Getting ready (using xubuntu 22.04, same as Ubuntu 20.04)

General installation techniques

Important - you need make tools installed! sudo apt-get install build-essential

Installing from a downloaded .deb file

sudo dpkg -i /absolute/path/to/deb/file then if (when!) it fails, to make sure all dependencies are fixed:

sudo apt-get install -f and rerun dpkg.

Specific packages

Anaconda (Python)

Installing anaconda - anaconda-navigator not running on xubuntu on HSMA

LaTeX and LyX

 ${\tt sudo}$ apt-get install texlive-full (it is easier than messing around with tlmgr) ${\tt sudo}$ apt-get install lyx

Git

```
install git sudo apt install git
```

GitHub

```
install github
sudo apt install gh
give github authority
gh auth login
mkdir (whatever)
cd (whatever)
Clone from git:
gh repo clone hsma-programme/h6_1a_welcome_to_hsma
```

QGIS

Painful to install, use their website guide https://qgis.org/en/site/forusers/alldownloads.htm l#debian-ubuntu

Quarto

Download from their website at https://quarto.org/docs/get-started/ then install as per .deb packages

R

```
To obtain the latest R 4.1 packages, add an entry like

deb https://cloud.r-project.org/bin/linux/ubuntu jammy-cran40/
in your /etc/apt/sources.list file.

sudo apt update -qq

sudo apt install --no-install-recommends software-properties-common dirmngr
```

this fails on 22.04

```
gpg --show-keys /etc/apt/trusted.gpg.d/cran_ubuntu_key.asc
Fingerprint: E298A3A825C0D65DFD57CBB651716619E084DAB9
sudo add-apt-repository "deb https://cloud.r-project.org/bin/linux/ubuntu
$(lsb_release -cs)-cran40/"
sudo apt install --no-install-recommends r-base
Trying
wget https://cloud.r-project.org/bin/linux/ubuntu/marutter_pubkey.asc
Confirm E298A3A825C0D65DFD57CBB651716619E084DAB9 with an expiration date of 2027-09-30 using
gpg --show-keys ./marutter_pubkey.asc
can then put the key in the right place:
wget -q0- https://cloud.r-project.org/bin/linux/ubuntu/marutter_pubkey.asc |
sudo tee -a /etc/apt/trusted.gpg.d/cran_ubuntu_key.asc Or copy it manually to the correct place and name.
```

Rstudio

Download from their website https://posit.co/download/rstudio-desktop/

Install as per .deb files.

At he end running quarto check gives a good summary of your installation.

This is my installation 14-4-2024

```
Quarto 1.4.553
[] Checking versions of quarto binary dependencies...
    Pandoc version 3.1.11: OK
    Dart Sass version 1.69.5: OK
    Deno version 1.37.2: OK
[] Checking versions of quarto dependencies.....OK
[] Checking Quarto installation.....OK
    Version: 1.4.553
    Path: /opt/quarto/bin

[] Checking tools.........OK
    TinyTeX: (not installed)
```

```
Chromium: (not installed)
[] Checking LaTeX.....OK
     Using: Installation From Path
     Path: /usr/bin
     Version: 2021
[] Checking basic markdown render....OK
[] Checking Python 3 installation....OK
     Version: 3.11.7 (Conda)
     Path: /home/luke/anaconda3/bin/python
     Jupyter: 5.5.0
     Kernels: python3
[] Checking Jupyter engine render....OK
[] Checking R installation.....OK
     Version: 4.3.3
     Path: /usr/lib/R
     LibPaths:
       - /home/luke/R/x86_64-pc-linux-gnu-library/4.3
       - /usr/local/lib/R/site-library
       - /usr/lib/R/site-library
       - /usr/lib/R/library
     knitr: (None)
     rmarkdown: (None)
     The knitr package is not available in this R installation.
     Install with install.packages("knitr")
     The rmarkdown package is not available in this R installation.
     Install with install.packages("rmarkdown")
```

Zoom

Download from the website https://us04web.zoom.us/support/download

May need to import key sudo apt install rpm if not already there download the key form their website https://us04web.zoom.us/linux/download/pubkey?version=5-12-6 NB this is subject to change so check on site.

```
rpm --import package-signing-key-[version].pub
```

Then install using the .deb instructions above.