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Using LaTeX via Overleaf

For LaTeX, you need an editor that understands LaTeX code and can run it through the LaTeX program to turn it into PDF.


Overleaf is an online system which does this, meaning you do not need to install programs from AppsAnywhere or on your own computer. If you prefer to use a computer program on your local computer, there are instructions available for this.

Overleaf is a free service which we will use to typeset LaTeX code. You do not need to pay any money to Overleaf and I do not recommend paying for a 'Premium' version.

1. Go to overleaf.com/register and register for a new account.



Create an account

 Continue with Google

 Continue with ORCID

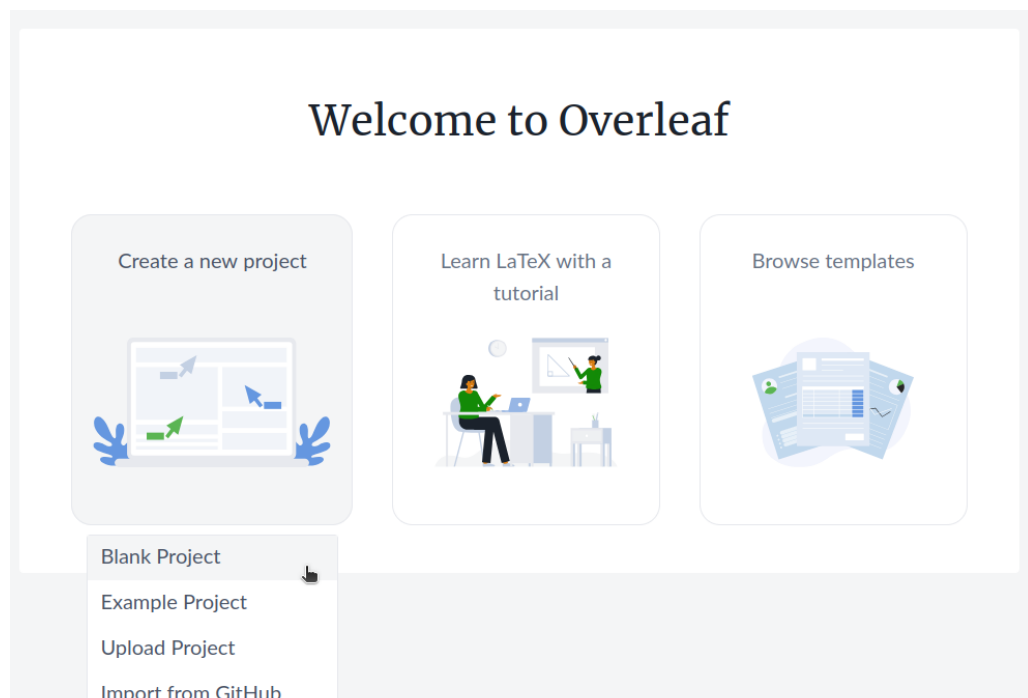
OR

Email

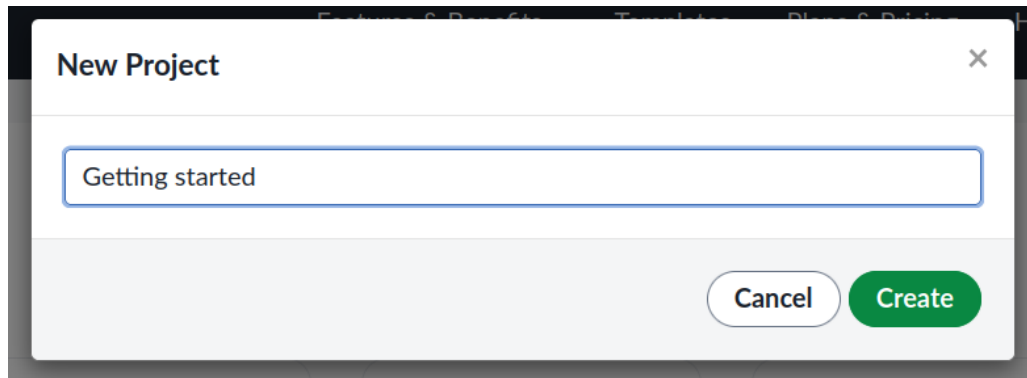
Password

Create account

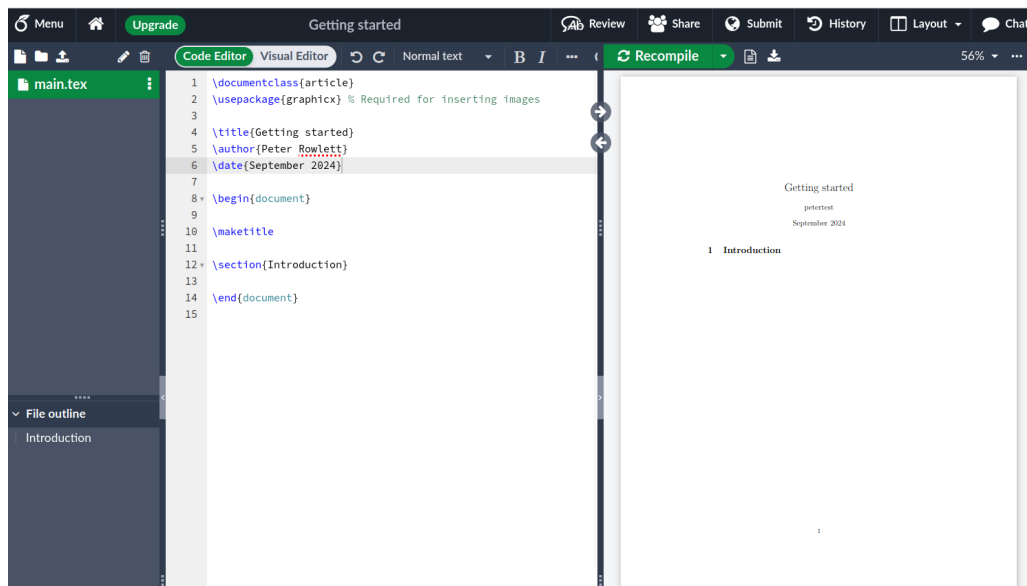
2. On the confirmation screen, choose to 'Create a new project' and select 'Blank Project'.



3. Give your project a name that will make sense to you when you see it in a big list of projects in future.

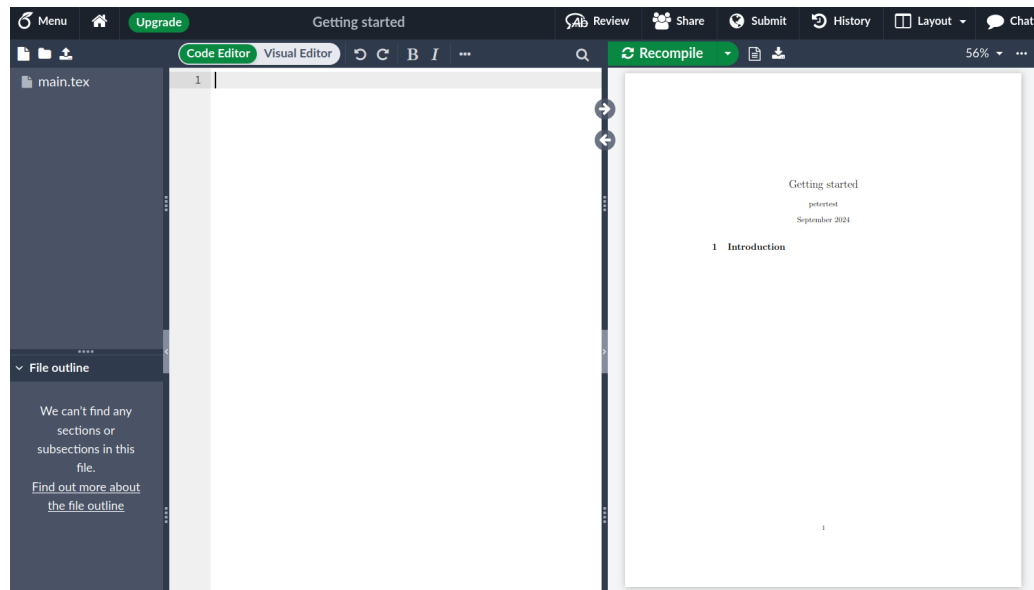


4. The main parts of the Overleaf interface are an area on the left where you write your code and an area on the right that displays the PDF it generated.



5. Overleaf has helpfully included a bunch of code you may not want. For now, delete everything in the code box on the left

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Writing a first LaTeX document with Overleaf

1. A LaTeX document has two parts - the preamble and the document itself. In the preamble, we must tell LaTeX what sort of document we want to write. We will write an article, so add this line to the top of your file.

```
\documentclass{article}
```

2. Below this, we put the actual document. We indicate where this will go using

```
\begin{document}

\end{document}
```

3. Within the document, write some text.

You could also write some maths. We'll learn more about how to do this later but for now here is the code for an integral

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```
\[ \int x^2 dx \]
```

4. The whole document should now look something like this:

```
\documentclass{article}

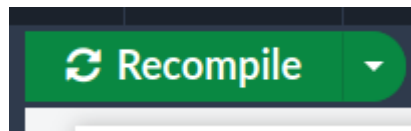
\begin{document}

    Hello.

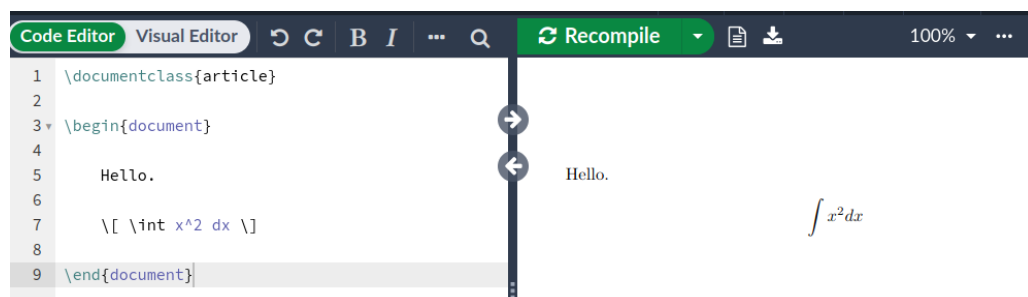
    \[ \int x^2 dx \]

\end{document}
```

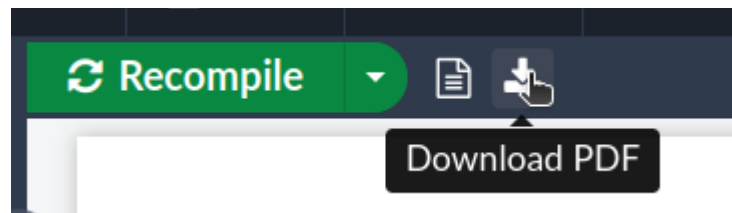
To run this code through LaTeX to turn it into a PDF document, press the 'Recompile' button.



This builds the document and produces a PDF document which appears to the right.



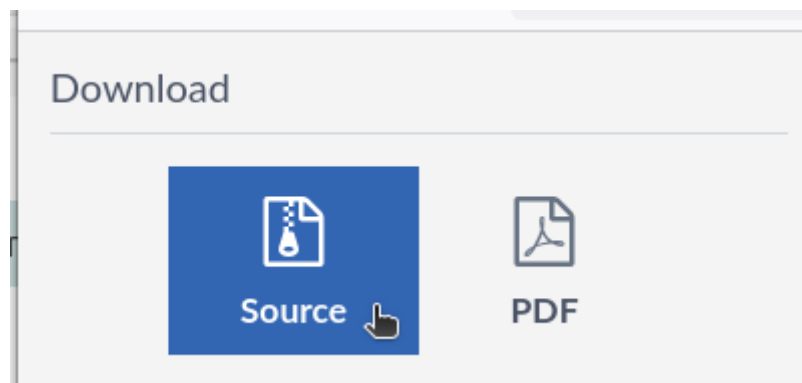
5. To get the actual PDF file, you can use the 'Download PDF' option.



It is also a good idea to save a copy of the original code you wrote. To do this, first click the Menu item.



Now where it says 'Download', choose the option 'Source'.



This will download a zip file containing all the source files in the project. In this case, this is one LaTeX file called `main.tex`, but in more complicated projects this might contain several LaTeX files and other files such as images.

Note that the zip download does not contain the PDF generated - you must download this separately.

