Getting Started With LaTeX

This document will guide you through setting up a LaTeX environment on Windows and Mac OS X, before giving you a short tour through the typesetting language itself!
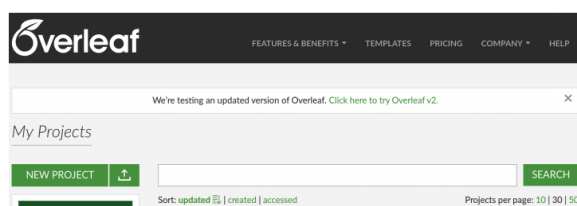
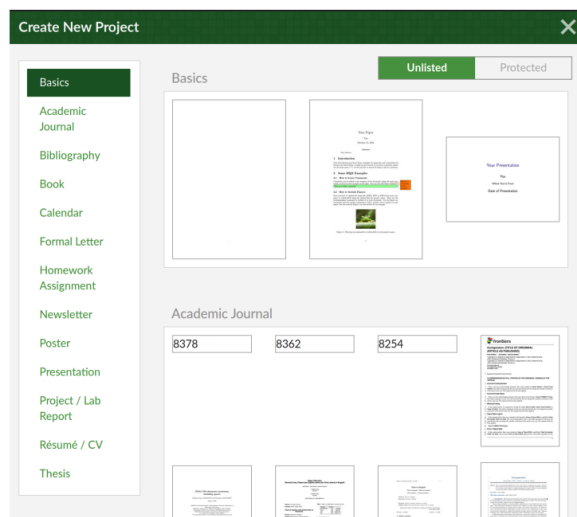# 1 Setting Up Your LaTeX Environment

1.1 Web Environment

For online environments, we recommend Overleaf.

Step 1. Begin by heading to https://www.overleaf.com. Click signup and follow the steps that guide you through the signup process.
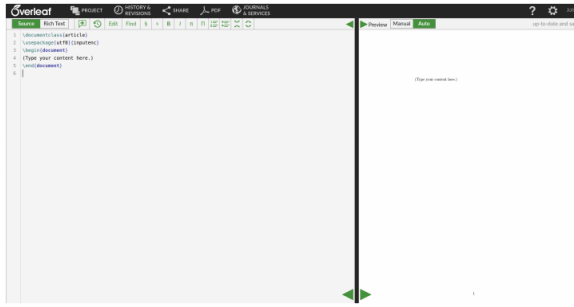
Step 2. Once you've created an account, login and you should see the following page. Click the new project to begin.

Step 3. Click "Blank Project" template under Basics (top left example).

Step 4. Copy the text from our **LaTeX interactive guide**, and paste it into the left hand area.

Step 5. Click the "PDF" button in the header to download a PDF copy of your work!.

1.2 Windows

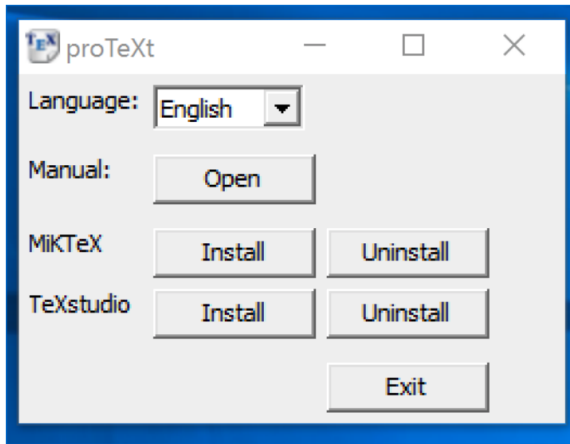For Windows, we recommend installing a LaTeX package called MiKTeX.

Step 1. Begin by heading to https://www.tug.org/protext/. Click to download using the link that says "download the self-extracting protext.exe file", or similar.

Step 2. Once the download is complete, run the installer file. You may be prompted with a security dialog at this point. Click "Yes".
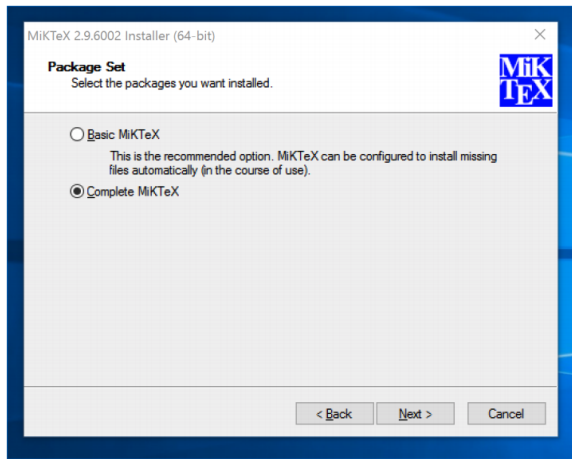
Step 3. Click Extract and wait till the process is complete.

Step 4. In the folder where you downloaded the file to, there should now be a folder called ProTeXt there. Open it and open the Setup.exe file inside it. Wait till a small windows labelled "proTeXt" appears.
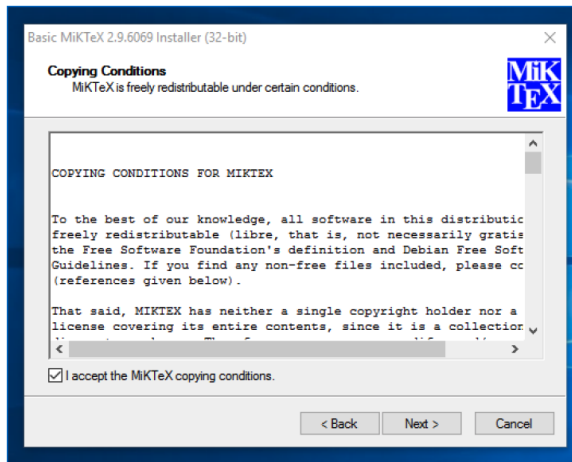
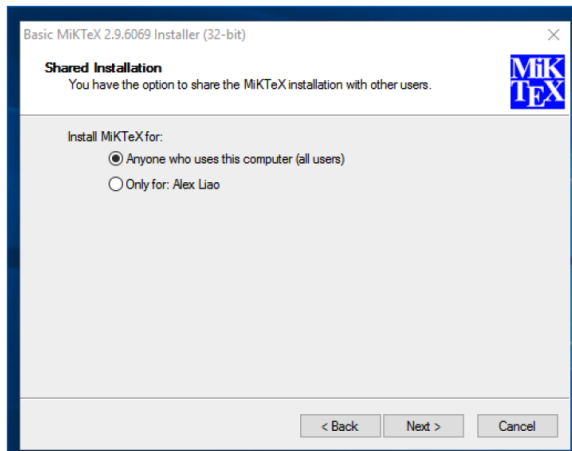**Step 5.** Click the "install" button next to MiKTeX.

Step 6. Make sure "Complete MiKTeX" is selected, and then click "Next".
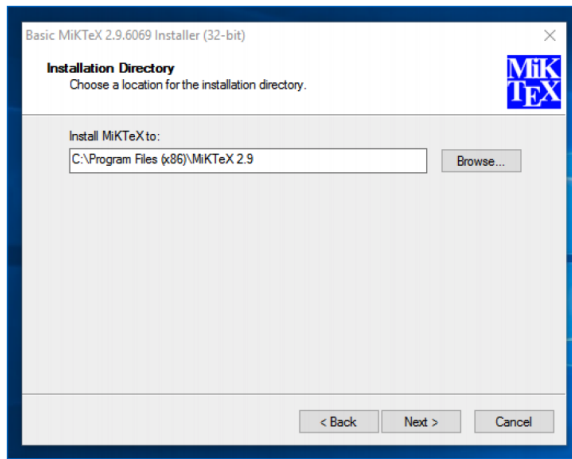
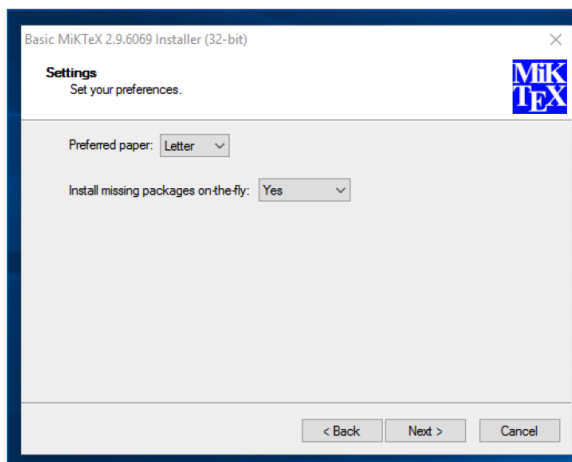**Step 7.** Accept the conditions (unless you don't!) and hit Next.

Step 8. Make sure that "Anyone who uses this computer (all users)" is selected and hit Next

Step 9. Hit Next

Step 10. Make sure you select "Preferred Paper" as "Letter" and "Install missing packages on-the-fly" as "Yes", then hit Next.

Step 11. Now just wait for it to finish!

1.3 Mac OS X

For Mac, the installation is super easy. Just download MacTeX from https://tug.org/mactex/mactex-download.html and click the link called "MacTeX.pkg".

Once the .pkg has been installed, just run through the installer, accepting all default settings, and you'll be setup!
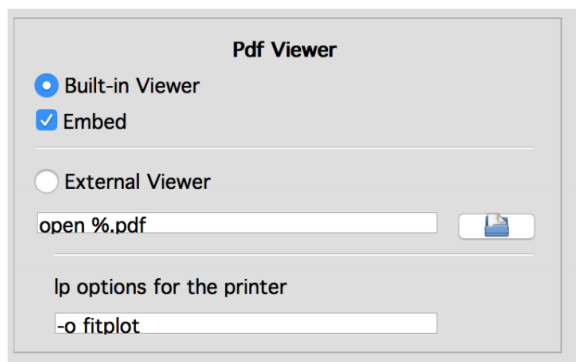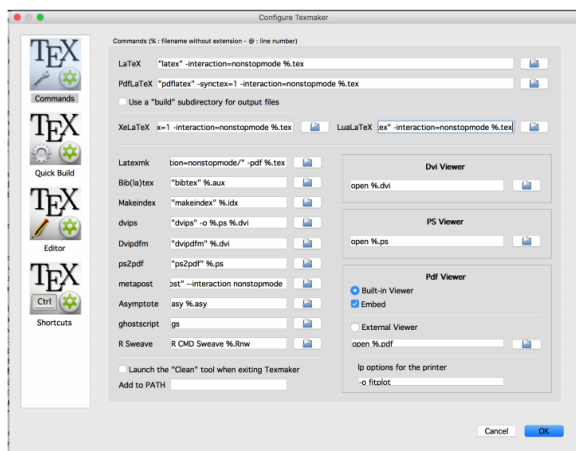
2 Setting up a LaTeX editor

2.1 Texmaker

Texmaker is a great LaTeX editor that is cross-platform, meaning that it works on Windows, Mac OS X and Linux. Just head over to http://www.xm1math.net/texmaker/download.html and click on the correct download link for your operating system.
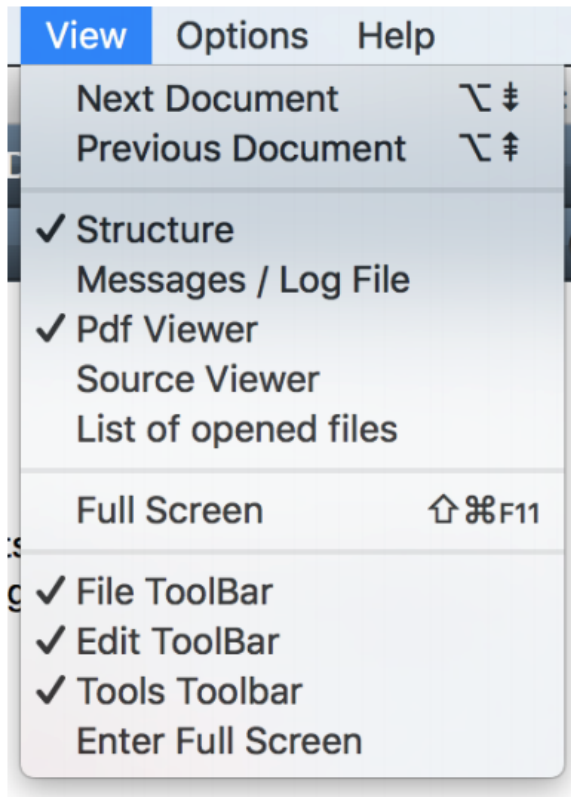
Once downloaded, install it like you would another application.

After this, open Texmaker and complete the following setup steps:

1. Head to the "Preferences" screen. On Windows, click on "Options" in the menu bar and then select "Configure Texmaker". On Mac, click on "texmaker" in the menu bar and then select "Preferences...".

2. In the "Preferences" pane, head to the "Pdf Viewer" box and select the "Embed" checkbox.

3. Close out the "Preferences" pane. Now click on "View" in the menu bar and make sure that "Structure" is unchecked and "Pdf Viewer" is checked.

4. Finally, let's test it out. Grab the .tex file at

   `https://www.cis.upenn.edu/~cis160/current/files/resources/latex_interactive_guide.tex`

5. Open the file in texmaker. You should see a bunch of text appear in one of the windows.

6. Now press F1 on your keyboard to build the LaTeX file. On some computers (like Macs), which map the F1 key to some other function, you may need to press Fn+F1 instead.

7. Awesome – you should see the rendered .pdf appear on the other screen now! That's basically it in terms of setting up your LaTeX environment. Now, follow the instructions in the .tex file to begin learning how to typeset in LaTeX!

2.2 Other editors

There are actually a bunch of different editors out there that will allow you to easily edit and build .tex files. TA favorites are Atom and Sublime Text.

If you want to get setup using a snazzy and powerful editor like Atom or Sublime Text, do a quick Google search around to see how to set it up!