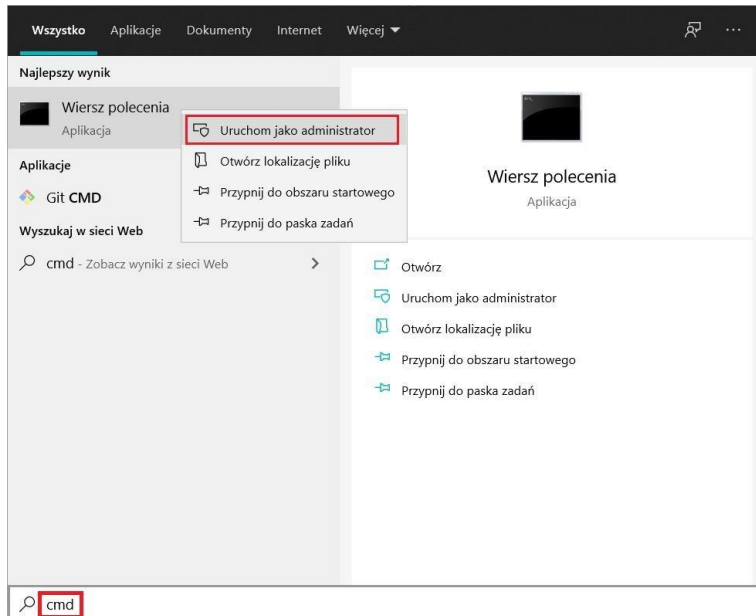


## 1. Check your python version

Search for “cmd” in Windows, and run it (terminal) as administrator.



Type `python --version`:

```
C:\WINDOWS\system32>python --version
Python was not found; run without arguments to install from the Microsoft Store, or disable this shortcut from Settings
> Manage App Execution Aliases.

C:\WINDOWS\system32>
```

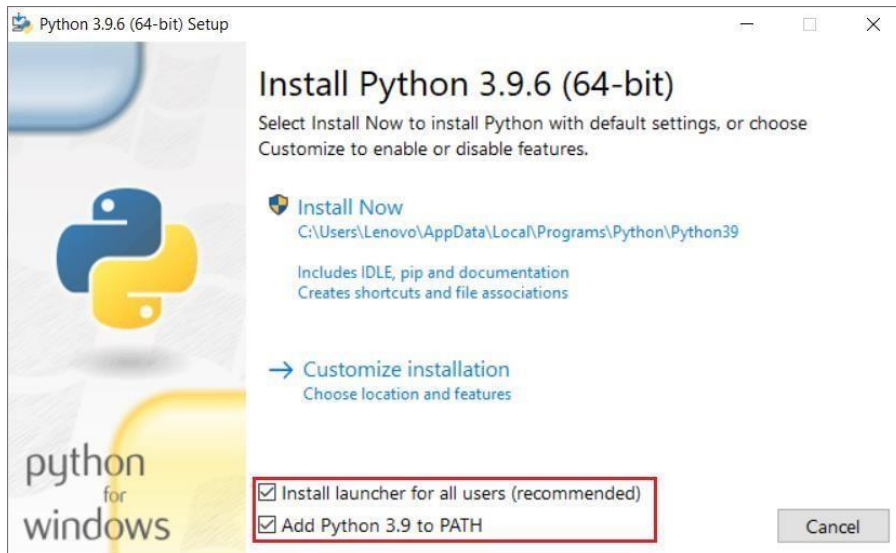
## 2. Download and install Python.

Visit the site:

<https://www.python.org/downloads/release/python-396/> or install the latest stable version available. scroll down the site and choose python version for your os.

<a href="#">Windows embeddable package (32-bit)</a>	Windows		5b9693f74979e86a9d463cf73bf0c2ab	7599619	SIG
<a href="#">Windows embeddable package (64-bit)</a>	Windows		89980d3e54160c10554b01f2b9f0a03b	8448277	SIG
<a href="#">Windows help file</a>	Windows		91482c82390caa62accfdacbaabf618	6501645	SIG
<a href="#">Windows installer (32-bit)</a>	Windows		90987973d91d4e2cddb86c4e0a54ba7e	24931328	SIG
<a href="#">Windows installer (64-bit)</a>	Windows	Recommended	ac25cf79f710bf31601ed067ccd07deb	26037888	SIG

Install python, remember to check both checkboxes:

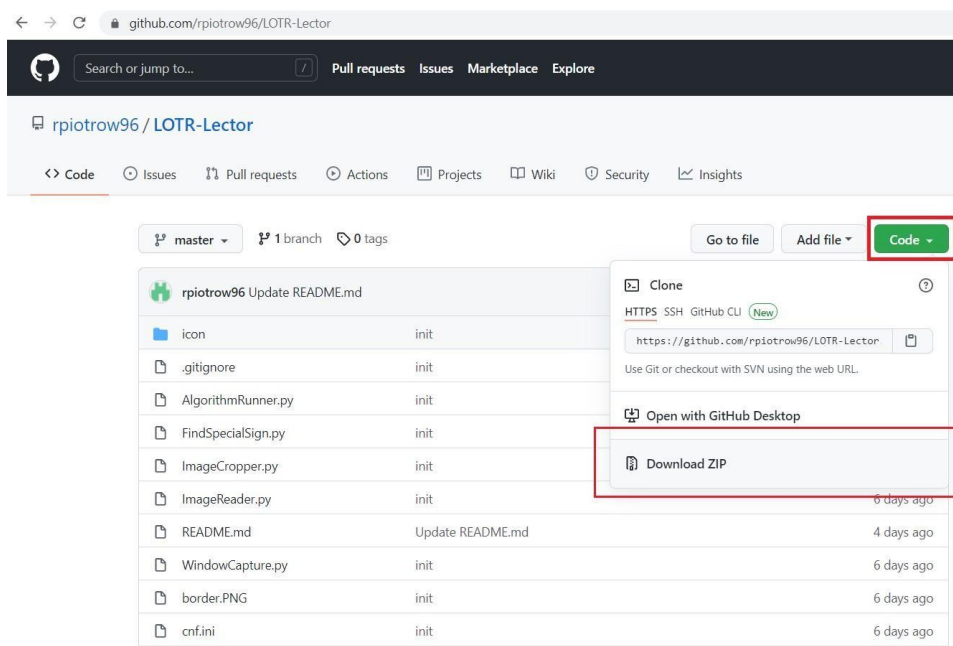


Click install now.

After installation, run new terminal and type `python --version`. You should see something like this:

```
C:\WINDOWS\system32>python --version
Python 3.9.6
C:\WINDOWS\system32>
```

3. Download the project <https://github.com/rpiotrow96/LOTR-Lector>



Click Code -> Download ZIP and unzip it.

4. download and install tesseract <https://github.com/UB-Mannheim/tesseract/wiki>

## Home

Stefan Weil edited this page 19 days ago · 71 revisions.

## Tesseract at UB Mannheim

The Mannheim University Library (UB Mannheim) uses Tesseract to perform OCR (optical character recognition) of historical German newspapers (*Allgemeine Preußische Staatszeitung*, *Deutscher Reichsanzeiger*). The latest results with OCR from more than 360,000 scans are available online.

## Tesseract installer for Windows

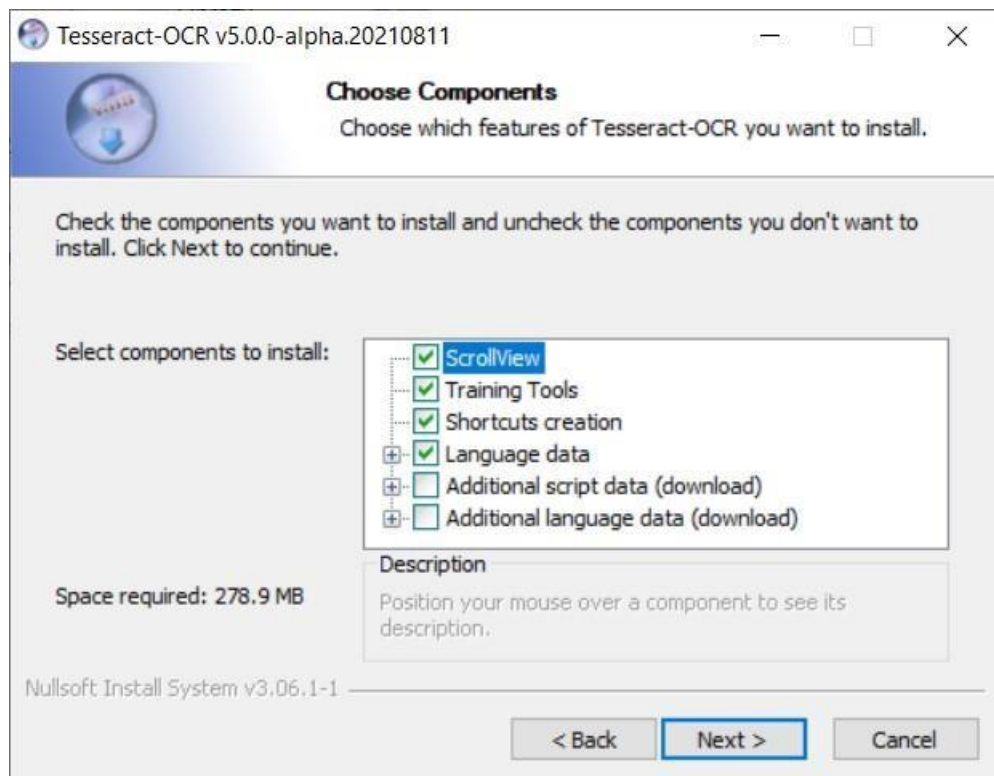
Normally we run Tesseract on Debian GNU Linux, but there was also the need for a Windows version. That's why we have built a Tesseract installer for Windows.

**WARNING:** Tesseract should be either installed in the directory which is suggested during the installation or in a new directory. The uninstaller removes the whole installation directory. If you installed Tesseract in an existing directory, that directory will be removed with all its subdirectories and files.

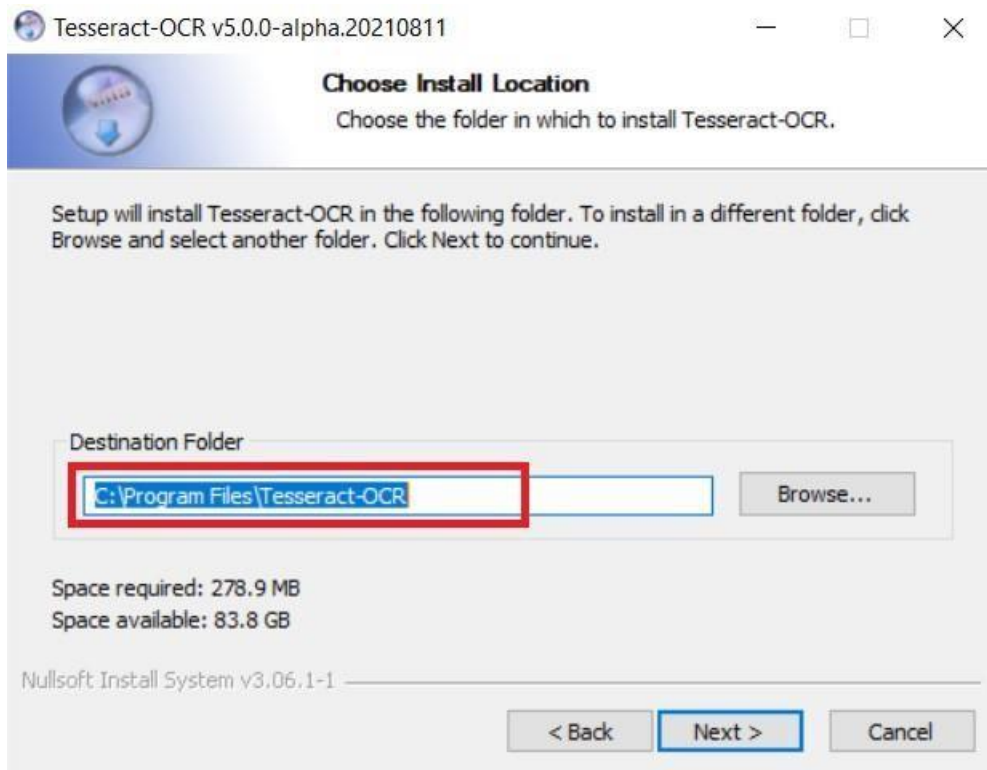
The latest installers can be downloaded here:

- [tesseract-ocr-w32-setup-v5.0.0-alpha.20210811.exe](#) (32 bit) and
- [tesseract-ocr-w64-setup-v5.0.0-alpha.20210811.exe](#) (64 bit) resp.

Installation:



Remember to **NOT EDIT** the Destination Folder! if you do, you will have to edit the python configuration file as well.



Then click next and install.

## 5.Download python libraries

Open terminal (as previous) on unzip folder and run command:

`pip install requirements.txt`

```
Administrator: Wiersz polecenia
Microsoft Windows [Version 10.0.19043.1165]
(c) Microsoft Corporation. Wszelkie prawa zastrzeżone.

C:\WINDOWS\system32>pip install git+https://github.com/rpiotrow96/LOTR-Lector.git
Collecting git+https://github.com/rpiotrow96/LOTR-Lector.git
  Cloning https://github.com/rpiotrow96/LOTR-Lector.git to c:\users\lenovo\appdata\local\temp\pip-req-build-2hf8rrep
  Running command git clone -q https://github.com/rpiotrow96/LOTR-Lector.git 'c:\users\lenovo\appdata\local\temp\pip-req-build-2hf8rrep'
Collecting gtts
  Downloading gtts-2.2.3-py3-none-any.whl (25 kB)
Collecting playsound==1.2.2
  Downloading playsound-1.2.2-py3-none-any.whl (6.0 kB)
Collecting pytesseract
  Downloading pytesseract-0.3.8.tar.gz (14 kB)
Collecting opencv-python
  Downloading opencv-python-4.5.3.56-cp39-cp39-win_amd64.whl (34.9 MB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 34.9 MB 1.3 MB/s
Collecting pywin32
  Downloading pywin32-301-cp39-cp39-win_amd64.whl (9.3 MB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 9.3 MB 819 kB/s
Collecting six
  Downloading six-1.16.0-py2.py3-none-any.whl (11 kB)
Collecting requests
  Downloading requests-2.26.0-py3-none-any.whl (62 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 62 kB 267 kB/s
Collecting click
  Downloading click-8.0.1-py3-none-any.whl (97 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 97 kB 730 kB/s
Collecting colorama
  Downloading colorama-0.4.4-py2.py3-none-any.whl (16 kB)
Collecting numpy>=1.19.3
  Downloading numpy-1.21.2-cp39-cp39-win_amd64.whl (14.0 MB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 14.0 MB 403 kB/s
Collecting Pillow
  Downloading Pillow-8.3.1-1-cp39-cp39-win_amd64.whl (3.2 MB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 3.2 MB 939 kB/s
Collecting certifi==2017.4.17
  Downloading certifi-2021.5.30-py2.py3-none-any.whl (145 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 145 kB 939 kB/s
Collecting charset-normalizer==2.0.0
  Downloading charset-normalizer-2.0.4-py3-none-any.whl (36 kB)
Collecting urllib3<1.27,=>1.21.1
  Downloading urllib3-1.26.6-py2.py3-none-any.whl (138 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 138 kB 819 kB/s
Collecting idna<4,=>2.5
  Downloading idna-3.2-py3-none-any.whl (59 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 59 kB 939 kB/s
Using legacy 'setup.py install' for LOTR-Lector, since package 'wheel' is not installed.
Using legacy 'setup.py install' for pytesseract, since package 'wheel' is not installed.
Installing collected packages: urllib3, idna, colorama, charset-normalizer, certifi, six, requests, Pillow, numpy, click, pywin32, pytesseract, playsound, opencv-python, gtts, LOTR-Lector
  Running setup.py install for LOTR-Lector ... done
  Running setup.py install for LOTR-Lector ... done
Successfully installed LOTR-Lector-1.0 Pillow-8.3.1 certifi-2021.5.30 charset-normalizer-2.0.4 click-8.0.1 colorama-0.4.4 gtts-2.2.3 idna-3.2 numpy-1.21.2 opencv-python-4.5.3.56 playsound-1.2.2 pytesseract-0.3.8
pywin32-301 requests-2.26.0 six-1.16.0 urllib3-1.26.6
WARNING: You are using pip version 21.1.3; however, version 21.2.4 is available.
You should consider upgrading via the 'c:\users\lenovo\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\WINDOWS\system32>
```

Wait for downloading all libraries and close terminal.

6. Create azure free account in <https://azure.microsoft.com/pt-br/products/ai-services/text-to-speech/>

6.1 – install Microsoft Visual C++ if you don't have (recommended) <https://learn.microsoft.com/en-us/cpp/windows/latest-supported-vc-redist?view=msvc170&preserve-view=true>

6.2 – Create a new multi-service resource in [https://portal.azure.com/#blade/Microsoft\\_Azure\\_ProjectOxford/CognitiveServicesHub/SpeechServices](https://portal.azure.com/#blade/Microsoft_Azure_ProjectOxford/CognitiveServicesHub/SpeechServices)

6.2.1 – Click on subscription (assinaturas), then add:



Then add (check if your plan is free to use not pay as you go).

6.2.2 – go to home and then click speech services then create.

6.2.3 – check your subscription (created in the previous step), set up resources group (read tips), set up region (Brazil South), name: Python-lotr and price type, F0. After create, copy one of your Keys, open cmd and paste :

### Keys and endpoint

**i** Essas chaves são usadas para acessar a API do OpenAI. Não compartilhe suas chaves. Armazená-las com segurança– por exemplo, usando Azure Key Vault. Também recomendamos regenerar essas chaves regularmente. Apenas uma chave é necessária para fazer uma chamada à API. Ao regenerar a primeira chave, você pode usar a segunda chave para acesso contínuo ao serviço.

**Mostrar as Chaves**

CHAVE 1

\*\*\*\*\*

CHAVE 2

\*\*\*\*\*

Localização/região ⓘ

brazilsouth

Ponto de extremidade

<https://brazilsouth.api.cognitive.microsoft.com/>

```
setx COGNITIVE_SERVICE_KEY your-key setx
```

```
SPEECH_REGION brazilsouth
```

```
Prompt de Comando
Microsoft Windows [versão 10.0.22621.3155]
(c) Microsoft Corporation. Todos os direitos reservados.

C:\Users\phili>setx COGNITIVE_SERVICE_KEY your-key

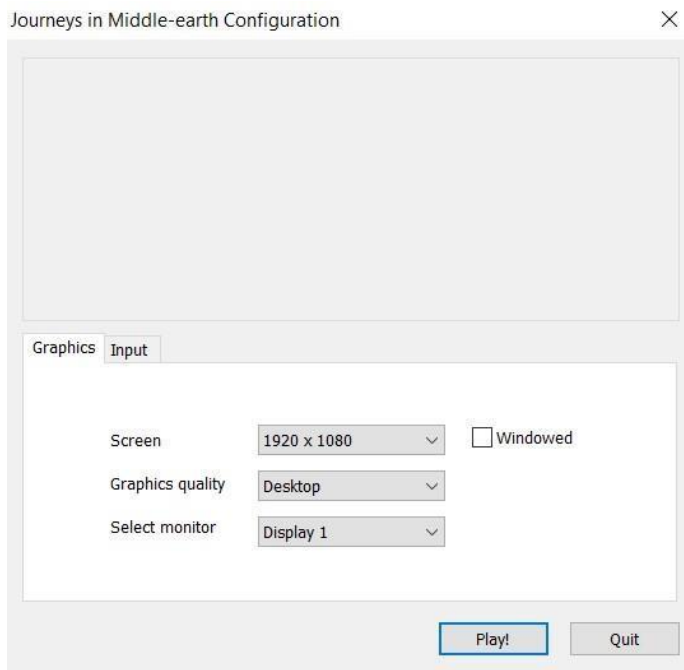
ÊXITO: o valor especificado foi salvo.

C:\Users\phili>setx SPEECH_REGION brazilsouth

ÊXITO: o valor especificado foi salvo.

C:\Users\phili>
```

## 7.Run the app!



Open terminal and go to directory where you unzipped app.

On my computer I typed: `cd ..\..\Users\Lenovo\Desktop\LOTR-Lector-master` Then:  
`python main.py`

```
C:\Users\Lenovo>cd ..\..\Users\Lenovo\Desktop\LOTR-Lector-master
C:\Users\Lenovo\Desktop\LOTR-Lector-master>python main.py
```

It works!

Example of read txt:

```
C:\Users\Lenovo\Desktop\LOTR-Lector-master>python main.py
This cave wall has several cracks and jutting shelves of rock.
A faint buzzing sound alerts you to something amiss in this area.
Hidden here is a chest made of stout wood with iron fastenings, apparently locked tight.
```