Instructions to run local version of Auto-qPCR

You have already downloaded the folder ‘Local\_Download.zip’ and unzipped the file.

Make a note of where in your file system you downloaded this folder. (Desktop Documents Downloads). For easier use, you can move the ‘Local\_Download’ folder to your desktop.

Now we will set up to run the local program.

1. **Install python3**

<https://www.python.org/downloads/> from the python website follow the instructions for your operating system.

1. **Open your terminal/command prompt**

**mac** <https://setapp.com/how-to/how-to-open-terminal-on-mac>

**windows** <https://www.howtogeek.com/235101/10-ways-to-open-the-command-prompt-in-windows-10/>

1. **Navigate to the correct location inside the terminal/command prompt**

Inside the terminal/command you need to move inside the folder to get into the folder ‘Auto-q-pcr-frontend:

If you have placed the folder ‘Local\_download’ on your Desktop you should be able to type or copy paste this code then press enter:

**For Linux and Mac**

cd Desktop/Local\_Download/Auto-q-pcr-frontend

**For Windows**

cd Desktop\Local\_Download\Auto-q-pcr-frontend

For information about navigating in shell

cmd for windows: <https://www.digitalcitizen.life/command-prompt-how-use-basic-commands/>

Linux for os and linux: <https://www.pluralsight.com/guides/beginner-linux-navigation-manual>

1. **Install package manager ‘pip’** Type or paste the code in grey into your terminal/command window and press enter .

**For linux:**

sudo apt-get install python3-pip

**For mac**

python3 get-pip.py

**For windows**

python get-pip.py

1. **Install package to create virtual environments**

Now pip is installed, you can use pip to install virtualenv

**For linux**

pip3 install virtualenv

1. **Run the program that will launch the app locally**

**For linux**

bash run\_linux.sh

**For max**

bash run\_os.sh

The script provided will create and open a virtual environment in your computer. Then install all the packages required for the app. Then it will run the app.

**For windows**

The bash script doesn’t currently work. You will need to paste each of the following lines in one at a time into the command window. After the last line your local web-browser will open with Auto-qPCR.

Install the package requirements, this will take a while and output a lot of information into your terminal

python -m pip install -r requirements.txt

Connect to the web-browser. This will open an empty browser window.

python -m webbrowser <http://127.0.0.1:5000/>

This will run the program and auto-qPCR will be opened in the web-browser locally (no need for internet connection)

python main.py

1. **Open the website locally**

A web-browser (whatever you have as your default) might open on your computer automatically. If not, you will see a web address in the terminal/command window.

http://127.0.0.1:5000



Right click on the web address and choose open website.

You might have an error that says ‘cannot connect to server’. Click try again or reload and the web-app will open locally.

1. **Analyze your data.**

Use the local web form the same way as the online web app.

1. **Exit the app**

When you close the window you will still be running a local server and this could slow your computer down. To disconnect the program you can press CTRL +C in the terminal/command window.

**For continued use of the app**

**For linux and mac**

You have created a virtual environment with the packages using the run.sh scripts. You can just simply run these again and the packages will be reinstalled on top of the existing packages. To save time you can enter the virtual environment by :

cd Desktop/Local\_Download/Auto-q-pcr-frontend

source loca-env/bin/activate

python -m webbrowser <http://127.0.0.1:5000/>

python3 main.py

**For Windows**

You have installed the packages directly and do not need to enter a virtual environment.

cd Desktop\Local\_Download\Auto-q-pcr-frontend

python -m webbrowser <http://127.0.0.1:5000/>

python main.py