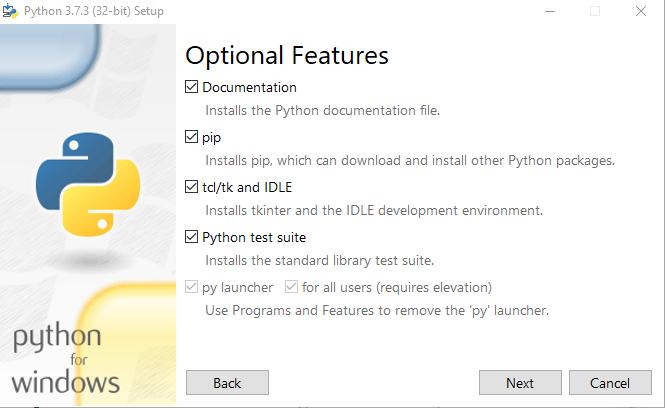
Technical manual

This document provides descriptive steps for running Study Insight backend and frontend on a local machine.

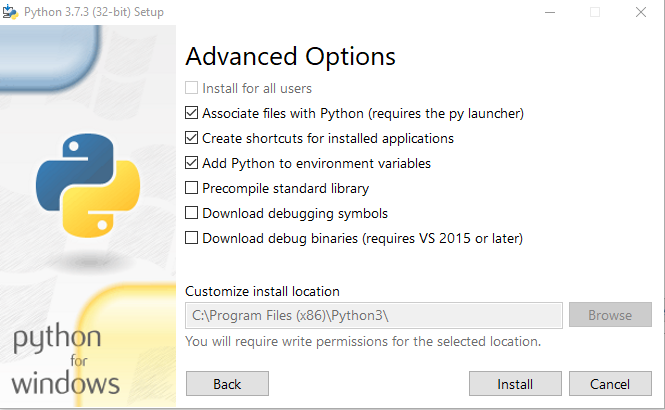
# Backend

Firstly, you need to have Python 3 installed on your device in order to run the application. Python releases can be downloaded from <https://www.python.org/downloads/>. Downloading and installing the latest release in preferable (release 3.7). After selecting the wanted release you can chose the version that you need based on the OS you are running. There are executable installer versions for Mac OS X and Windows.

The following the screenshots are taken from a python executable installer for Windows:



When installing python 3, it is best if you also install *pip.* This is the preferred installer program for python modules. It will make the installation of the needed modules for Study Insight way easier.



Furthermore, make sure that you add Python to the environment variables, so that you can execute python commands in a command line.

After python is installed there several modules that Study Insights project needs:

Django  
python-dotenv  
django-seed  
djangorestframework  
mysqlclient

They can be installed separately by running **pip install <nameOfTheModule>** on a command line.

However, in our project there is a *requirements.txt* file where all modules are defined. All modules can be easily installed by running **pip install -r requirements** in the console.

**Warning!!!**

*mysqlclient* installation may fail when run with *pip* remote repositories on Windows!

If you have such an issue, you can download the installation file from: <https://www.lfd.uci.edu/~gohlke/pythonlibs/#mysqlclient>

Make sure to download the version that corresponds to the python release you installed. For Python 3.7 running on 32-bit architecture: **mysqlclient‑1.4.2‑cp37‑cp37m‑win32.whl**

To make it easier we’ve already provided the previously mentioned file in the project. In order to perform the installation, run the following command in the command line: **pip install mysqlclient‑1.4.2‑cp37‑cp37m‑win32.whl**

After everything is installed, the project should me connected to an *mysql* server. The properties of the server should me added in a **.env** file. We have provided a template file **.env.example.** Copy the file, remove the *.example* extension and fill the file with the properties of your mysql server. For example:

DB\_HOST=localhost  
DB\_DATABASE=proep\_studyinsight  
DB\_USERNAME=root  
DB\_PASSWORD=  
DB\_PORT=3306

Next you should generate the database from the data models defined in the project using migrations. To do that the following commands should be executed on the command line:

**python manage.py makemigrations** – to create the initial migrations. **python manage.py migrate –** toexecute the migrations on the database server.

Now you are ready to run the backend of Study Insight by executing command:

**python manage.py runserver 8000**

# Frontend

In order to run the frontend Study Insight project, *NodeJS* is required. NodeJS can be downloaded from <https://nodejs.org/en/>. It is advised to download and install the latest stable release. Using the executable installer install NodeJS.

Afterwards, running the frontend on a local machine is rather straightforward. You simply need to download the project and run the following commands: 