IT Requirements Guide

Apprenticeships Programmes

This is a guide to installing our recommended set of programs on your computer that you will need during your Apprenticeship:

- **Hardware:** a suitable computer with enough RAM
- **Tools**
  - Python package management
  - Version control tool
  - Remote delivery tool
  - Communication tool
  - Apprenticeship tool
  - EDUKATE.AI
  - Archive Files

Hardware Specifications

Hardware Specifications

There are very few hardware specifications that we recommend for apprenticeships

We recommend that you have

- a hard drive capacity of at least 100GB +
- CORES, RAM as below

	IDEAL	ADEQUATE	MINIMUM
CORES	4	2	2
RAM	16 GB	16 GB	8 GB

Tools Specifications

Required Tools

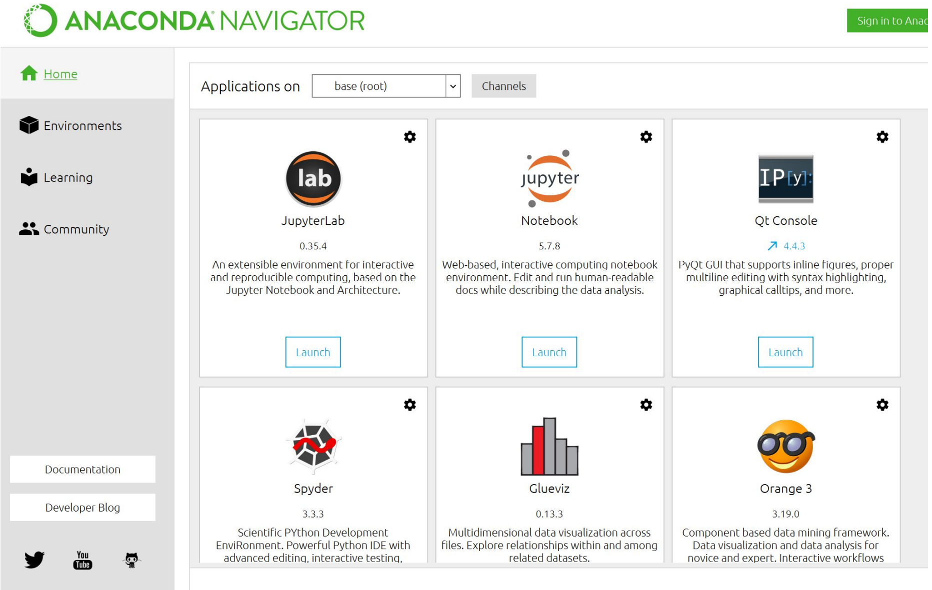
1. Anaconda Python 3.7
2. Microsoft VS Code
3. Zoom
4. Slack
5. EDUKATE.AI
6. Aptem
7. Archive Files

Anaconda Python 3.7

Anaconda

Anaconda provides the tools needed to easily:

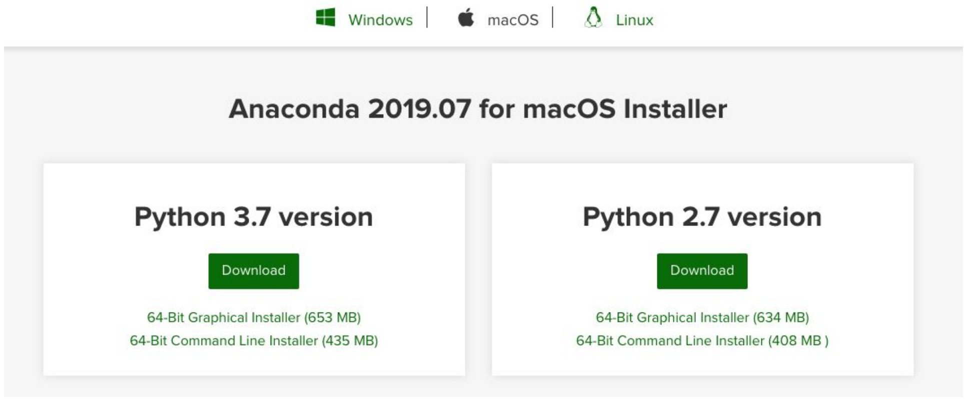
- Collect data from files, databases, and data lakes
- Manage environments with Conda
- Share, collaborate on, and reproduce projects
- Deploy projects into production with the single click of a button



Anaconda Python 3.7 - Installation

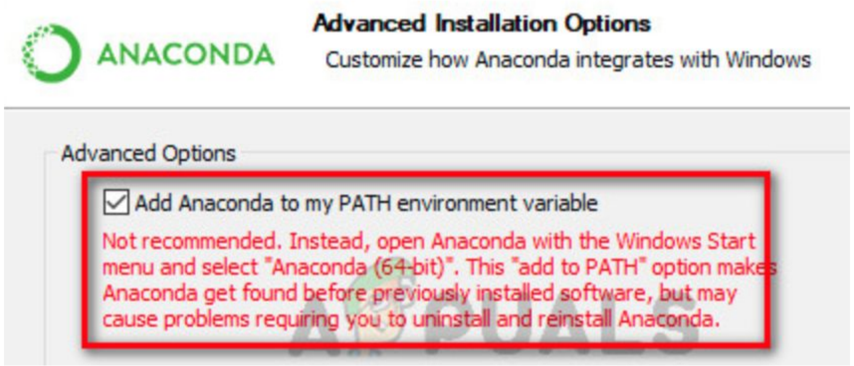
Installation of **Anaconda Distribution** will ensure your computer has access to **Python** and many of the **packages** commonly used for data science, analysis and visualisation.

Download the **Python 3.x version** for your operating system.



Anaconda Python 3.7 - Installation

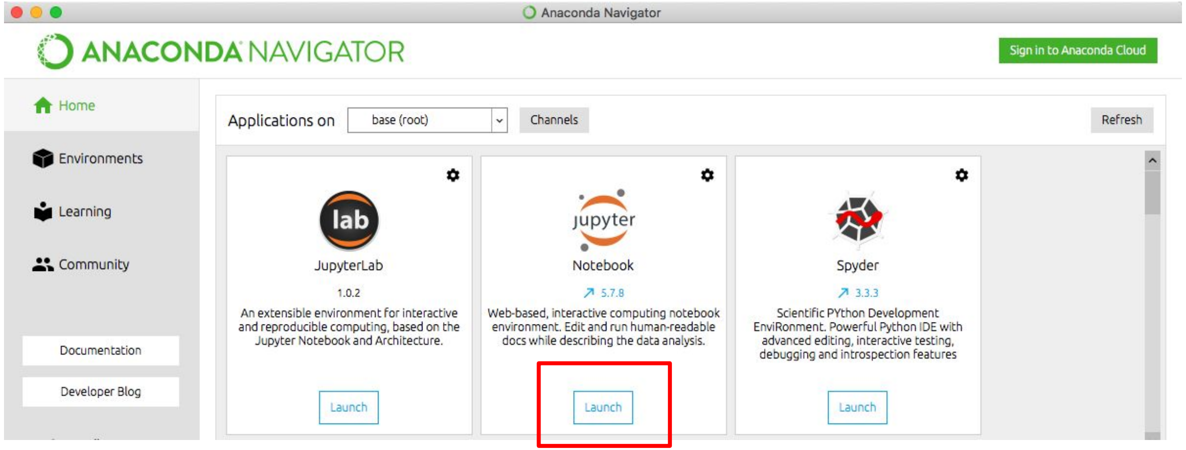
Windows users: During installation, we recommend that the "**Add Anaconda to my PATH environment variable**" checkbox is ticked (ignore the warning).



Anaconda Python 3.7 - Installation

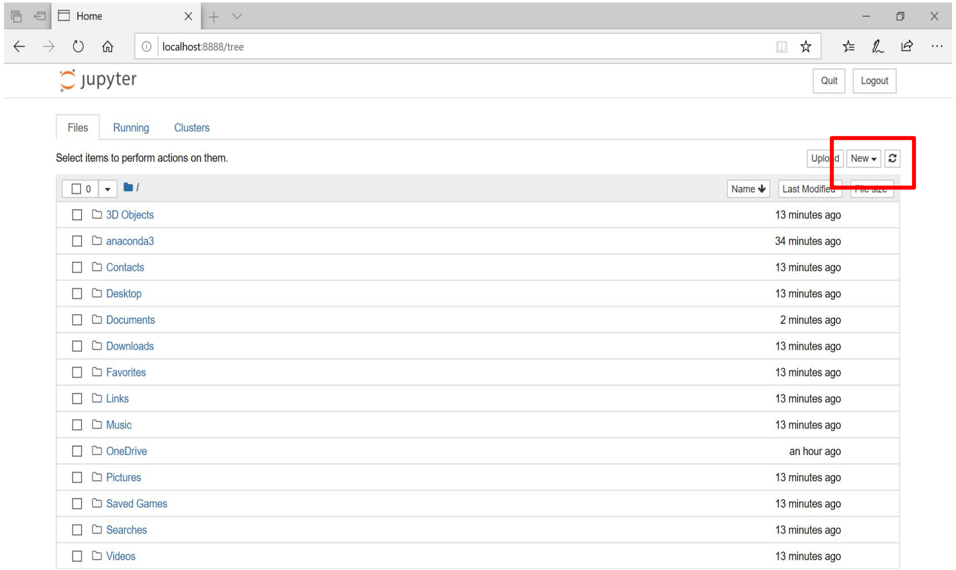
This is dealt with automatically for installations on other operating systems. The defaults are fine for the remaining settings.

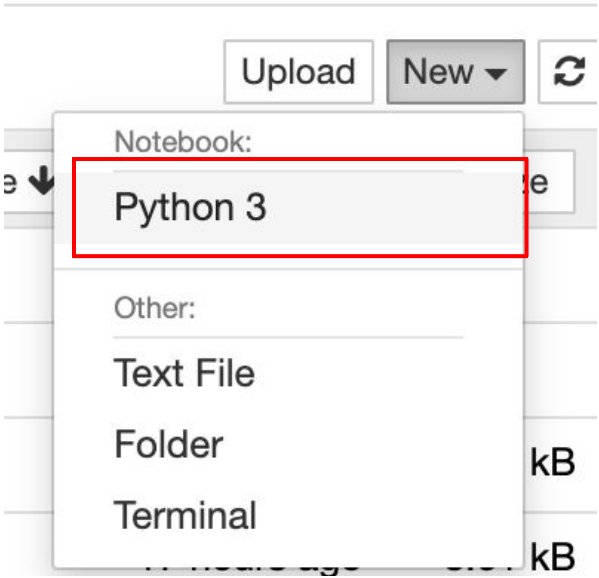
You should then be able to access Anaconda Navigator, from which you will be able to launch **Jupyter Notebook**.
Click on the **Launch** button in Jupyter Notebook. This will start a new tab in your default browser.



Anaconda Python 3.7 - Installation

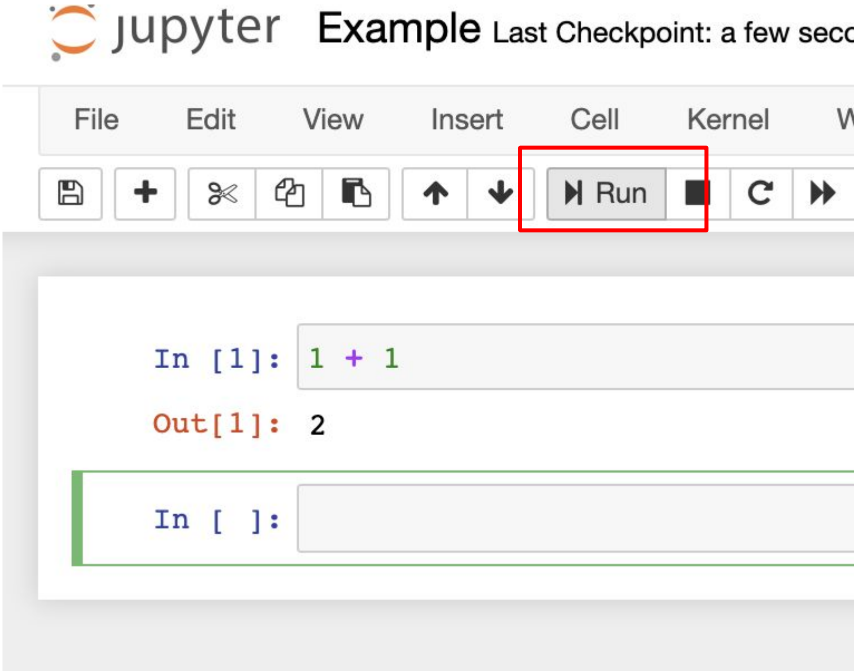
After clicking on the Launch button in Jupyter Notebook. This will start a new tab in your default browser. You can then navigate to where you stored your notebooks, data, or where you want to create new ones. **Make sure Chrome** is your default browser, this tends not to work with Internet Explorer.





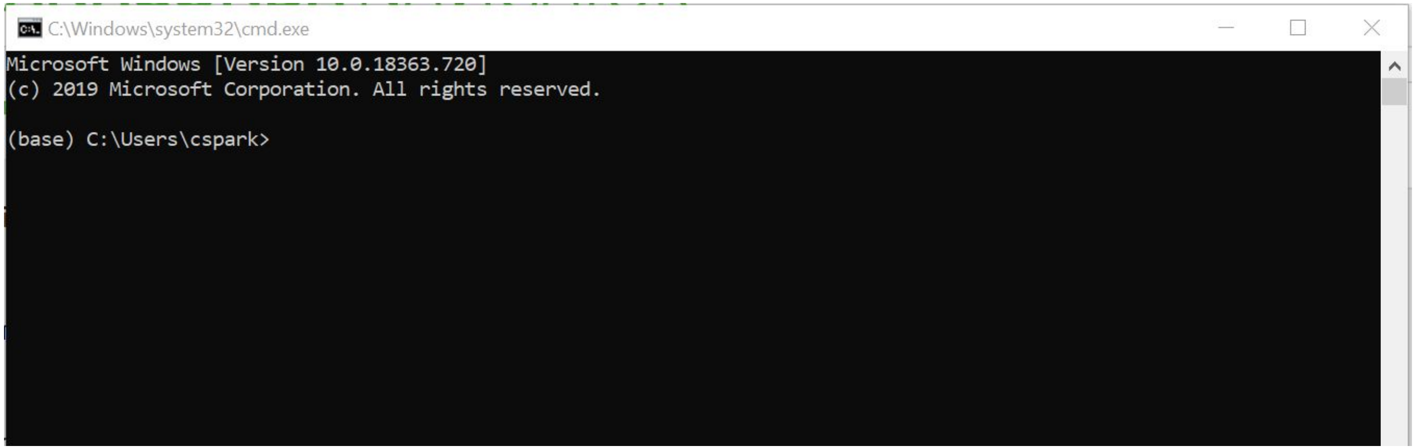
Anaconda Python 3.7 - Installation

When you click on the new button, you will be able to create a new notebook. Type `1 + 1` in a cell and execute it by clicking on the run button.



Anaconda Python 3.7 - Installation (Advanced Notes)

With Jupyter, you will only be able to see files that are on your main disk - external hardrives or virtual drives such as OneDrive will not show by default. In order to access those, you will need to start Jupyter from the command prompt. To do so, click on Launch for the CMD.exe Prompt (or find "Anaconda Prompt" in your applications):



Anaconda Python 3.7 - Installation (Advanced Notes)

Use `cd path/to/your/folder/` to navigate to the folder of your choice. Then run `jupyter notebook` to start Jupyter from this folder. Your notebooks will be connected to this prompt, so make sure to keep it open.

Anaconda Prompt (anaconda3) - jupyter notebook

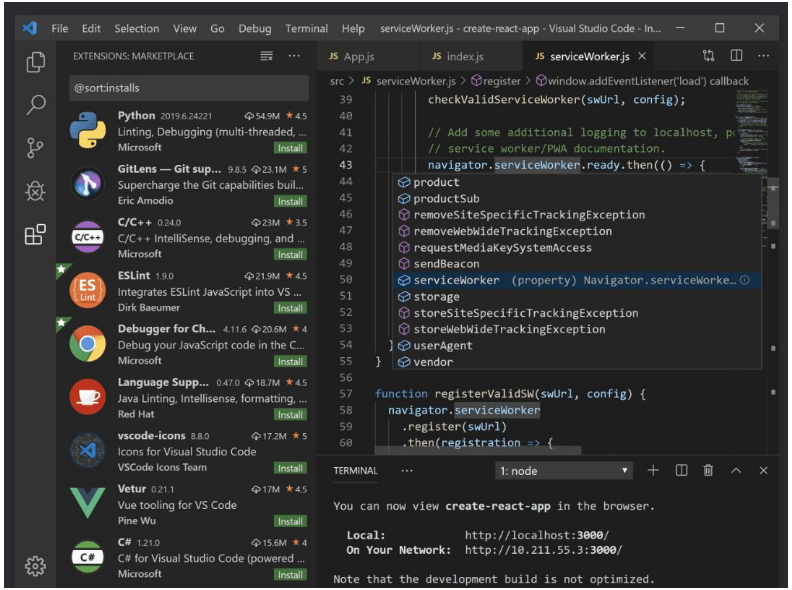
```
(base) C:\Users\cspark>cd Documents

(base) C:\Users\cspark\Documents>jupyter notebook
[I 14:26:56.963 NotebookApp] The port 8888 is already in use, trying another port.
[I 14:26:57.016 NotebookApp] JupyterLab extension loaded from C:\Users\cspark\anaconda3\lib\site-packages\jupyterlab
[I 14:26:57.016 NotebookApp] JupyterLab application directory is C:\Users\cspark\anaconda3\share\jupyter\lab
[I 14:26:57.032 NotebookApp] Serving notebooks from local directory: C:\Users\cspark\Documents
[I 14:26:57.032 NotebookApp] The Jupyter Notebook is running at:
[I 14:26:57.032 NotebookApp] http://localhost:8889/?token=88ae85a96ba8fe0508bb6e3267b0012da7c64d2e55d8095c
[I 14:26:57.032 NotebookApp]  or http://127.0.0.1:8889/?token=88ae85a96ba8fe0508bb6e3267b0012da7c64d2e55d8095c
[I 14:26:57.032 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 14:26:57.055 NotebookApp]

    To access the notebook, open this file in a browser:
        file:///C:/Users/cspark/AppData/Roaming/jupyter/runtime/nbserver-1496-open.html
    Or copy and paste one of these URLs:
        http://localhost:8889/?token=88ae85a96ba8fe0508bb6e3267b0012da7c64d2e55d8095c
     or http://127.0.0.1:8889/?token=88ae85a96ba8fe0508bb6e3267b0012da7c64d2e55d8095c
```

Microsoft VS Code

Microsoft VS Code

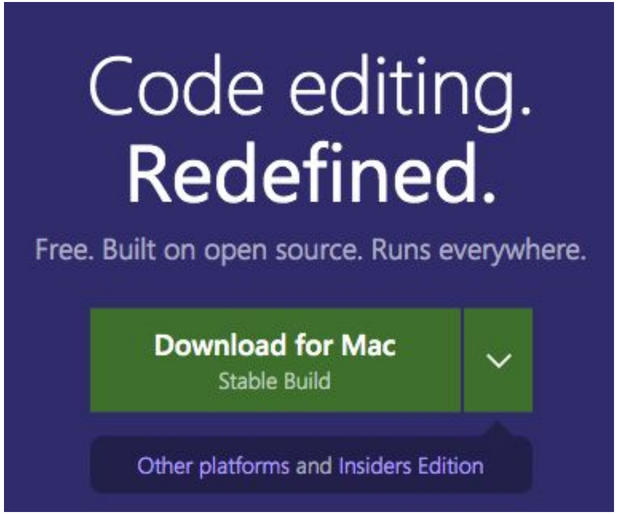
Visual Studio Code

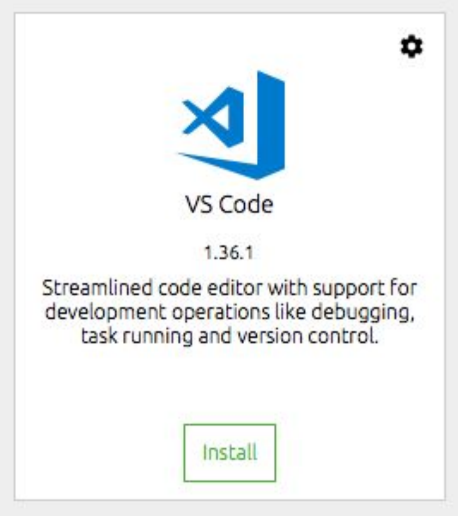
Visual Studio Code is a source-code editor developed by Microsoft for Windows, Linux and macOS. It includes support for debugging, embedded Git control and GitHub, syntax highlighting, intelligent code completion, snippets, and code refactoring.



Microsoft VS Code

Microsoft VS Code is a free, cross-platform code editor. It's available [here] (choose the **Stable** version for your operating system), or in **Anaconda Navigator**.



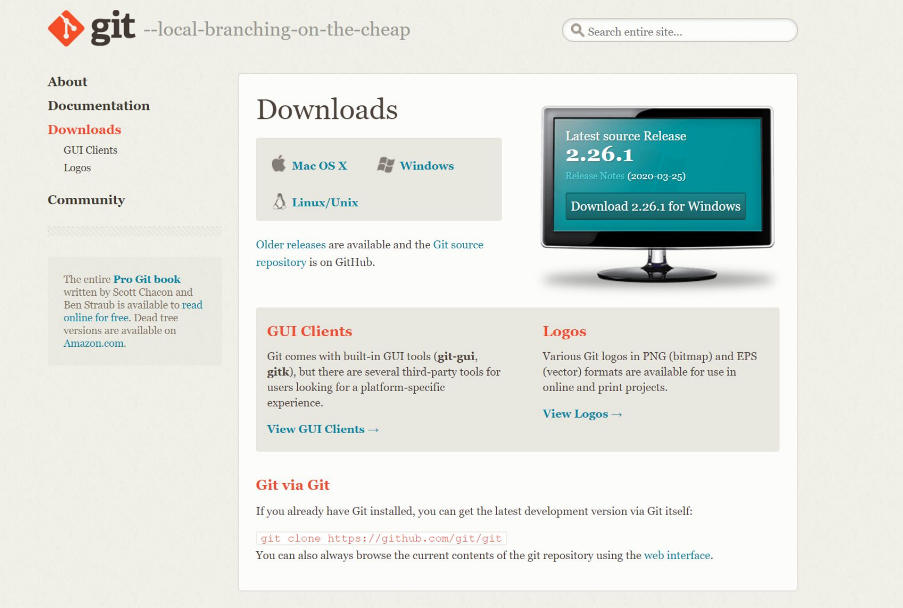


Git

Git

Git is a **version control system** used by many systems for **software development and collaboration**.

[Download Git](#) for your operating system, then follow the installation instructions.



Zoom

Zoom

Zoom provides a remote conferencing service that combines video conferencing, online meetings, chat, and mobile collaboration.

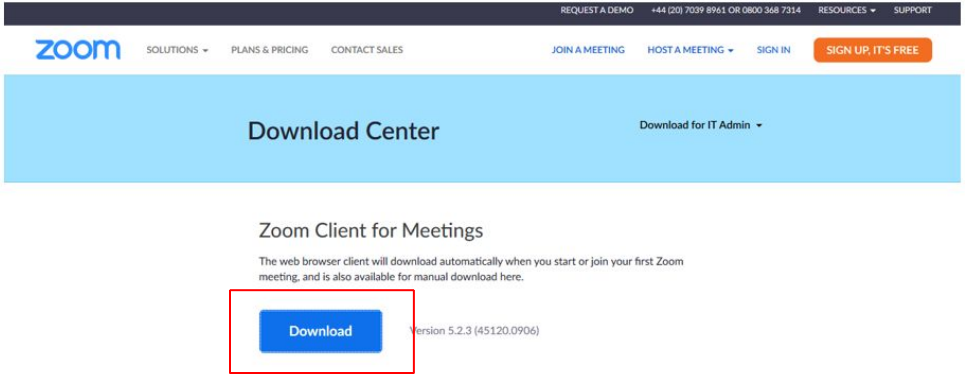
We will be using it for the delivery of live remote sessions.

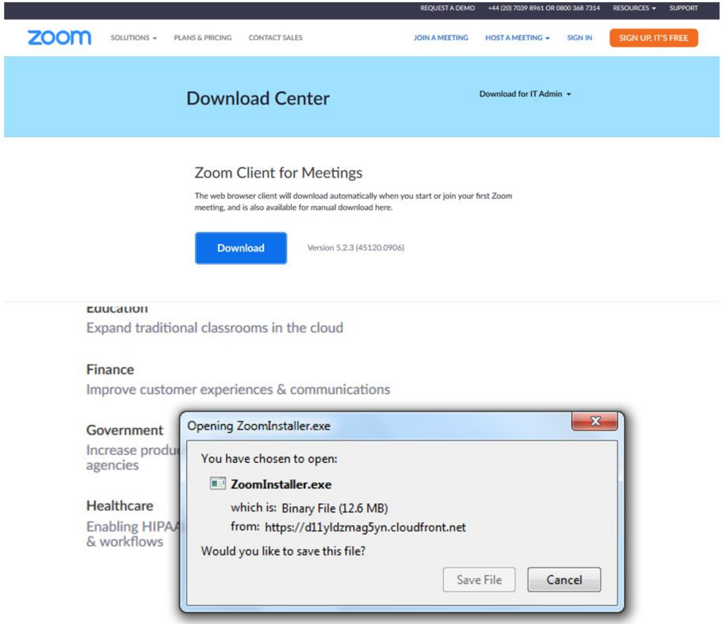
You have the following options how to access live sessions:

- **Download Zoom App** (we recommend this option!) - please see the instructions on the following slides
- **Use a web browser** (please use this option only if the installation of the Zoom App is not allowed on your machine!). In this case, please skip the following slides and go directly to a slide number 28.

Zoom - Zoom App Set Up Instructions

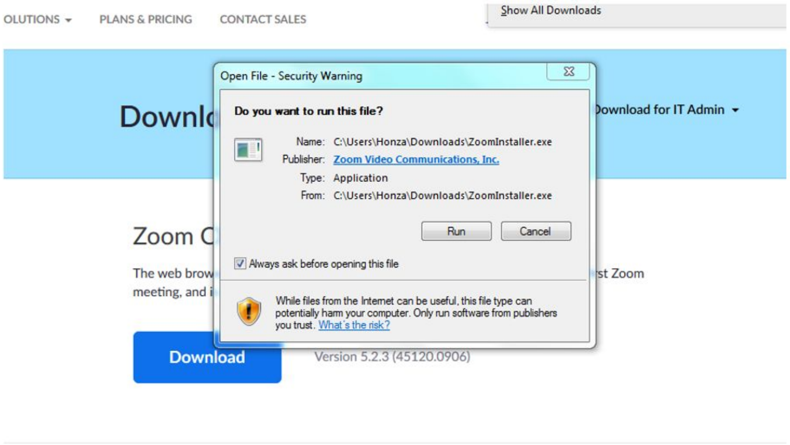
- Please download Zoom App here: https://zoom.us/download (**NOTE**: If you have Zoom already installed on your machine, **please go to slide 25!)**
- Click the blue ‘Download’ button and then click the ‘Save File’.

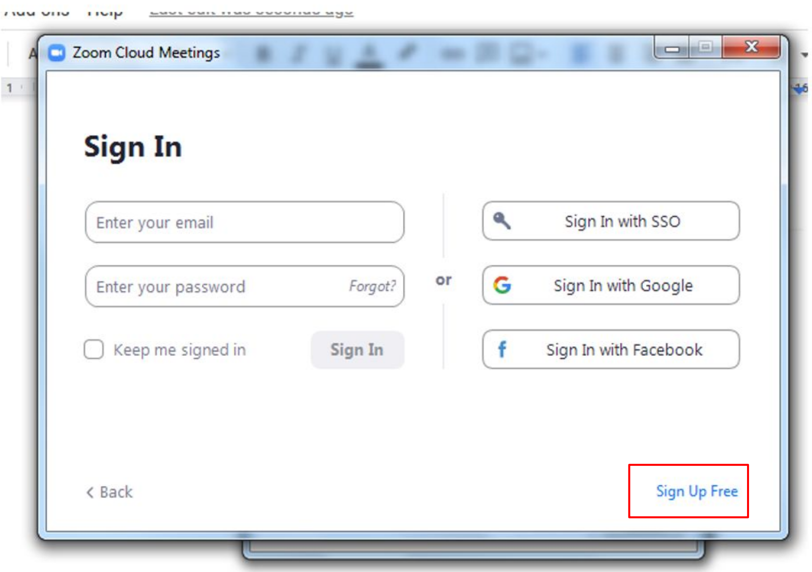




Zoom - Zoom App Set Up Instructions

- Once the file has been downloaded, open it and click ‘Run’ and wait until Zoom App has been successfully installed on your machine.
- Open the Zoom App, you will be able to create your Zoom account
- Click the ‘Sign Up Free’ button

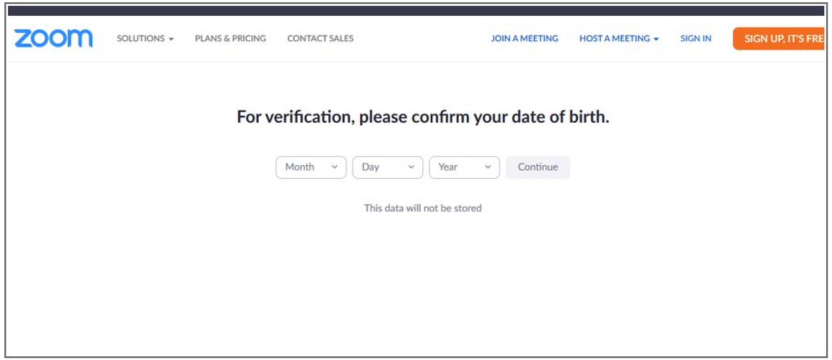


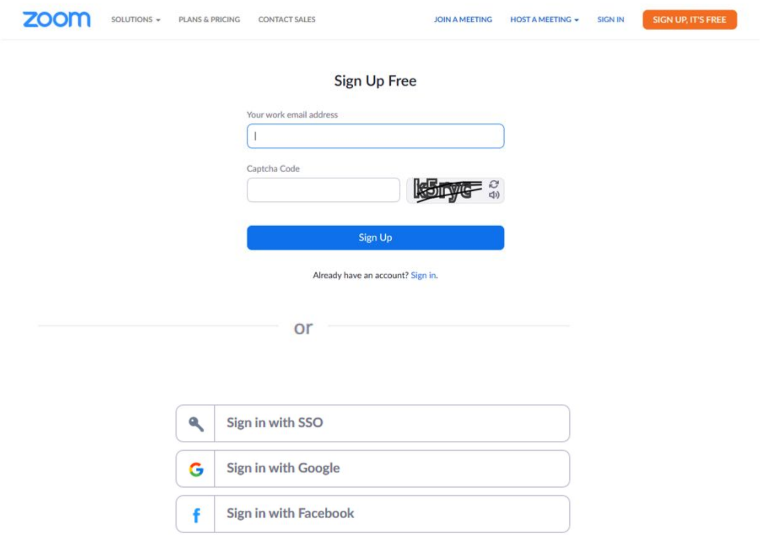


Zoom - Zoom App Set Up Instructions

You will be taken to the Zoom website:

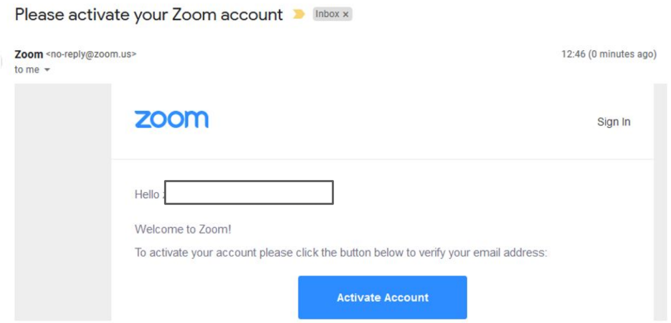
- Please enter your date of birth and click ‘Continue’
- You will be then asked to enter your work email address to sign up
- You can also use your SSO or Google login details to sign up

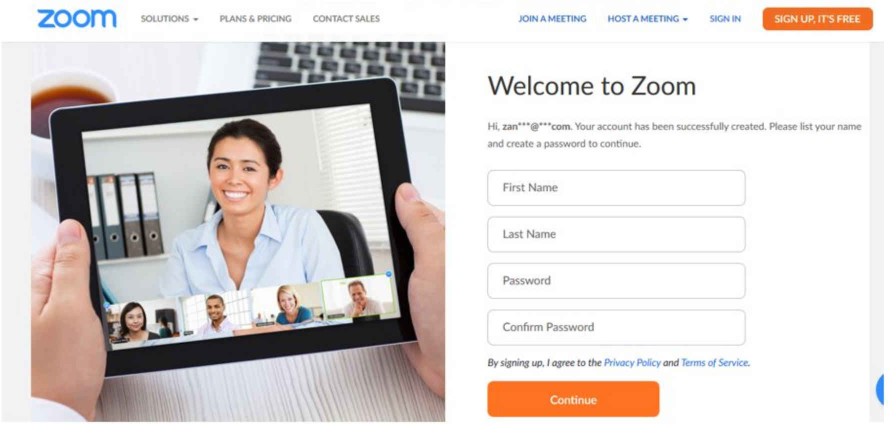




Zoom - Zoom App Set Up Instructions

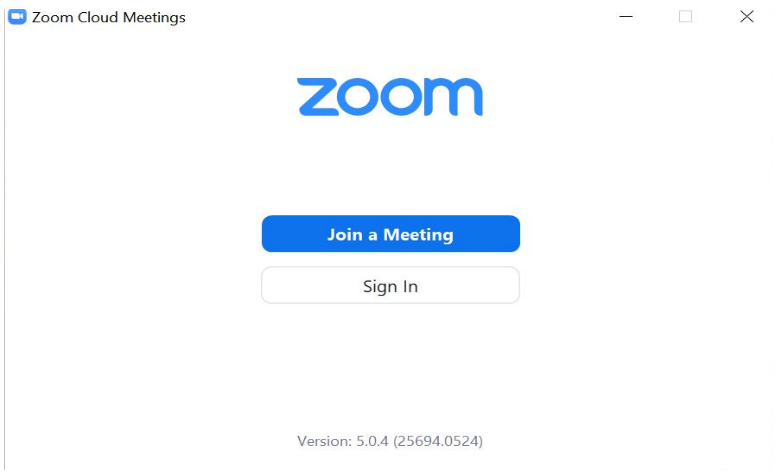
- You will receive an email asking you to activate your account, please do so by using the 'Activate Account' button.
- You will then be asked to enter your full name and create password.
- Click 'Continue', your Zoom account has now been created!

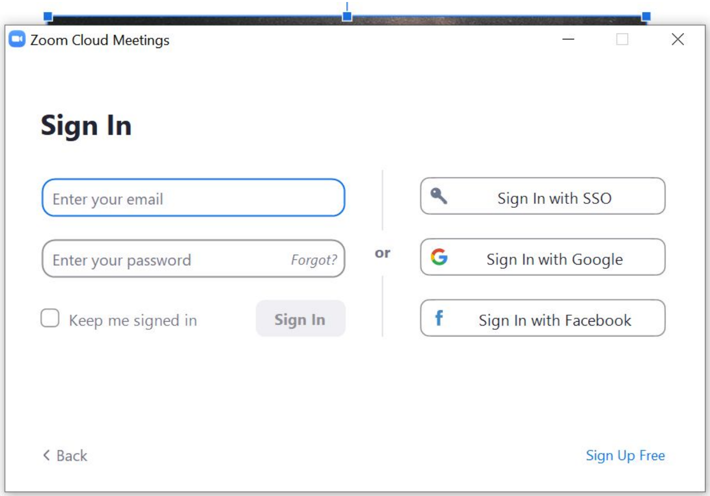




Zoom - How to access live session via Zoom App

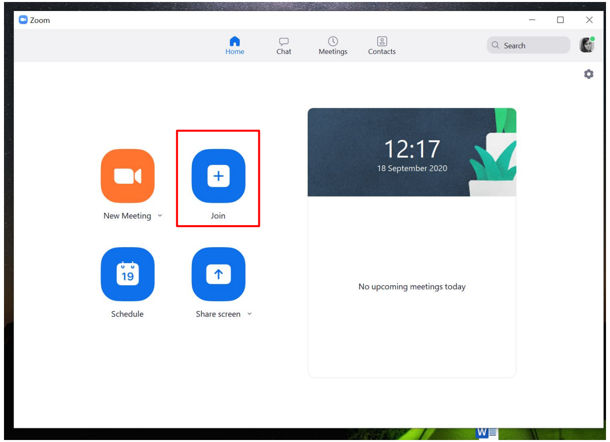
- Open the Zoom App on your machine, click ‘Sign in’ button and sign in with your login details or via SSO or Google.

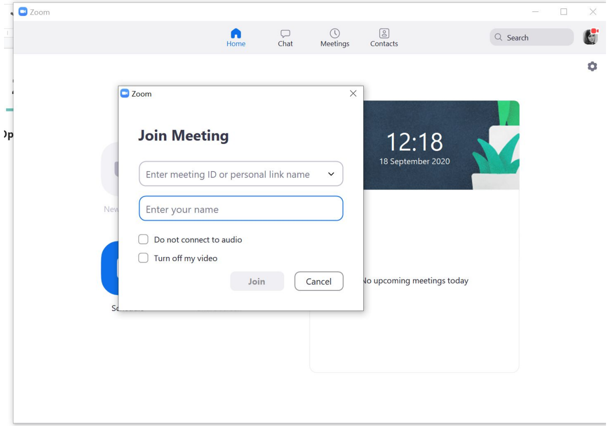


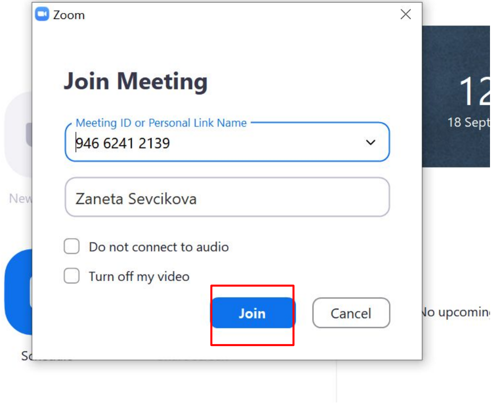


Zoom - How to access live session via Zoom App

- Click the ‘Join’ button. Enter the Zoom link provided by Cambridge Spark and your full name (note that once you enter the link it will automatically change to the Meeting ID - this is fine).
- Click the ‘Join’ button to confirm

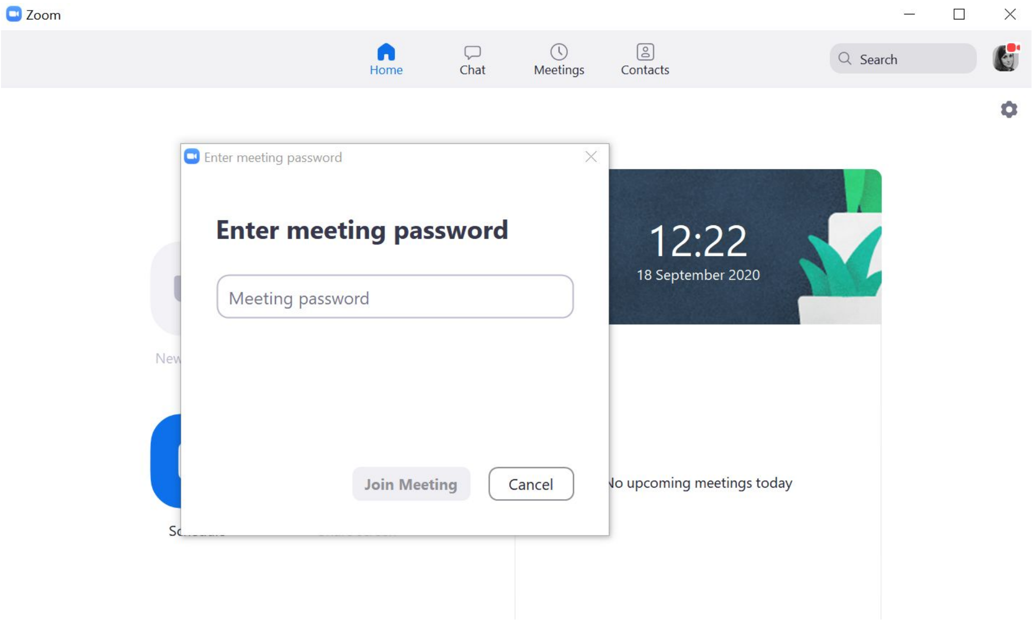






Zoom - How to access live session via Zoom App

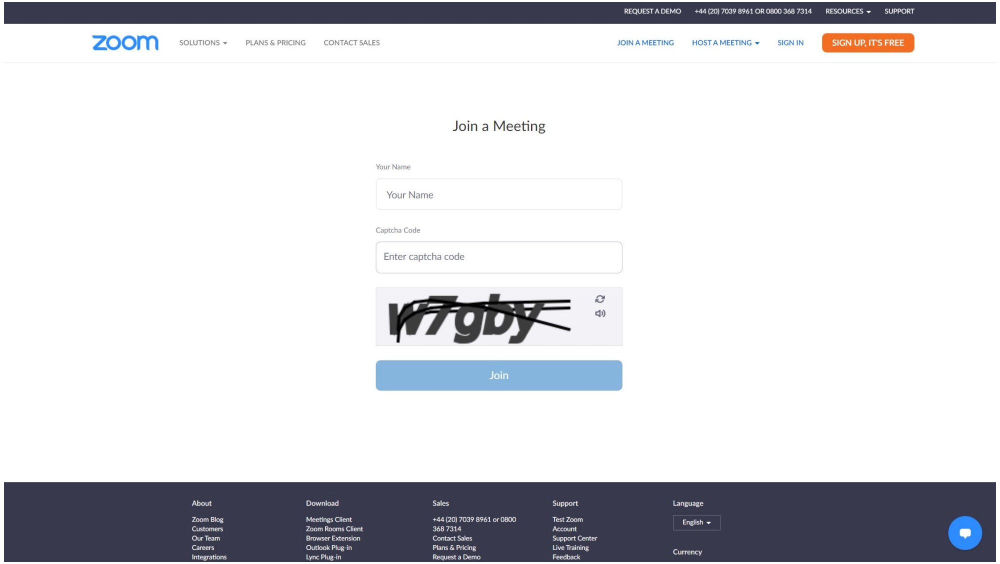
- You will be asked to enter the meeting password, please do so (the password has been provided by Cambridge Spark together with the link for the live session.) Confirm the password by clicking on 'Join Meeting'.
- You will now enter the live session.



Zoom - How to access live session via a web browser

WEB BROWSER USERS ONLY (please use this option only if the installation of the Zoom App is not allowed on your machine)!

- Click on the link to the live session provided by Cambridge Spark. You will see the following page.
- Enter your full name and captcha code and click 'Join'. You will then enter the live session. If you are asked to enter a password, please do so (it has been provided to you together with the link for the live session).
- You will now enter the live session.



Zoom - Instructions for the live remote session

During the session

- When you enter the broadcasting, immediately check that **you are on mute** whilst the teacher is speaking. This is very important for sound quality!

How to ask questions during the session

- Use a dedicated Slack channel to ask questions, tutors will be answering them as they pop up. You can use it for 1:1 questions as well (e.g. screen share, call) during the session. If one question is trending the tutors might leave it for the teacher to answer. The tutor's support on the Slack channel is available only during the live remote session.

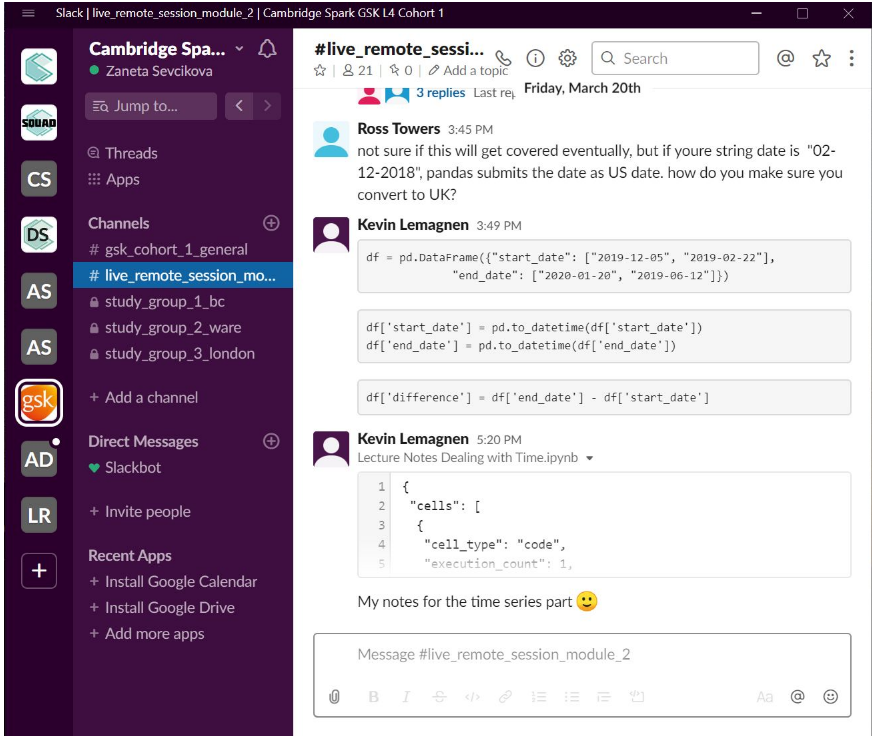
Slack

Slack

Slack is a collaboration hub where the right people and the right information come together, helping everyone get work done.

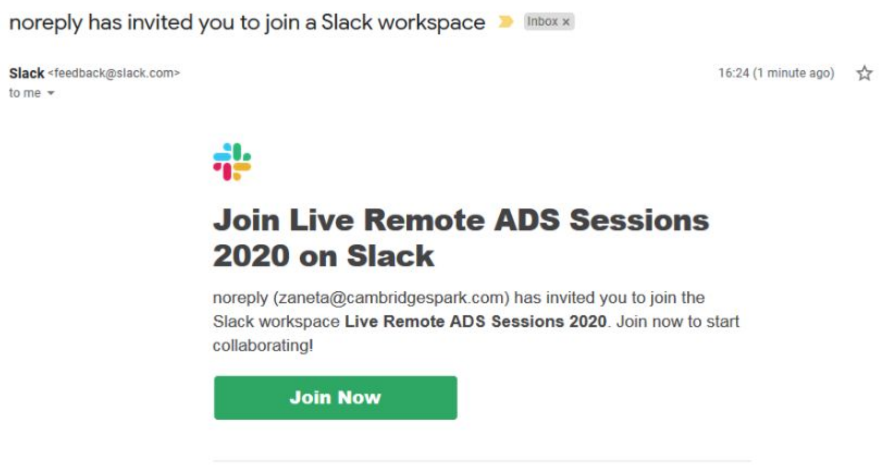
We will be using Slack for

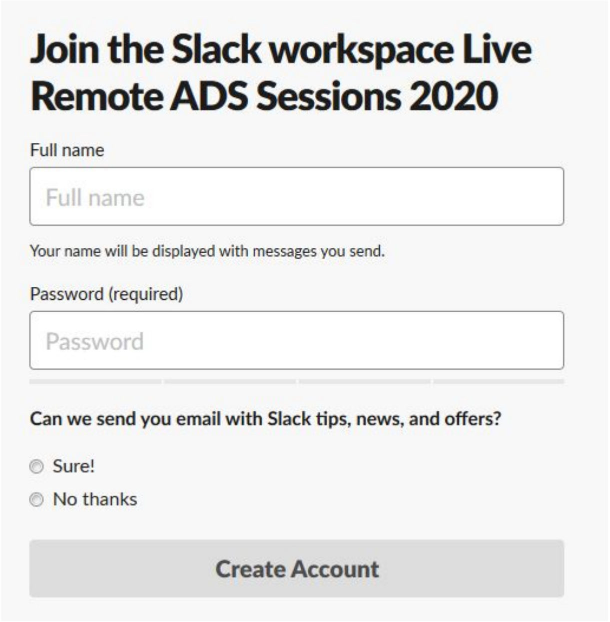
- study groups
- Q&A from students during live remote sessions
- Building a community of CSpark Learners



Slack - Setup

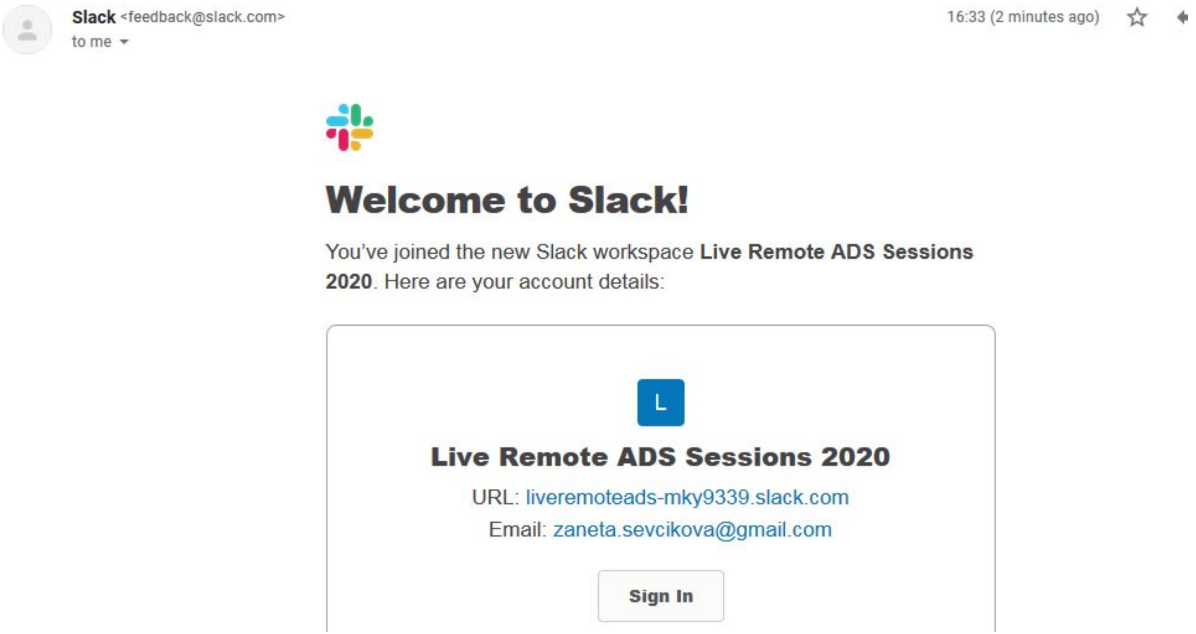
- Download Slack here: https://slack.com/intl/en-gb/downloads/ and install it on your machine
- In the meantime, you should have received an invitation via email to join a Slack workspace
- Click the green ‘Join now’ button in the invitation email
- You will then be asked to create your account





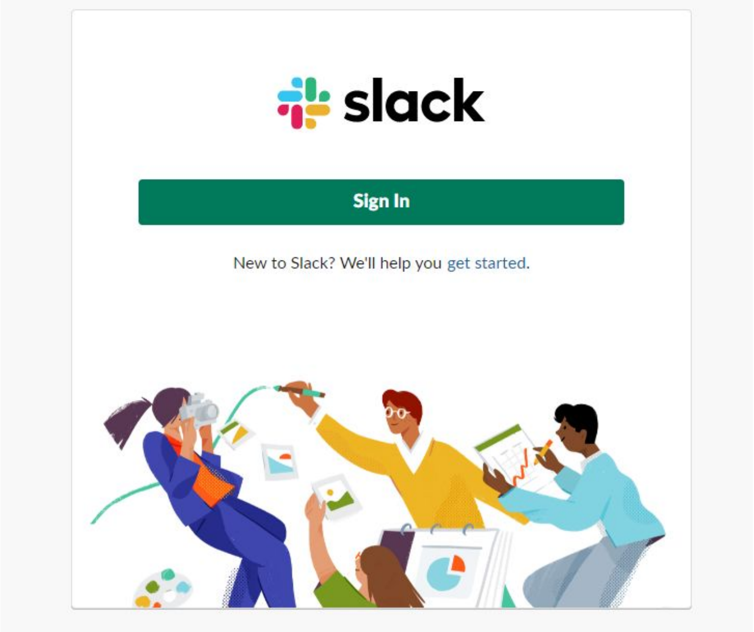
Slack - Setup

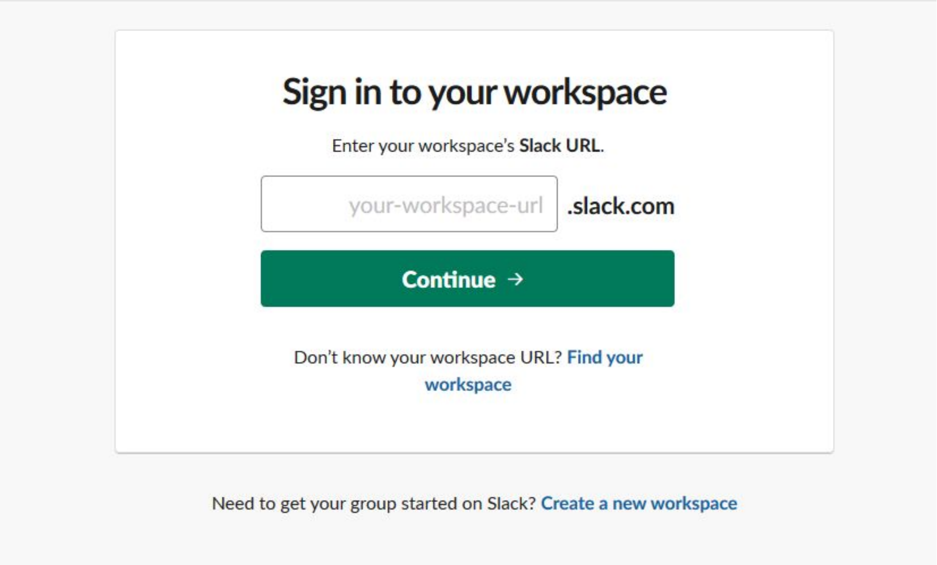
- Once you have created your account, you will immediately receive a ‘Welcome to Slack’ email with your workspace details



Slack - Setup

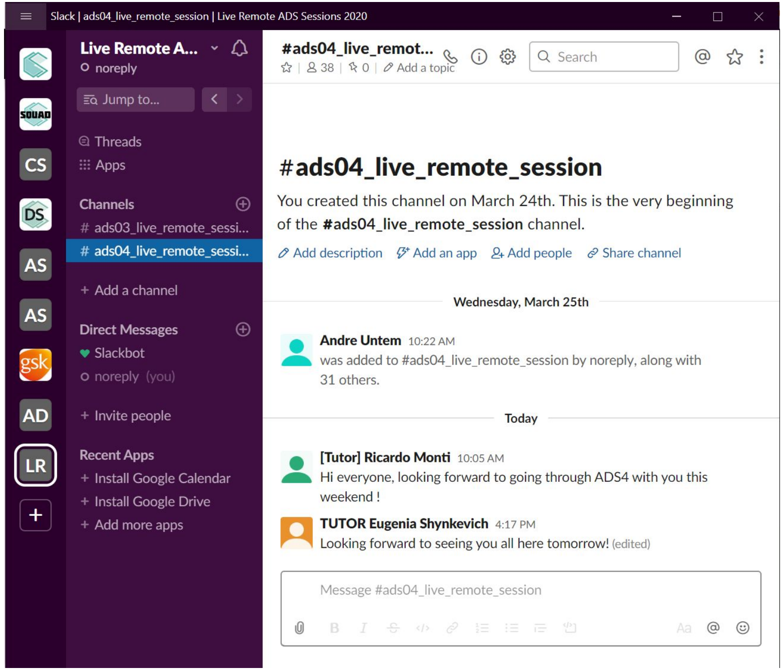
- Click on the Slack icon on your machine, you will be asked to ’Sing in’
- Enter your workspace’s Slack URL. You can find it in your ‘Welcome to Slack’ email or you can access it via the ‘Find your workspace’ button.





Slack - Setup

- The Slack application will open on your machine. From now on you should easily open Slack on your machine anytime by clicking the Slack icon.



EDUKATE.AI

EDUKATE.AI

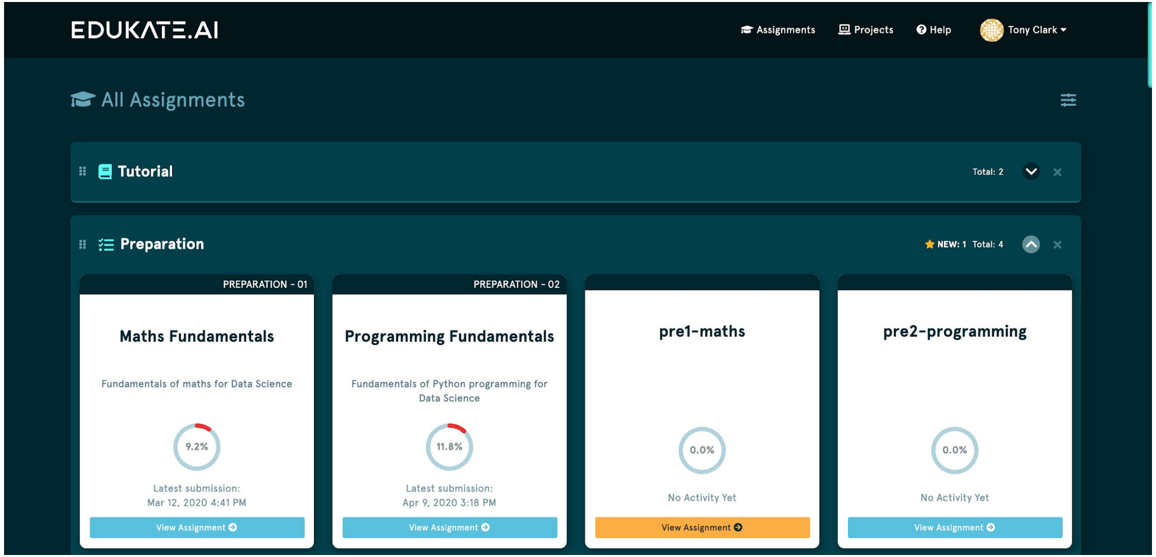
EDUKATE.AI is our proprietary tool for hands-on practical coding projects where learners can apply their new skills and receive immediate and personalised feedback.

It is browser based so learners will need to access it via their web browser (Chrome is recommended).

Learners need access to:
https://app.edukate.ai/

Please ensure there are no firewall restrictions on that URL.

Your user account will be created by Cambridge Spark separately.

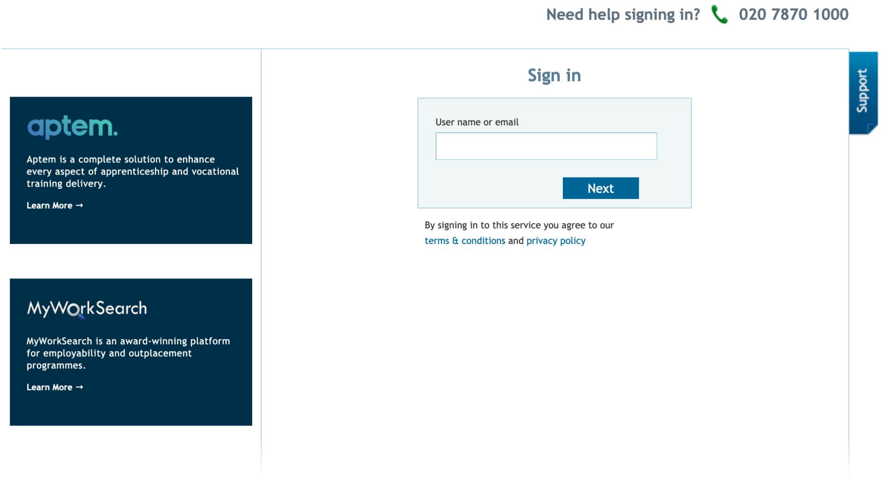


Aptem

Aptem

Aptem is a complete end-to-end apprenticeship and vocational training delivery platform. It is where learners a can access all information relating to their programme and learning and is also where they will build their portfolios and track the number of hours they are learning (off the job training)

Learners need access to:
https://cambridgespark.aptem.co.uk/Users/Account/LogOn



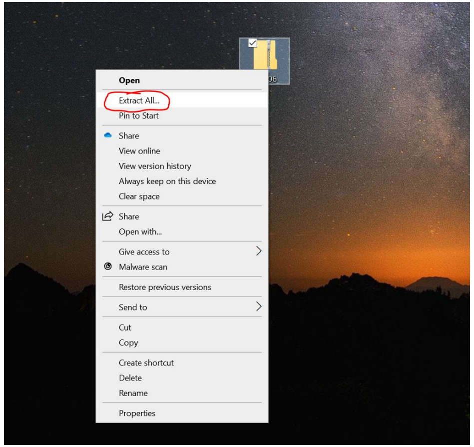
Archive Files

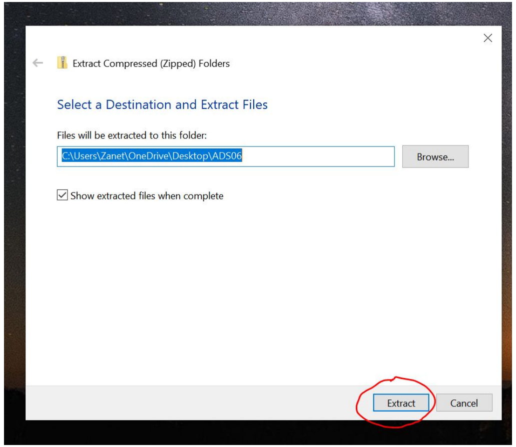
Archive Files

An **archive file** is a file that is composed of one or more computer files along with metadata. Archive files are used to collect multiple data files together into a single file for easier portability and storage, or simply to compress files to use less storage space. All our study materials for L4 are released in archive files.

How to open an archive file (windows):

1. Download the zip file to your machine
2. Right click the file, select 'Extract All' and then click 'Extract'
3. A new folder will be automatically created in the location of your file. You can now open the content in the folder.





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