Setting up R and RStudio

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Foreword

Dear all,

In the next few weeks, you will become competent users of the R programming language, and the RStudio IDE. This will not only give you an insight into today's word of data science, but will train you hand-on skills on how to code, and how to use computers in a more advanced fashion.

This course will teach you how to collect, manipulate and visualize relational data (meaning data that can be transformed into networks). This skill might prove very useful for your future career, especially for those of you who want to work in IT, or research.

Please understand that the first weeks of coding can be frustrating for some of you. I am very aware of this. To best cope with all this new information is to attend the exercise classes, where you can ask me questions. After the first couple of weeks however, I expect everyone to have built up some literacy on how to read and write R code. Expect a steep learning curve.

In the short guide below, I outline how you install R and RStudio.

Looking forward to seeing you in class.

Alexander

Setting up R and RStudio

The first thing we need to do is to make sure that we have all the same version of R and RStudio. Most of you will have taken a statistics course where you have already used R and RStudio. **However, the versions of R and RStudio you have used are old and need to be deleted.**

> ❗ If you have never installed R or RStudio on your computer, feel free to skip the next section.

Uninstalling R and RStudio

For MacOs Users

Uninstalling R and RStudio is fairly simple. Go to your applications folder and simply move RStudio and R to your trash by right clicking on the application icon. Do the same also for the R application.
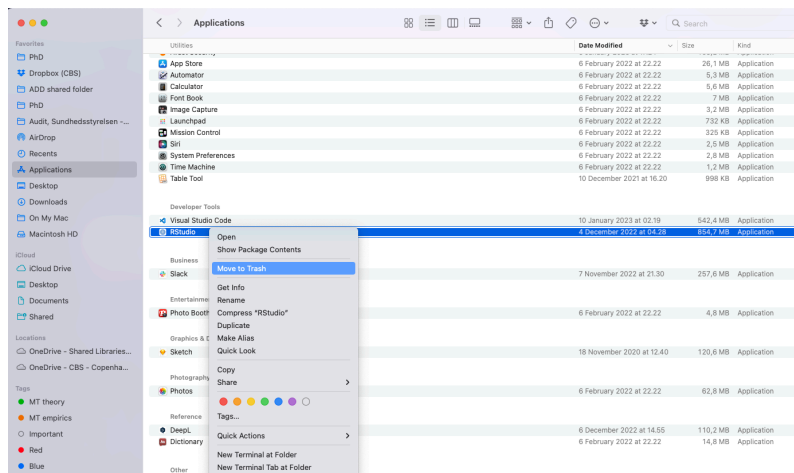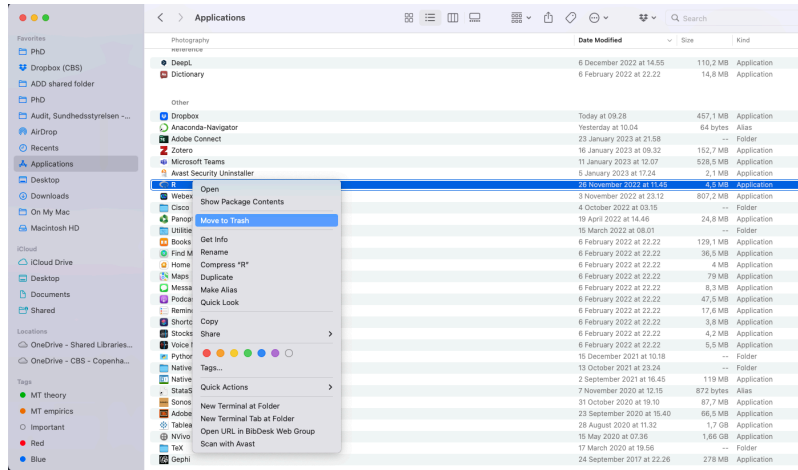

Figure 1: Deleting RStudio on Mac

Figure 2: Deleting R on Mac

For Windows users

Uninstalling the two applications for windows users quite straight forward as well. Go to Apps & features which can be found in settings. There, you will find a list of all the apps on your computer. Just find "R for Windows (version number)" and RStudio. Then uninstall them. The two screenshots below show how this can be done.
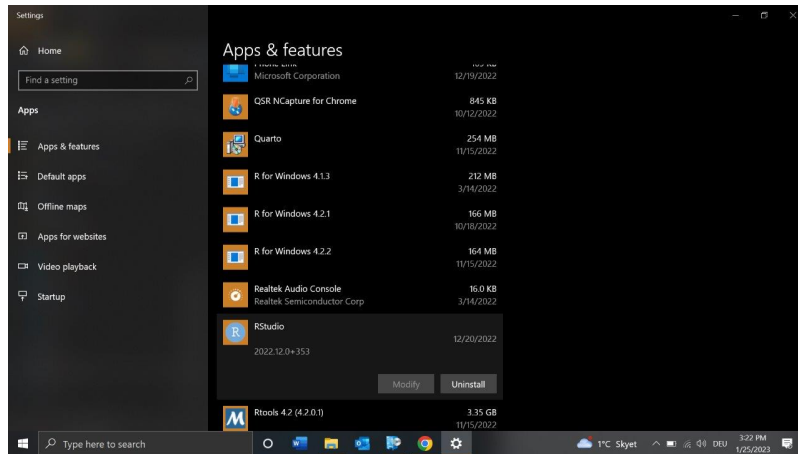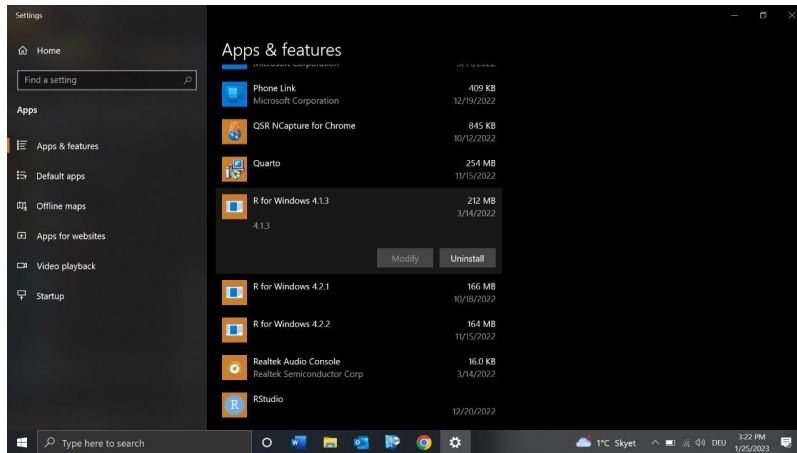

Figure 3: Deleting RStudio on Windows 10

Figure 4: Deleting R on Windows 10

Installing R

Download the newest R version from this link. Pick your operating system:

- If you are on windows, click on 'base' and then click the big letters 'Download R X.X.X for Windows' (instead of X.X.X there will numbers, eg the newest version of R currently available)

- If on MacOs, click the .pkg-file under 'latest release', named something like R-X.X.X.pkg, like the Windows-version

- If you are on Linux, follow the guide here.

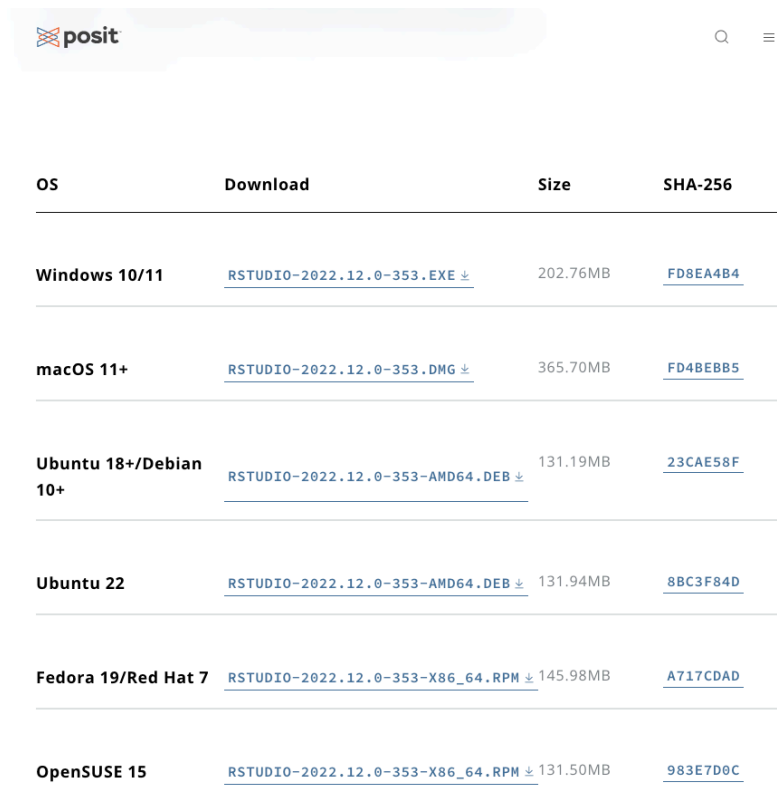Then install the programming language. You don't need to adapt the default install options during installation.

> ℹ Note
>
> Please note that we are using **R version 4.2.2** in this course.

Installing RStudio

After you have installed R, we install RStudio next. Please open this link here. Usually, the website has already recognized your operating system so that you can go right ahead and click download.

Otherwise, scroll down on the page and find a list of download links for every operating system.

OS	Download	Size	SHA-256
Windows 10/11	RSTUDIO-2022.12.0-353.EXE ⬇	202.76MB	FD8EA4B4
macOS 11+	RSTUDIO-2022.12.0-353.DMG ⬇	365.70MB	FD4BEBB5
Ubuntu 18+/Debian 10+	RSTUDIO-2022.12.0-353-AMD64.DEB ⬇	131.19MB	23CAE58F
Ubuntu 22	RSTUDIO-2022.12.0-353-AMD64.DEB ⬇	131.94MB	8BC3F84D
Fedora 19/Red Hat 7	RSTUDIO-2022.12.0-353-X86_64.RPM ⬇	145.98MB	A717CDAD
OpenSUSE 15	RSTUDIO-2022.12.0-353-X86_64.RPM ⬇	131.50MB	983E7D0C

Figure 5: Options seen at https://posit.co/download/rstudio-desktop/

> **ℹ Note**
>
> Please note that we are using **RStudio version 2022.12.0+353** in this course.

Getting started!

After successful installation of R and RStudio, open RStudio on your computer. This will lead R at the same time. Then, brush your R skills up a little.

See you in class.

Best,

Alexander