**Installation Di-Plast Data Analytics Tool**

This installation document explains how to install the necessary software for using the Data Analytics tool from the Di-Plast project.

First we need to start with an explanation on how this works; for running the scripts that we use in the analytics tools, a computer should be installed with Python programming language and dedicated packages to execute the scripts for the tools. Please keep in mind that for most of the software that needs to be installed, you need to give permission for the installation.

**Step 1**: go to <https://www.python.org/downloads/> and install the latest python version. Go through each of the steps necessary for using this software. Please click on the “install now” button when using the installation wizard (so not “customized installation”).

For Windows: <https://www.youtube.com/watch?v=xXEt9dyvq3U> this video explains how to install python. Watch until 3:40.

For Mac: <https://www.youtube.com/watch?v=M323OL6K5vs> this video explains how to install python. Watch until 2:50.

**Step 2:** Go to <https://java.com/en/download/> and download and install the latest version of java. Go through each of the steps necessary for using the software.

**Step 3:** To get the EPA tool up and running, we also need the JDK (Java Development Kit) installed on your computer. For this, please visit <https://www.oracle.com/java/technologies/downloads/> and download the JDK version suited for your operating system.

**Step 4**: go to <https://www.anaconda.com/products/individual> and install the latest version of anaconda. Go through each of the steps necessary for using this software. When you see a message concerning the creation of a “PATH”, please check both boxes.

When installation is final, please uncheck both boxes in the installation wizard.

**Step 5:** We have sent you a folder containing files that can be used to install the dependencies needed for the dashboard, which is named “data\_analytics\_test”. This folder is just an example for the dashboard to check if you are able to get it up and running. The actual dashboard containing the analyses, will be provided in a later stage.

**Step 6:** Now we will examine the files in this particular folder and explain which steps should be run to open the dashboard. First of all, you see a folder named “data”. This folder contains two raw datafiles that will be preprocessed in a later stage (filenames; “sensordata.csv” and “machinedata.csv”).

Graphical user interface, application

Description automatically generated

**Step 7:**

The next step is to install the dependencies of the dashboard and create the virtual environments to run it in. This can be done by double-clicking on the “install\_packages.bat” file. This action will automatically open your command prompt, which will create a virtual environment where the dedicated packages will be installed. This might take a few minutes. Next, you can run the “preprocess.bat” file, which in turn will preprocess the data that is stored in the “data” folder. This action will create a new folder within the “data” folder named “preprocessed” where the preprocessed file is then saved (data/preprocess).

Graphical user interface, application

Description automatically generated

**Step 8:**

There is only one thing that needs to be done to get the dashboard up and running, which is the execution of the “start\_dashboard.bat” file. This will again open your command prompt and automatically start the dashboard in your browser. Depending on the installation of your computer, there might be a message to allow the browser to start the dashboard.

Graphical user interface, application

Description automatically generated

**Final remarks:**

Now that you successfully went to all the steps, you should see the following dashboard:

Graphical user interface, application

Description automatically generated with medium confidence

The dashboard can be closed by just removing the browser tab and quit the command prompt. If you want to open the dashboard again, you can click on the “start\_dashboard.bat” file again as mentioned in step 6. The other files do not need to be opened again to restart the dashboard.

For any questions, please feel free to contact me on [j.o.d.hoogen@jads.nl](mailto:j.o.d.hoogen@jads.nl).