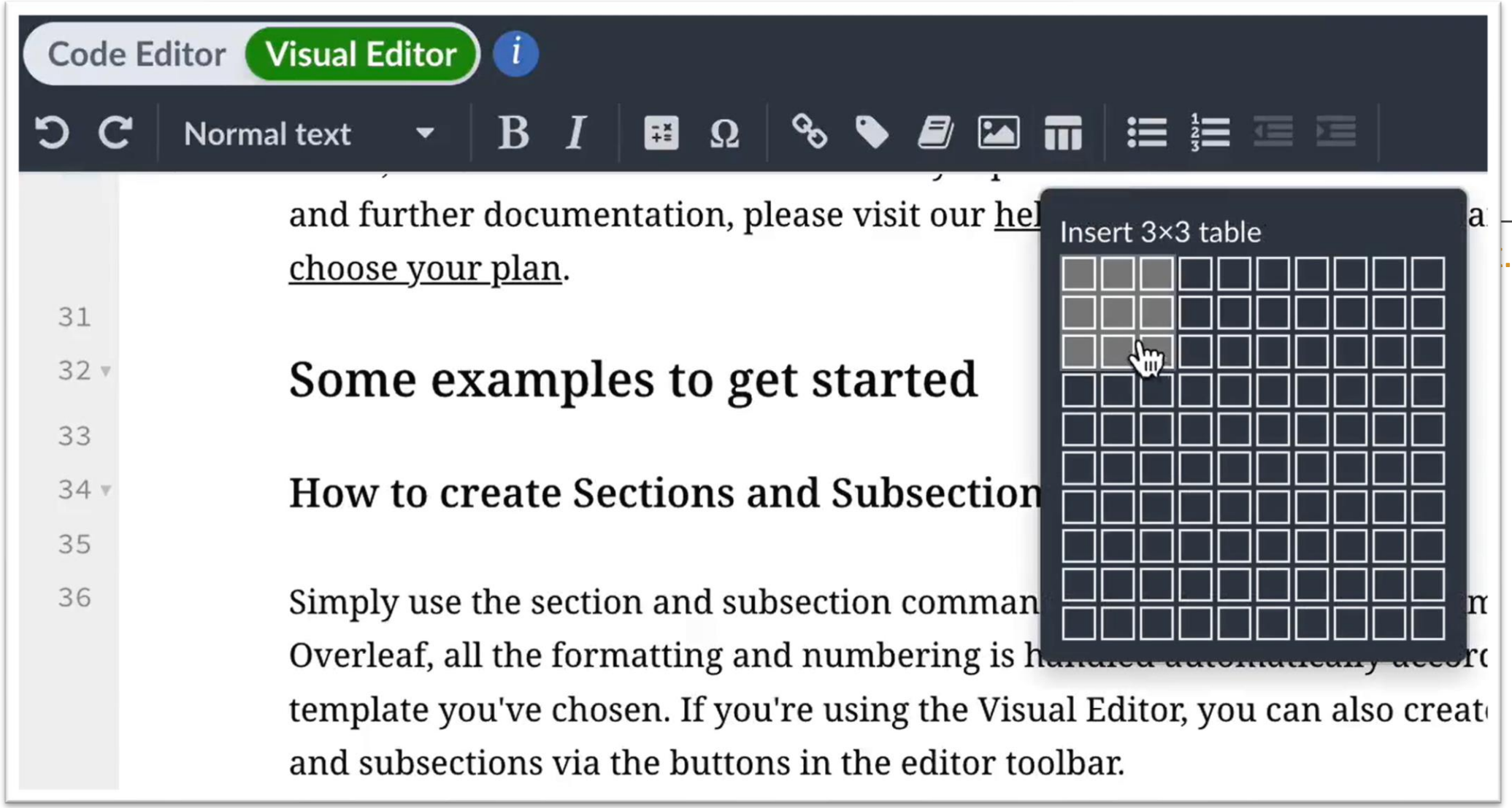
```
\begin{tabular}{ c c c }
\centering
 cell1 & cell2 & cell3 \\
 cell4 & cell5 & cell6 \\
 cell7 & cell8 & cell9
\end{tabular}
```

3 columns, centered. Could be r = right or l = left.

& = Separator between cells

\\ = End of row

cell1	cell2	cell3
cell4	cell5	cell6
cell7	cell8	cell9


Code Editor
Visual Editor
Normal text
Insert 3×3 table
and further documentation, please visit our hel
choose your plan.
31
32
Some examples to get started
33
34
How to create Sections and Subsection
35
36
Simply use the section and subsection comman
Overleaf, all the formatting and numbering is h
template you've chosen. If you're using the Visual Editor, you can also creat
and subsections via the buttons in the editor toolbar.

Tables: More Complexity

```
\begin{tabular}{||c c c||}
\hline
Col1 & Col2 & Col2 & Col3 \\ [0.5ex]
\hline\hline
1 & 6 & 87837 & 787 \\
\hline
2 & 7 & 78 & 5415 \\
\hline
3 & 545 & 778 & 7507 \\
\hline
4 & 545 & 18744 & 7560 \\
\hline
5 & 88 & 788 & 6344 \\ [1ex]
\hline
\end{tabular}
```

|| = draw double-border; also | draw single border before/after column

Adds a vertical space (1/2 the height of an ‘x’)

Horizontal border line

Col1	Col2	Col2	Col3
1	6	87837	787
2	7	78	5415
3	545	778	7507
4	545	18744	7560
5	88	788	6344

References & Bibliography

Preamble

```
\usepackage[round]{natbib}
\bibliographystyle{plainnat}
```

Using natbib references, also bibtex or biblatex

Change this to change the style of your bibliography
See https://www.overleaf.com/learn/latex/Natbib_bibliography_styles

Document

According to research by Authors \ref{author:coolpaper} this is a good way of doing things.

Research by OtherAuthors \cite{author:coolpaper} this is a good way of doing things.

End of Document (wherever you want the bibliography to appear)

```
\bibliography{mybibfilename}
```

Your .bib file that contains the reference information

* You will need to compile two times when you update your bib file.

.bib files

```
@Book{Lamport1986,
        author =       {Leslie Lamport},
        title = {LaTeX: A Document Preparation System},
        publisher = {Addison-Wesley},
        year = 1986,
        address = {Reading, Mass.}
}

@Book{Knuth1986,
        author = {Donald E. Knuth},
        title =  {The TeXbook},
        publisher = {Addison-Wesley},
        year = 1986
}
@booklet{Wilson2016,
        author = {Peter Wilson},
        title = {The Memoir Class for Configurable Typesetting},
        url = {https://ctan.org/pkg/memoir?lang=en},
        year = 2016
}
```

Software to help:

JabRef https://www.jabref.org/

CiteDrive https://app.citedrive.com/

EndNote

- Edit – Output Styles – Open Style Manager
- BibTexExport

Packages

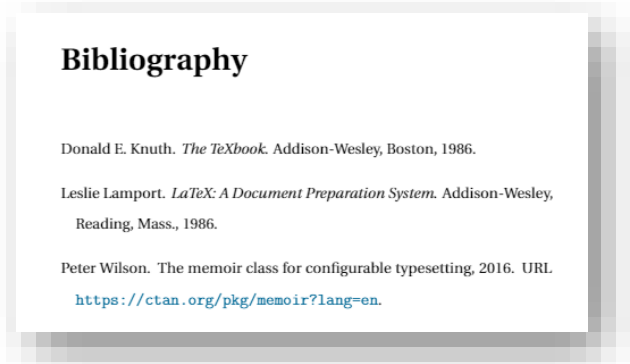
Package – adds features to provide different possiblities.

- Hyperref – support for links in your document. E.g., URLs, link citation to bibliography entries, etc.

How to find packages:

- CTAN (Comprehensive TeX Archive Network) https://www.ctan.org/ is a comprehensive listing of 5800+ packages
- Overleaf documentation: https://www.overleaf.com/learn
- Google – latex how do I …

Packages



Bibliography

Donald E. Knuth. *The TeXbook*. Addison-Wesley, Boston, 1986.

Leslie Lamport. *LaTeX: A Document Preparation System*. Addison-Wesley, Reading, Mass., 1986.

Peter Wilson. The memoir class for configurable typesetting, 2016. URL https://ctan.org/pkg/memoir?lang=en.

```
\usepackage[colorlinks,allcolors=MidnightBlue]{hyperref}
```

Must be in preamble

Options

Package name: *hyperref*

E.g., documentation for the *hyperref* class from https://ctan.org/pkg/hyperref

3 Package options

All user-configurable aspects of hyperref are set using a single 'key=value' scheme (using the keyval package) with the key Hyp. The options can be set either in the optional argument to the \usepackage command, or using the \hypersetup macro. When the package is loaded, a file hyperref.cfg is read if it can be found, and this is a convenient place to set options on a site-wide basis.

Note however that some options (for example unicode) can only be used as packge options, and not in \hypersetup as the option settings are processed as the package is read.

As an example, the behavior of a particular file could be controlled by:

a site-wide hyperref.cfg setting up the look of links, adding backreferencing, and setting a PDF display default:\hypersetup{backref, pdfpagemode=FullScreen,
colorlinks=true}

A global option in the file, which is passed down to hyperref:\documentclass[dvips]{article}

File-specific options in the \usepackage commands, which override the ones set in hyperref.cfg:\usepackage[colorlinks=false]{hyperref}
\hypersetup{pdftitle={A Perfect Day}}

Debugging

Read the error message, pay attention to which line is the problem

If you're not sure, try commenting out lines until you've pinpointed the problem

Watch out that you always match \begin{xyz} with an \end{xyz}. These problems can be a headache to track down.

Google: latex "my error message"

Warnings vs Errors (you can ignore warnings)

Extra Resources, Help

Overleaf documentation/help

- Many “old” resources on the web, Overleaf documentation is current

Stack Exchange

- https://tex.stackexchange.com/

Reference Sheet

- https://github.com/wch/latexsheet/blob/gh-pages/latexsheet.pdf

Good Luck, Happy Writing!

If you end up stuck with a LaTeX problem, feel free to get in touch.

Jennifer Lee
jennifer.lee@ucalgary.ca

John Brosz
jdlbrosz@ucalgary.ca