# Introduction

This program was developed by Julius Ramshage as an amanuensis at the Department of Sociology and Department for Social Work, during the autumn of 2024 and first quarter of 2025. The source code is available for free under the GPL v3 license on github(link). Questions about the source code and bug reports can also be submitted on github.
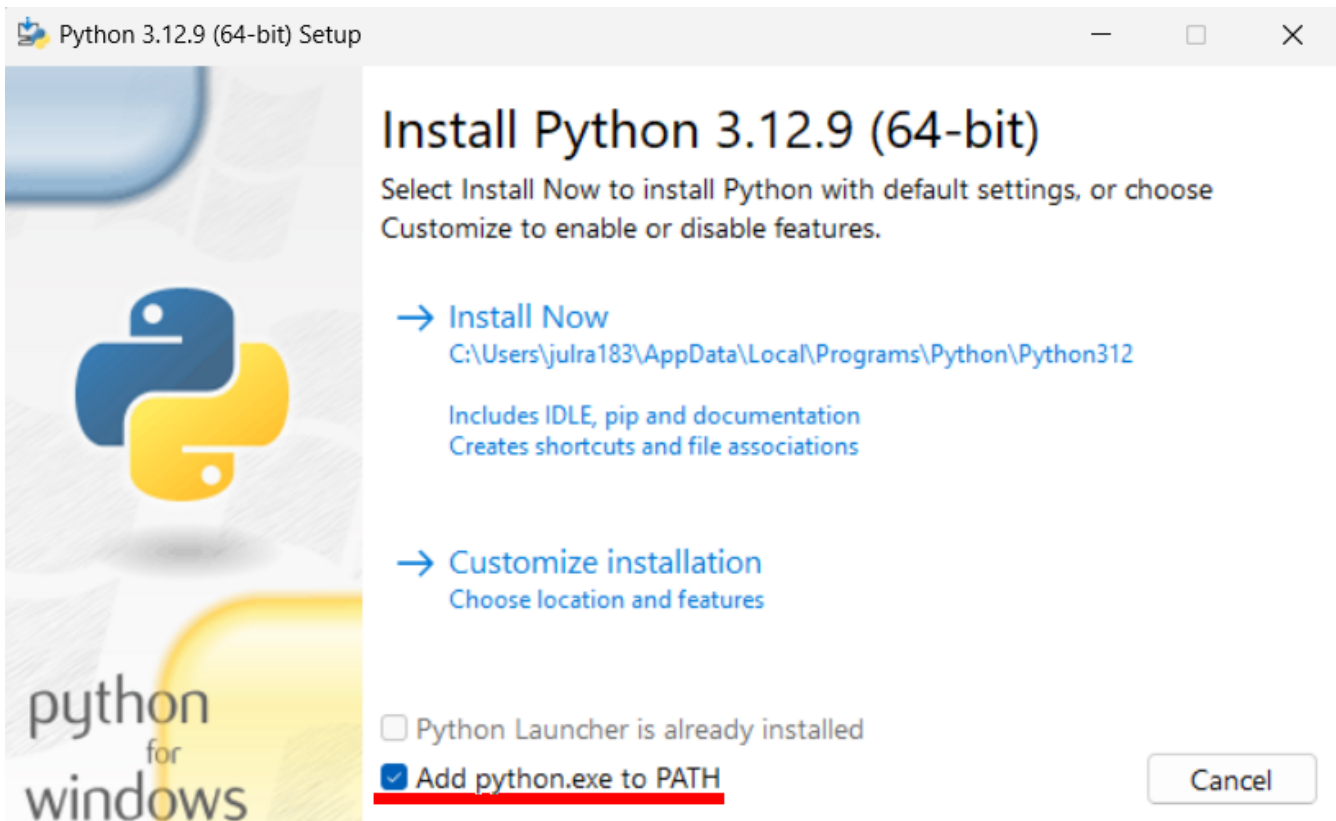
# Installation

If you already have installed python 3.12.9 or know how to do it you may skip the section on installing python. Python 3.12.9 is used due to a library conflict with Spacy and a newer version of python at the time of writing. Use newer versions at your own risk. If you happen to be an advanced user you can probably fingure it on your own how to run the program, this guide is intended for novice users.

## Installing python

To install Python follow this link to download the version of python (link) that we need. Once on the page scroll down to the *files* section, it should look like this



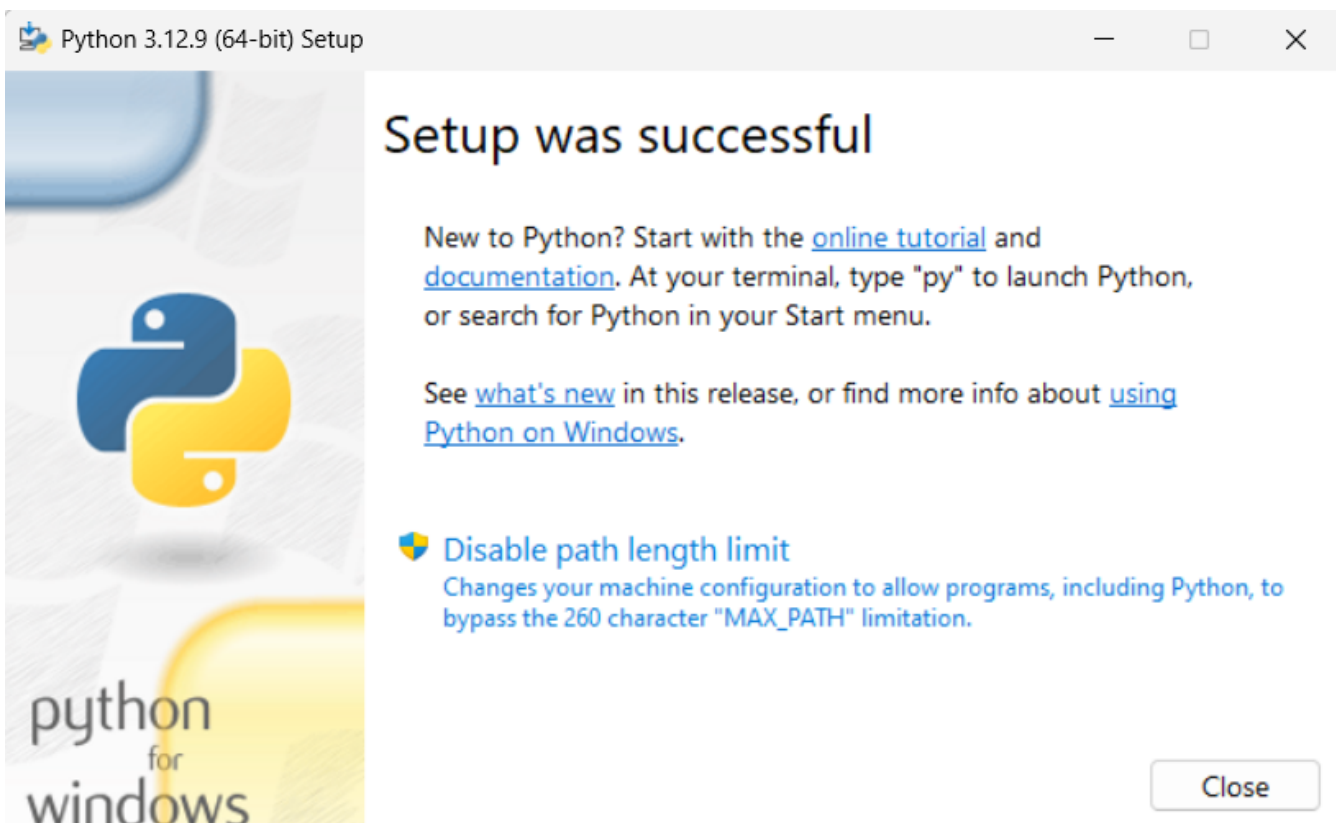| Version | Operating System | Description | MD5 Sum | File Size | GPG | Sigstore | SBOM |
|---|---|---|---|---|---|---|---|
| Gzipped source tarball | Source release | | ce613c72fa9b32fb4f109762d61b249b | 25.8 MB | SIG | .sigstore | SPDX |
| XZ compressed source tarball | Source release | | 880942124f7d5c01e7b65cbad62dc873 | 19.6 MB | SIG | .sigstore | SPDX |
| macOS 64-bit universal2 installer | macOS | for macOS 10.9 and later | fe3db9abb5c61010a9050d83bfcf8372 | 43.5 MB | SIG | .sigstore | |
| Windows installer (64-bit) | Windows | Recommended | 1cfb1bbf96007b12b98db895dcd86487 | 25.7 MB | SIG | .sigstore | SPDX |
| Windows installer (32-bit) | Windows | | b3a316b5a3d2c4a62552b3dd09750593 | 24.4 MB | SIG | .sigstore | SPDX |
| Windows installer (ARM64) | Windows | Experimental | a692acf8911d932f301aef5fcf30bbb8 | 25.0 MB | SIG | .sigstore | SPDX |
| Windows embeddable package (64-bit) | Windows | | f34996cc1f44c98729ef6ce92d05e41c | 10.6 MB | SIG | .sigstore | SPDX |
| Windows embeddable package (32-bit) | Windows | | a8015f8d166ea9a1fa9a3cf3b26c958d | 9.5 MB | SIG | .sigstore | SPDX |
| Windows embeddable package (ARM64) | Windows | | b5c1583bb0dc258799570a57a31a269d | 9.9 MB | SIG | .sigstore | SPDX |

In the description column it should say *Recommended.* you should click on the name of the recomeded installer, which is most likley _Windows installer (64-bit). Once you have clicked it, the file should be automatically downloaded. When the file is downloaded, head to the folder where it is downloaded and run it. This should not require admin privileges and follow the install instructions. The window should look like this

**IMPORTANT** make sure the checkbox with *Add python.exe to PATH* is ticked in.

If the install it successful you should see this on your monitor



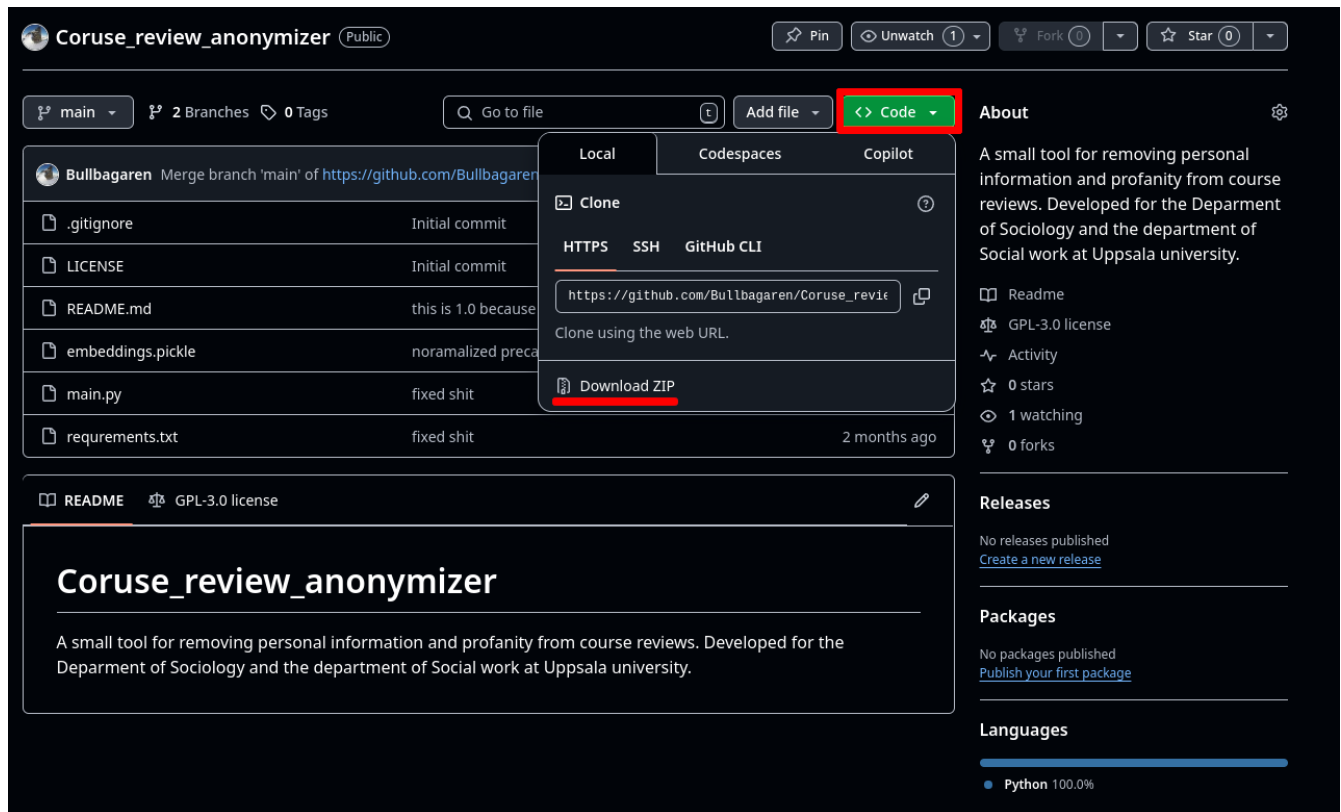You may now close it, and you can proceed to the next step.

# Downloading the script

To download the scrip you will need to fetch it from github (link).

> **TIP** If you know how to use git, you can probably skip to the section for how to run the script.

Once there click on the green button labeled code, a dropdown menu should appear and look something like this:



Click on the download zip button on the bottom of the dropdown menu, and save the zip archive to the location of your choosing.

If you have downloaded the file in your downloads folder make sure to move it to a different location of your choosing when extracting the contents of the folder. This is important because where you extract the content will determine where you will run the program from. So make sure you extract it to a place outside the downloads folder.

> **IMPORTANT** To extract an archive, right-click on the zip-file, and thne select *extract all* (swedish: extrahera alla)

# Setting up the environment

Before we are ready to run the script some preparations are in order. The program require some external libraries to function, to install we first need to create a python virtual environment. To do this we need to open the powershell, right click inside the folder to open the dropdown menu you

normally get from right clicking. Select *open in terminal* (swedish: Öppna i Terminal). You should now have a black window open. In the black window run the following command:

| **IMPORTANT** | Running a command means to type the command into the **Terminal** (black window) and then executing it by hitting *enter* |
|---|---|

```
python -m venv .venv
```

This create a python virtual environment in the folder *.venv* We only need to create the environment once (unless the folder has been deleted for some reason). But everytime we need to run the program the environment needs to be activated. This is done by the following command

```
.\.venv\Scripts\activate
```

| **TIP** | you can use tab-completion to type quicker. by partially typing what you want you can then press *tab* to complete it. for this command it might look like this: .ve[tab] Sc[tab] ac[tab] to complete the command. |
|---|---|

*(.venv)* should now appear on the left hand side of the terminal, indicating that the environment is active. Now we are ready to install the external libraries, this is done by the following command:

```
pip install -r requirements.txt
```

This will take a bit of time to run and should without fault install all required libraries. Once it's done we have one more command to run.

```
python -m spacy download sv_core_news_lg
```

This downloads the model which performs the named entity recognition to find and censor names that appear in the reviews.

If you get an error saying tha spacy doesn't exist, try the following commands and then re-run the command above.

```
pip install -U pip setuptools wheel

pip install -U spacy
```

| **IMPORTANT** | **If this throws and error, see the the trouble shooting section on spacy.** |
|---|---|

You have now installed all the libraries needed to run the program.

# Running the program

Before you try to run the program make sure that the virtual environment is activated. if you don't see *(.venv)* in the left hand of the terminal window you can always reactivate it with:

```
.\venv\Scripts\activate
```

**IMPORTANT** | The program need firefox to run so make sure it is installed before trying to run the program.

The libraries previously installed with still be installed, so nothing else should be required. Then to run the program you can go ahead and run the command:

```
python main.py
```

It will prompt you for a username, password, and URL for the course review. The username is just your AKKA-id, and the password is the password used for your AKKA-id. The URL is the URL for reviews the course evaluations for Uppsala university and will look something like this:

```
https://kv.uu.se/granska/140089
```

**IMPORTANT** | When typing in your password it will not echo back to you This means that you will not see that you are typing.

Once you provided it with a valid AKKA-id, password and URL the program will open a firefox window, it will not do much while the program is running.

**TIP** | You can use the computer while the program is running, but if you start experiencing issues, leave it until it is done and grab coffee instead whilst waiting.

When the program is finished it will enter the sanitised text into the web-browser it opened. Now is when you have to manually check so that everything is correct. When the program identifies what it considers a bad word it will tag it with

```
<ISSUE><ISSUE>
```

So in the web browser you can look for them with ctrl+f. When double checking if names are censored, the program will output a list which is mostly empty, but which contains names. if the list is completely empty it means it was unable to find any names, although this is very unlikely. You can use ctrl+f just to check if it by accident missed any names, as well as if some names that you don't recognize to be staff, is most likely to be author names and needs correction. When you are happy with the changes you can save and publish. It is important to know that it might sometimes say it failed to save and publish. This is most likely because the instance of firefox is considered to

be a bot. To remedy this check your email for a a notice that it was indeed publish, If so you can close down the browser and exit the program. If you did not receive an email, you can just save the changes and then head over to the course review website and manually publish the saved version.

| IMPORTANT | You are most likely to get this error when letting the website be open for too long without any changes made. |
|---|---|

To make another sanitation round, exit the script and re-run it again.

# Troubleshooting

## Basic troubleshooting step

If the programs runs but can't change anything, i.e. it throws an error saying that the URL must be wrong, first double check so the URL is correct, secondly make sure you have the privileges to review and edit the course reviews. It should also go without saying that you have doublechecked so that you have correctly spelled your AKKA-id and password. If the issue still persists, move on to the next step.

Make sure that the virtual environment is activated. So remember to check that it does in fact say (.venv) next to your username in the terminal (black window).

If there are no files, in the files section of the provided download link then download the recomended installer for the latest version of python.

## More advanced steps

Second step would be to make sure that it is not the python library spacy which is causing issues with the version of python, or any other library for that matter of fact. First step to try and resolve the issue is to repeat the step were we install the libraries using the requirements.txt file. If the issue still persists, try installing different versions of python, spacy during the development period of this application proved to be temperamental depending on the version of python that was used.

If the issue still persists ask someone who knows more or open an issue on github and please provide the full error message in any issue that you decide to open.

## Spacy module not found

during testing we found that deactivating you virtual envorinment seemed to solve this issue, to deactivate the environment run

```
deactivate
```

Now you can resume the step where you were.

Welcome back, if it threw the error message that you need to run a certain command to edit pip,

then do so, this includes the whole filepath from *C:* all the way to *wheel* then you can try to install sv_core_news_lg. The error message provides you whith what it wants you to do!