Scientific Writing and Communication

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Preface

This is a Quarto book.

To learn more about Quarto books visit https://quarto.org/docs/books.

1 Introduction

This book introduces essential open-source tools for mastering the art of scientific writing.

1. Writing/ Collaborative Writing Platforms
    - Overleaf: An online LaTeX editor for collaborative writing and publishing.
2. Computing
    - R
    - Python
3. Data visualization
    - R: ggplot2
    - Python: plotnine
4. Reproducible Research
    - R and Python both: Quarto
    - Python: Jupyter Notebooks
    - R: RMarkdown, knitr
5. Paper Management
    - Zotero
    - Mendeley
6. Open Access Journals/ Research papers
    - Directory of Open Access Journals (DOAJ): A community-curated online directory that indexes and provides access to high-quality, open access, peer-reviewed journals.
7. Research Collaboration and Networking
    - ResearchGate

- Academia.edu

8. Version control
    - Github

2 Writing/ Collaborative Writing Platforms

2.1 What is Overleaf?

Overleaf is an online LaTeX editor that allows users to create, edit, and collaborate on LaTeX documents in a web-based environment.

2.2 LaTeX Documents

LaTeX is a typesetting system commonly used for the production of scientific and mathematical documents due to its robust handling of complex formatting.

2.3 Advantages of Overleaf

1. Real-Time Collaboration

Multiple users can work on a document simultaneously, with changes visible in real-time.

2. Templates

Overleaf provides a variety of templates for different document types such as thesis, posters, presentations, etc., making it easier to get started.

3. Version Control

Integrated version control system tracks changes and allows users to revert to previous versions.

4. Rich Text Editing

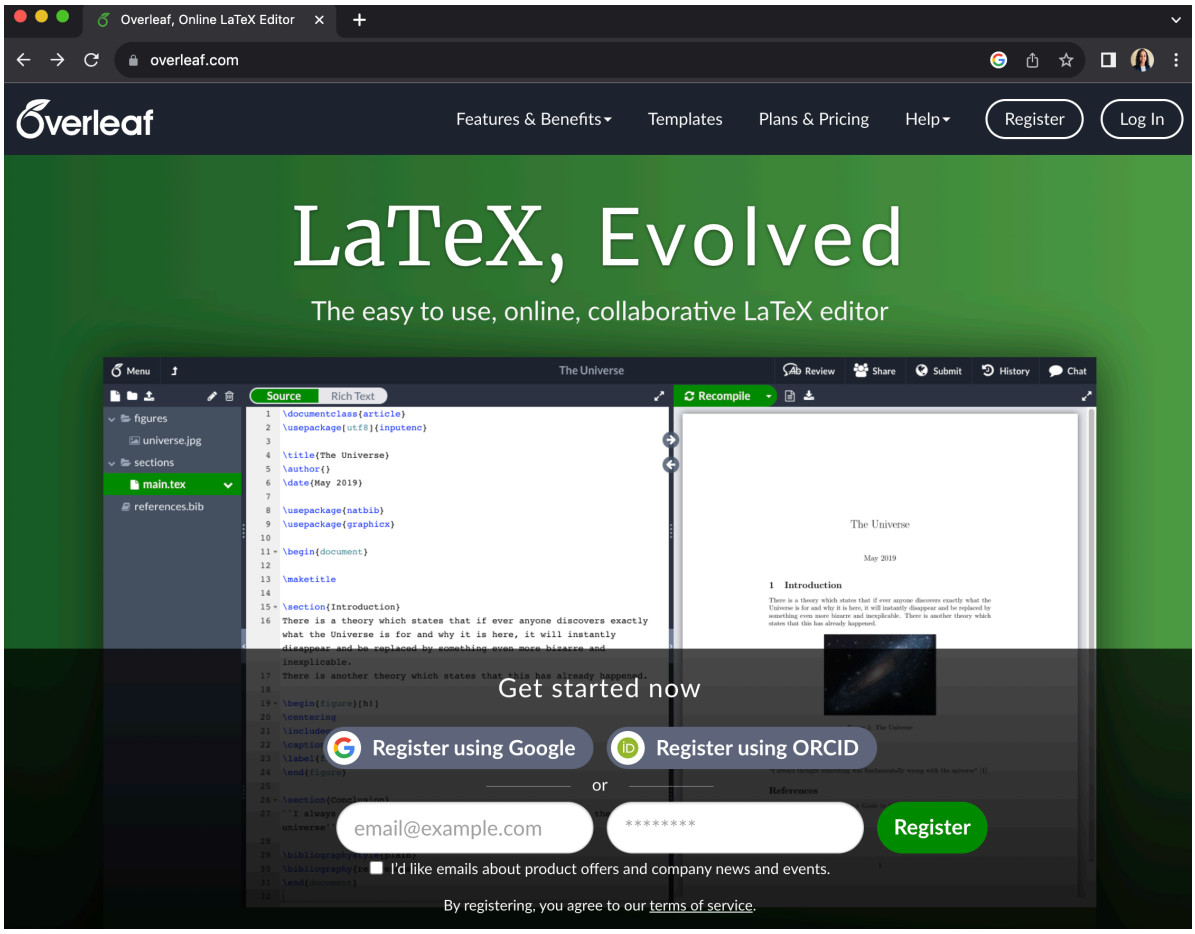
Combines the power of LaTeX with a user-friendly rich text editor for easy formatting.

5. Accessibility

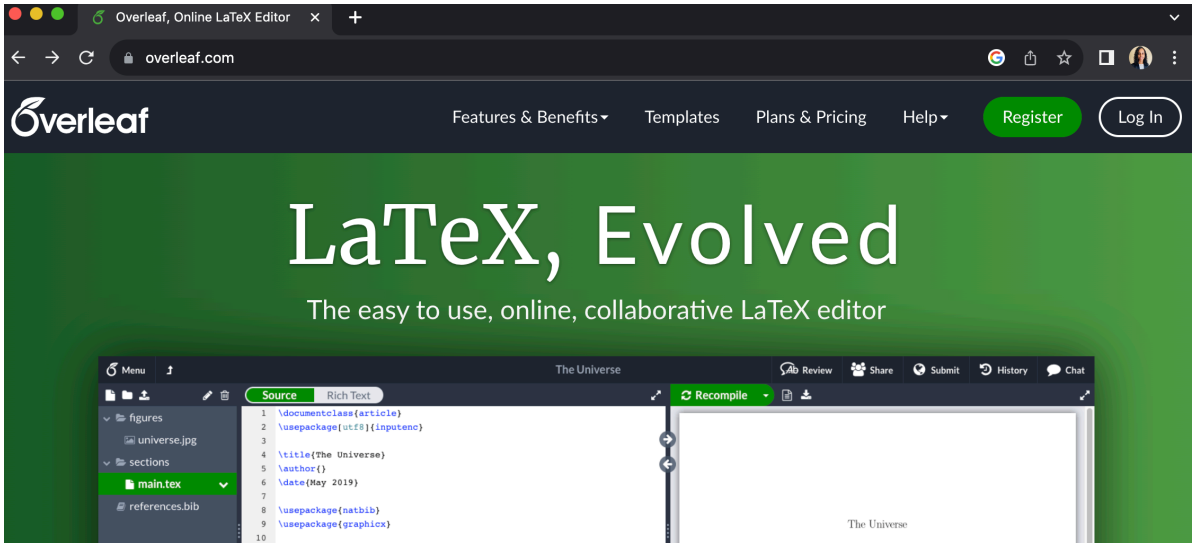
Access your documents from any device with an internet connection. Since it's web-based, there's no need to install LaTeX on your computer.

2.4 Setting up an Overleaf Account

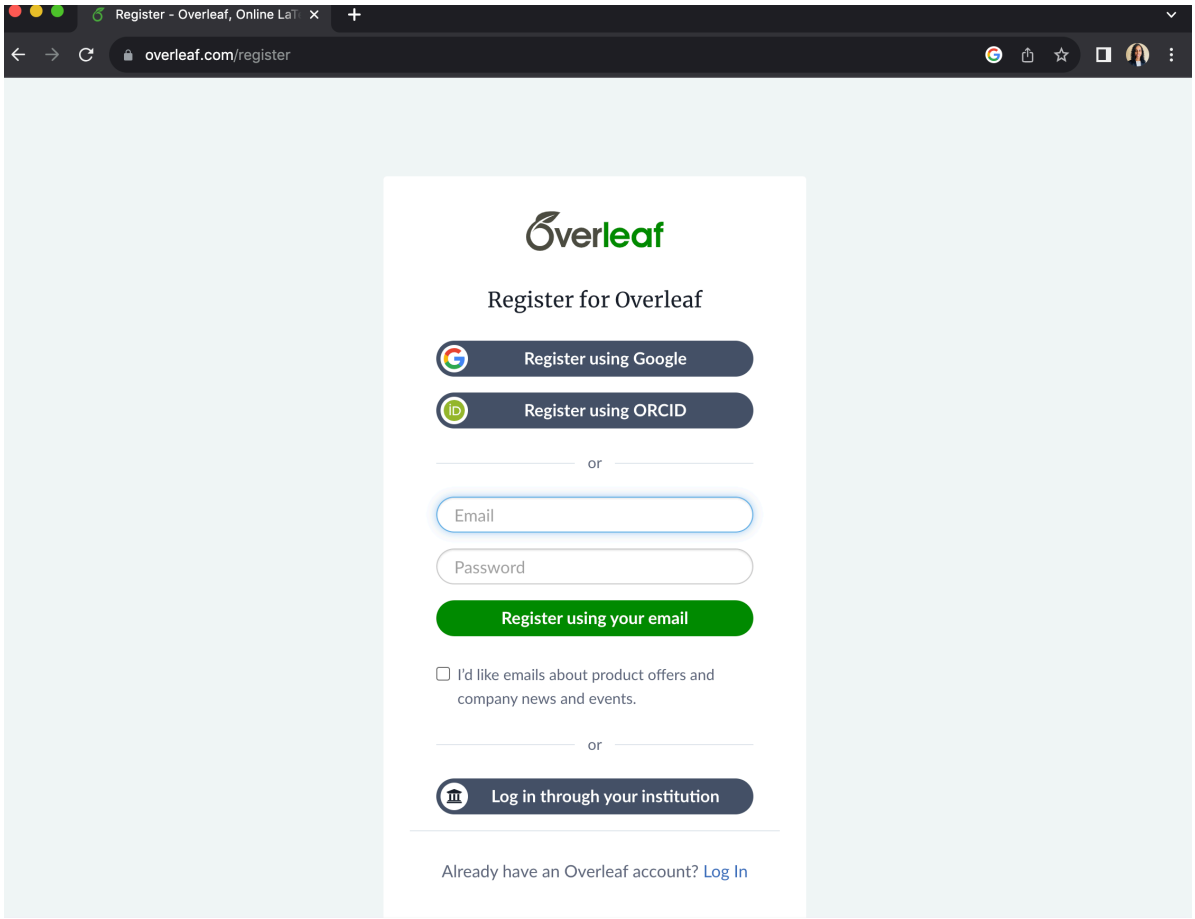
1. Go to https://www.overleaf.com/.



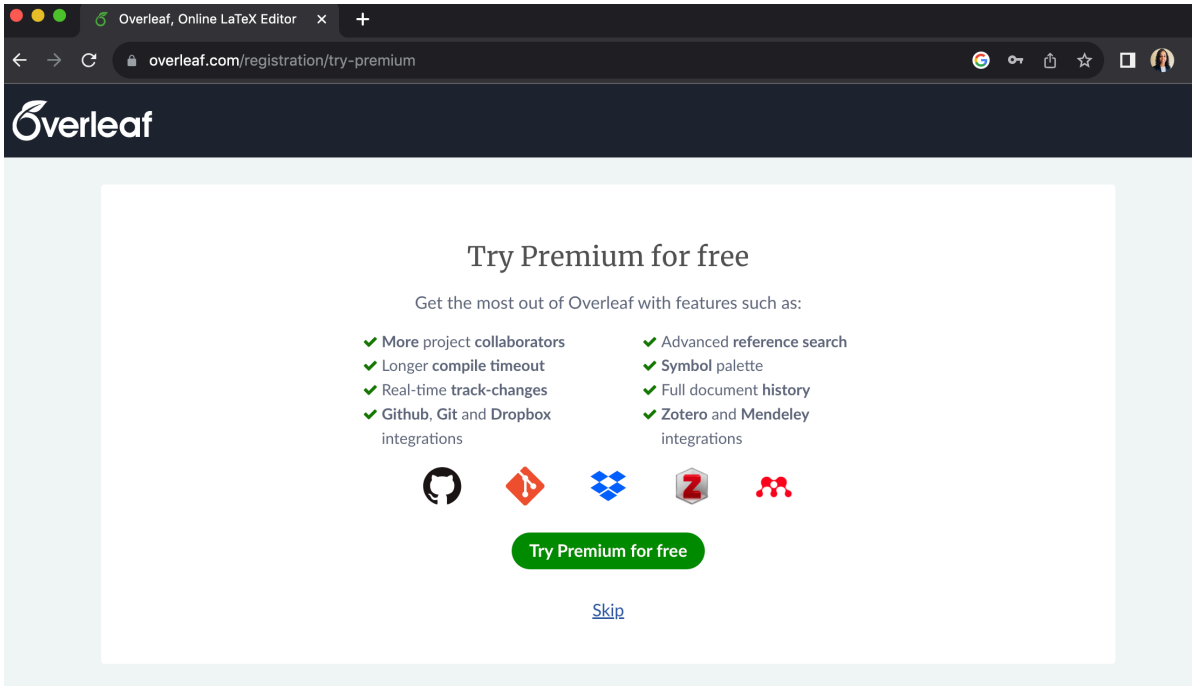
2. Click on Register

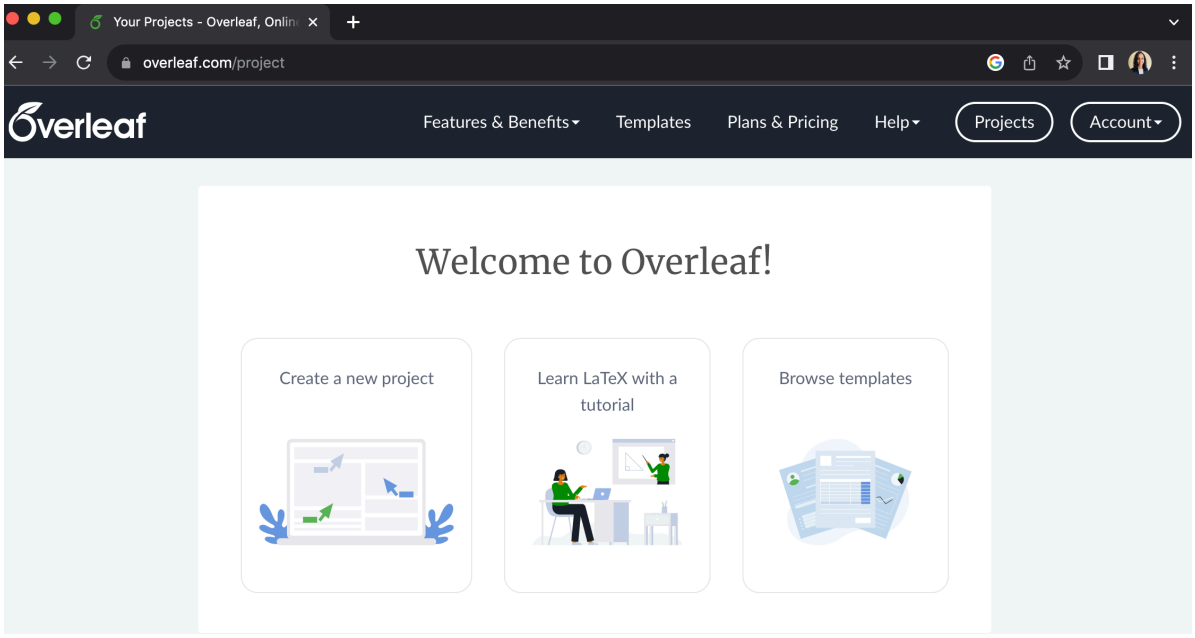


3. Register Overleaf by entering your details. I registered using my email.



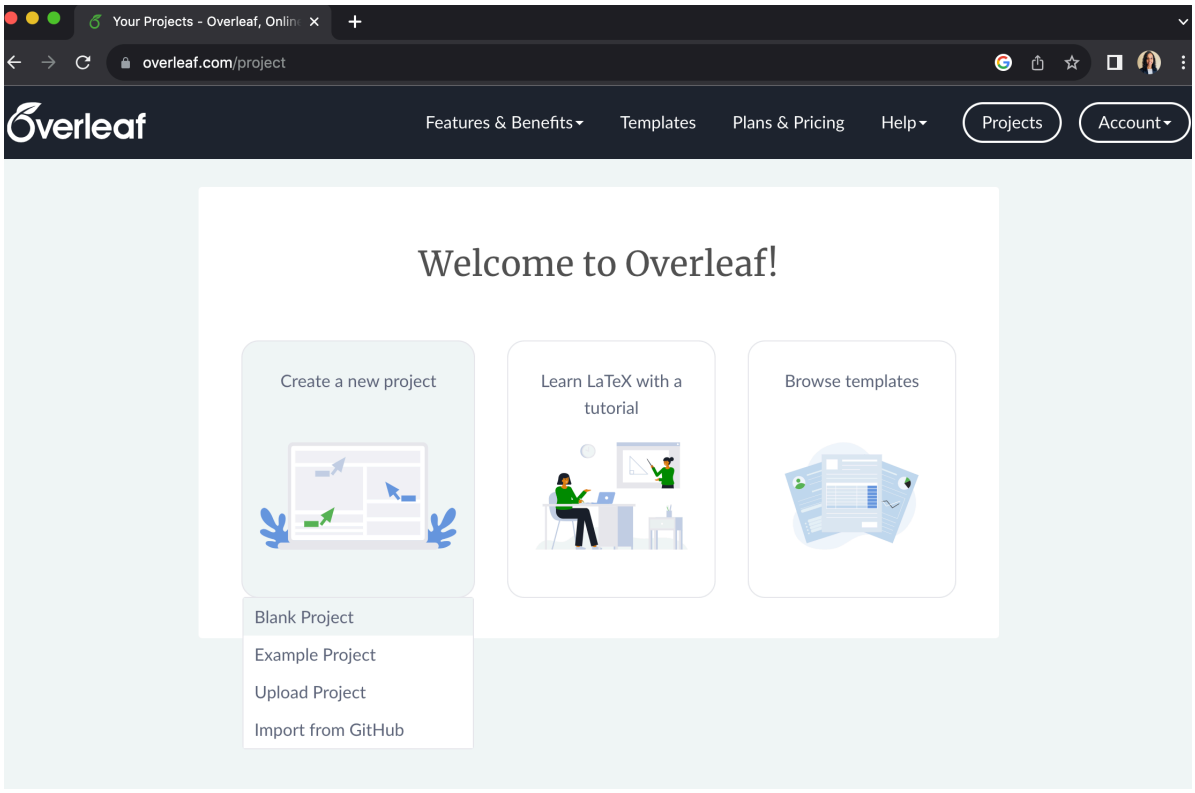
4. Skip “Try Premium for free”



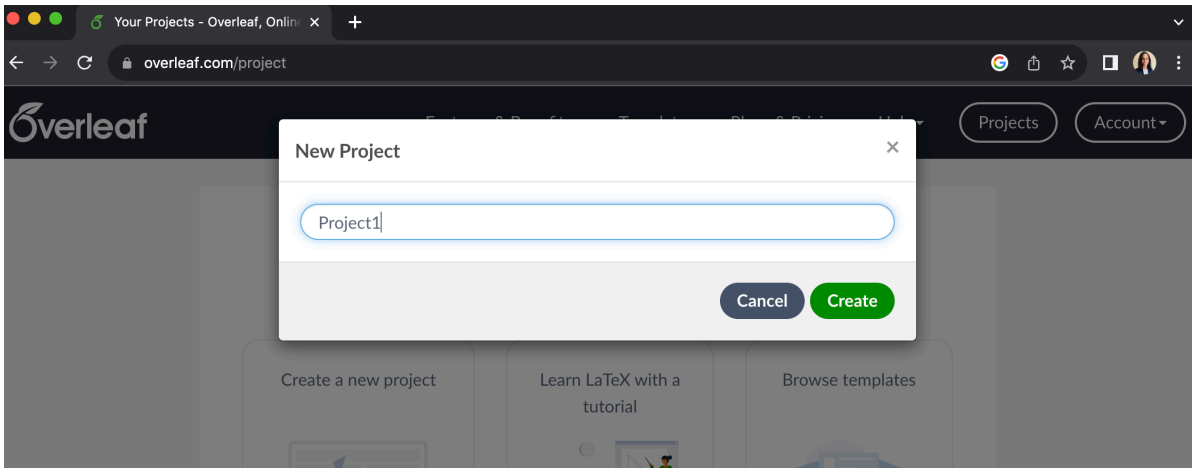


2.5 Create a new project

1. Create a new project -> Blank Project

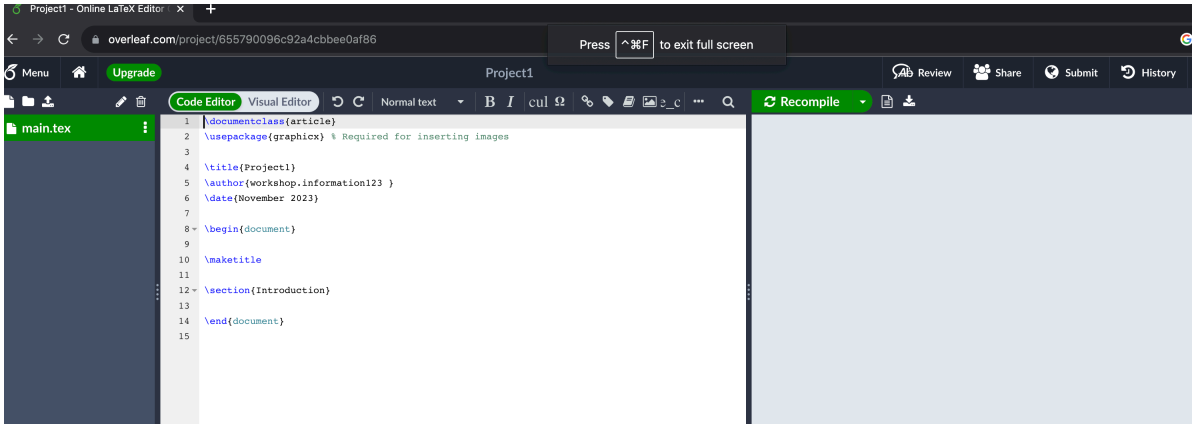


2. Give a name to your project

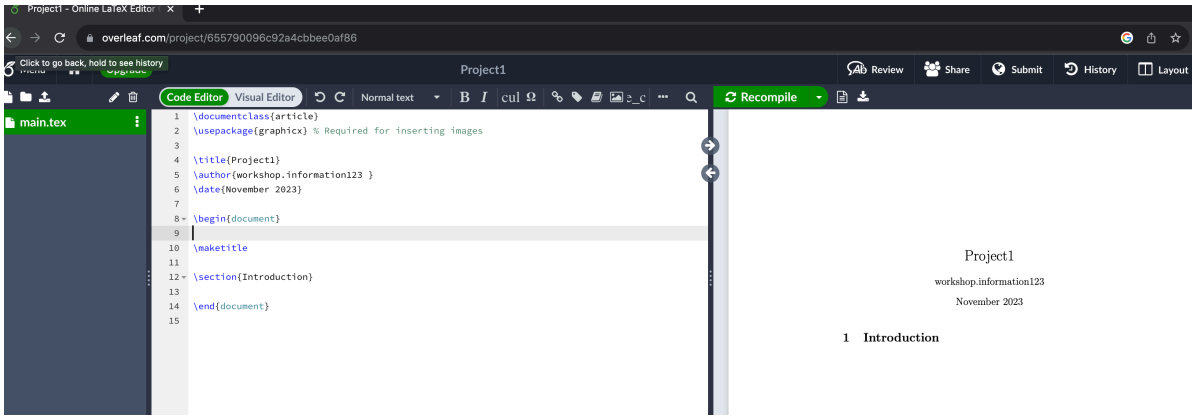


Your first overleaf document

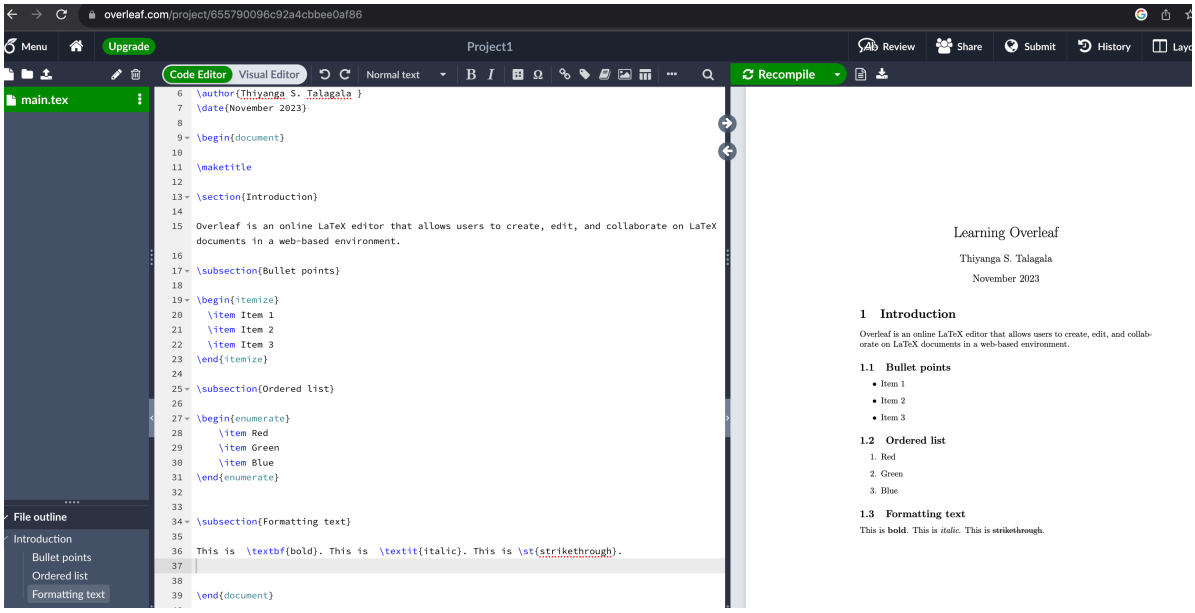
1. Template



2. Compile

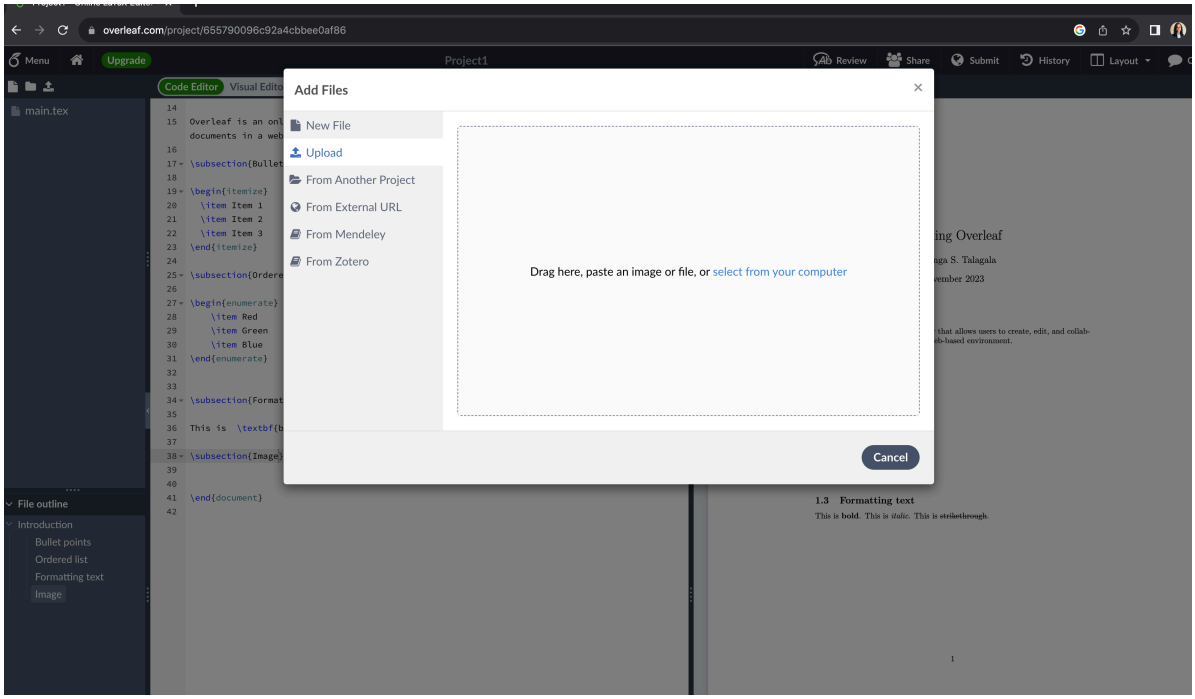


2.6 Text formatting

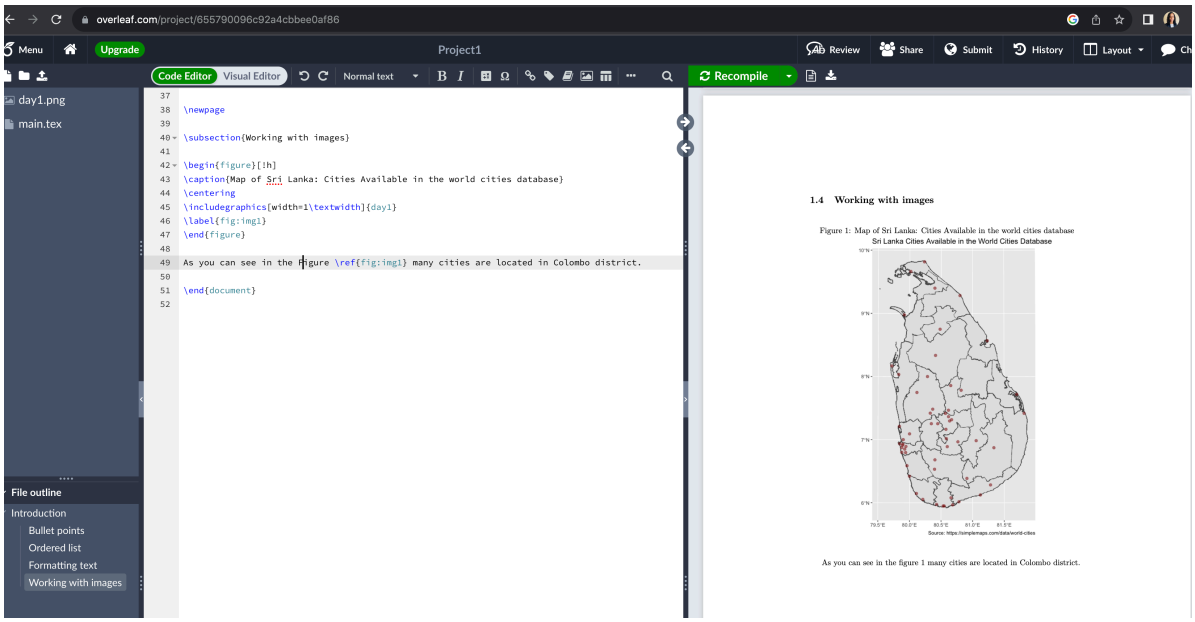


2.7 Working with images

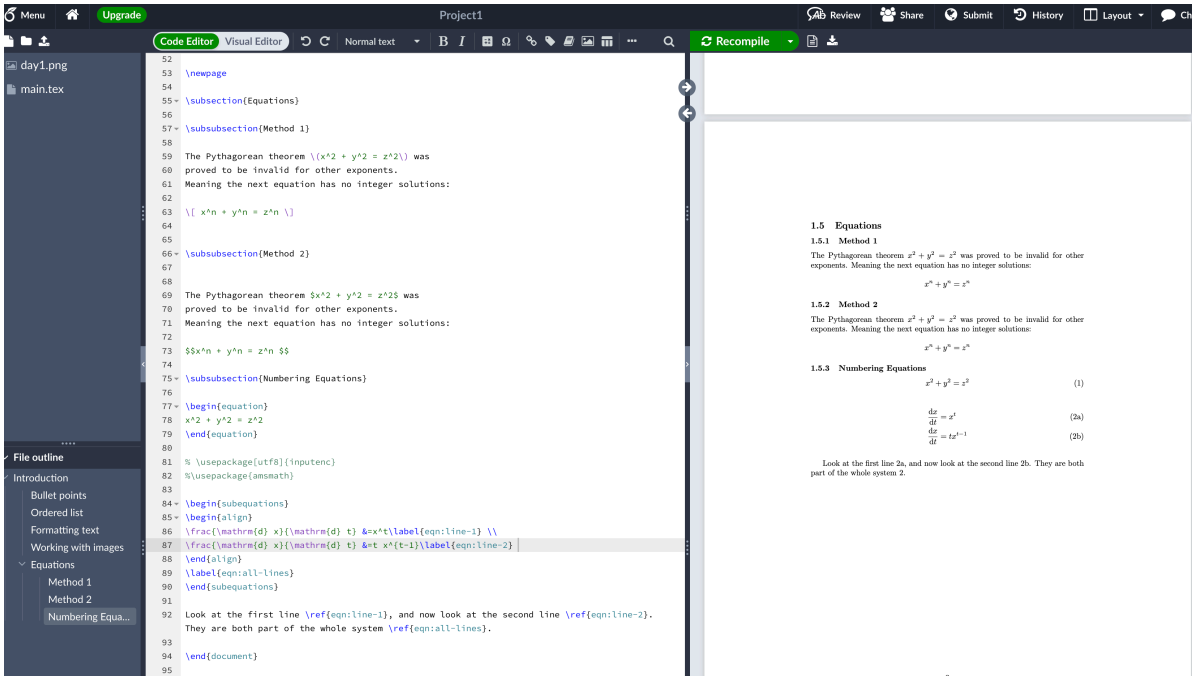
1. Upload an image



2. Insert an image to the document



2.8 Mathematical Equations



3 Summary

In summary, this book has no content whatsoever.

References