

# Starting Hands On 1

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# Instructions (detailed after)

1. Create a new workspace and launch it
2. Download the zip file of the source  
[https://gitlab.in2p3.fr/thomas.grenier/tp1ss\\_classification/-/blob/master/TP1.zip](https://gitlab.in2p3.fr/thomas.grenier/tp1ss_classification/-/blob/master/TP1.zip)
3. Drag and drop this file in your workspace
4. Unzip it in /home
5. Double clic on : **01\_Classification\_TF22.ipynb** to launch the jupyter notebook of the hands-on and follow instructions of the notebook

# 1- Create a new workspace and launch it

Can be 20 minutes long ...

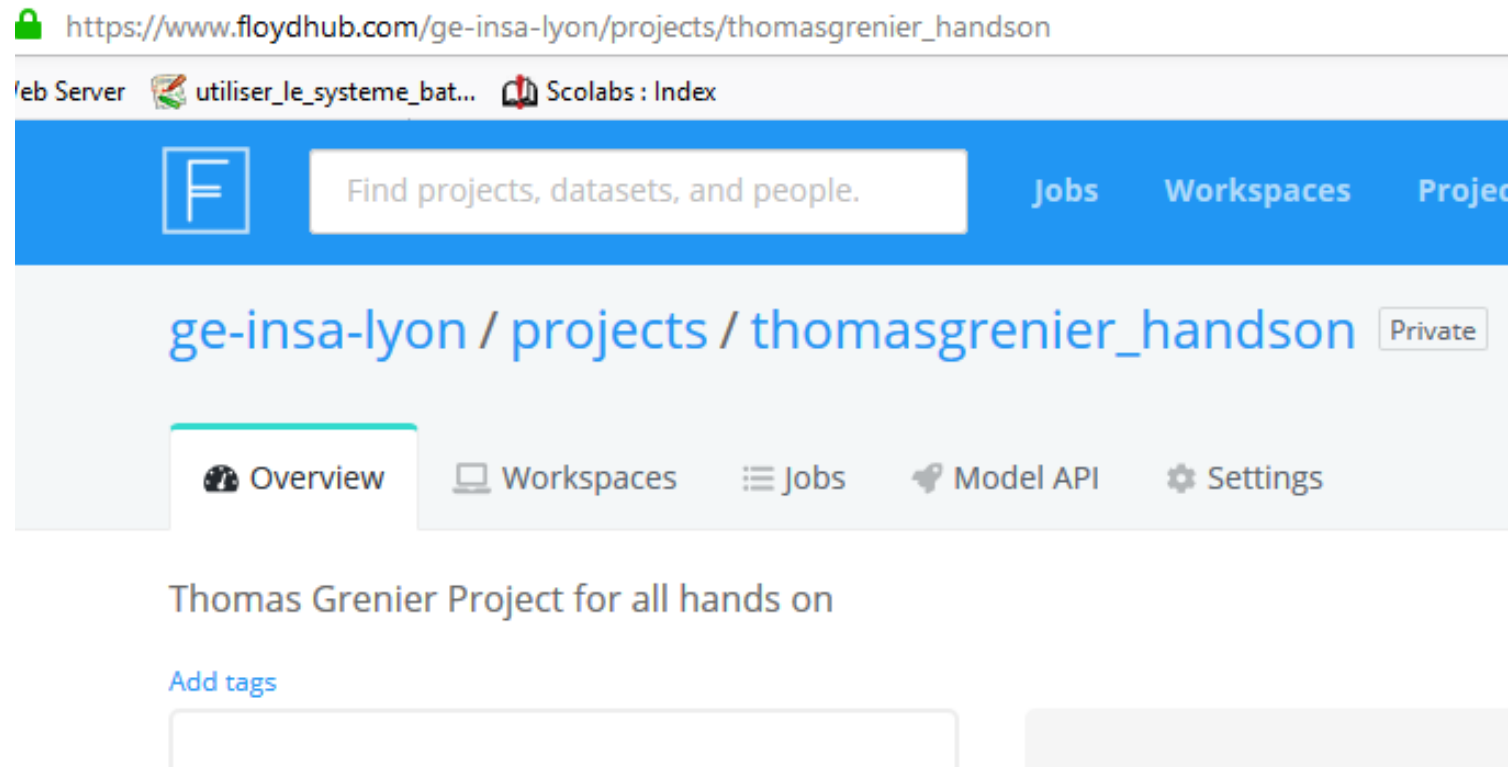
# 1- Create a new workspace and launch it

- First, go to **your project page**

- Find it on the list, or use the direct link access:

*[www.floydhub.com/ge-insa-lyon/projects/YourProjectName](http://www.floydhub.com/ge-insa-lyon/projects/YourProjectName)*

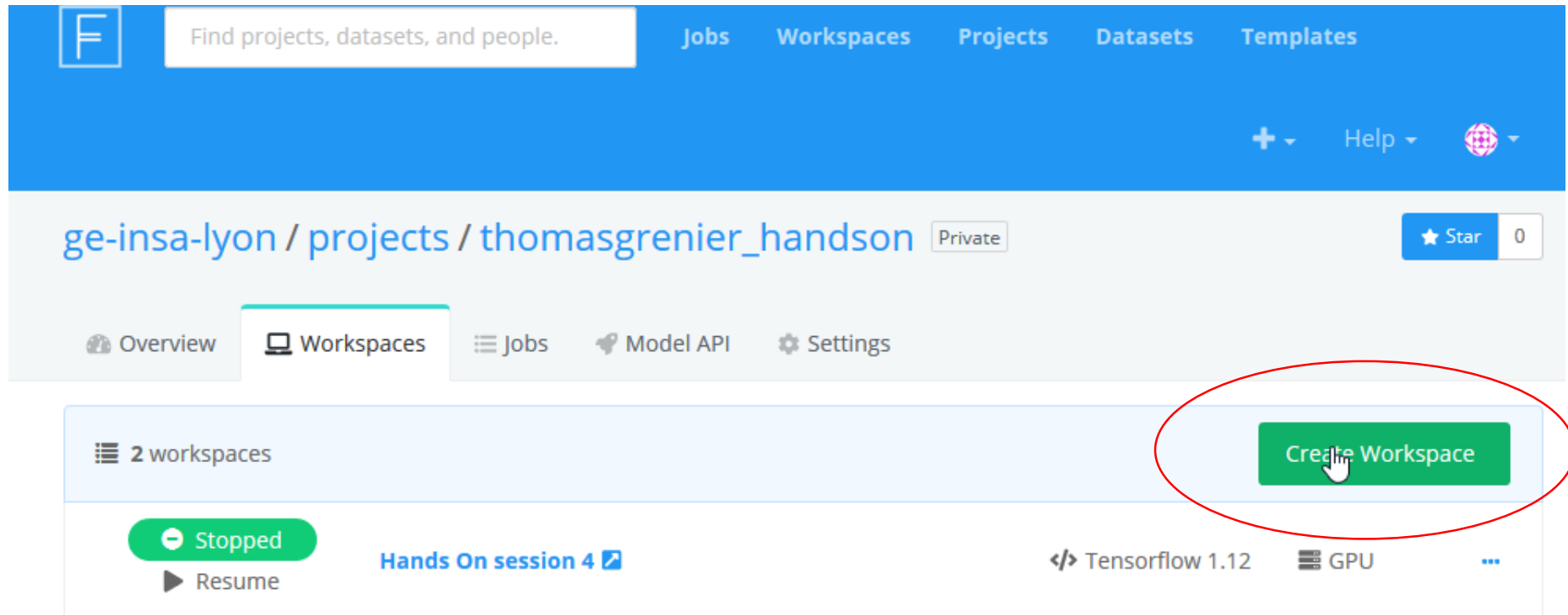
- For me :



The screenshot shows a web browser window with the URL [https://www.floydhub.com/ge-insa-lyon/projects/thomasgrenier\\_handson](https://www.floydhub.com/ge-insa-lyon/projects/thomasgrenier_handson). The browser's address bar and tabs are visible at the top. The page features a blue header with the FloydHub logo (a white 'F' in a blue square) and a search bar containing the text "Find projects, datasets, and people." To the right of the search bar are navigation links for "Jobs", "Workspaces", and "Projects". Below the header, the breadcrumb navigation shows "ge-insa-lyon / projects / thomasgrenier\_handson" with a "Private" status indicator. A secondary navigation bar includes "Overview" (selected), "Workspaces", "Jobs", "Model API", and "Settings". The main content area displays the project title "Thomas Grenier Project for all hands on" and a link to "Add tags" above a text input field.

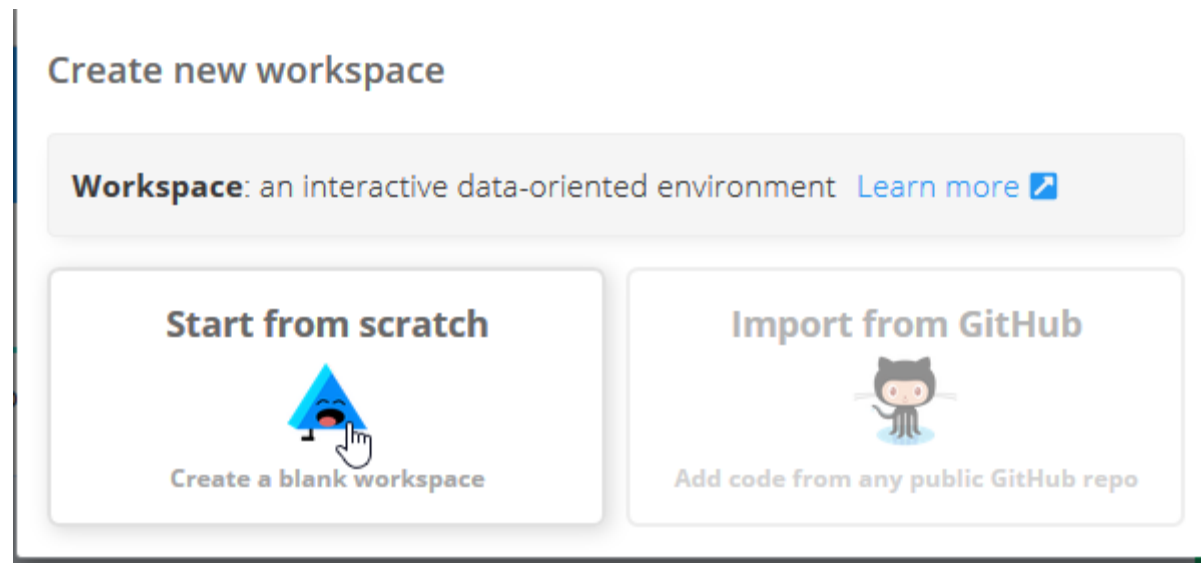
# 1- Create a new workspace and launch it

- Then click on the “Create Workspace” button



# 1- Create a new workspace and launch it

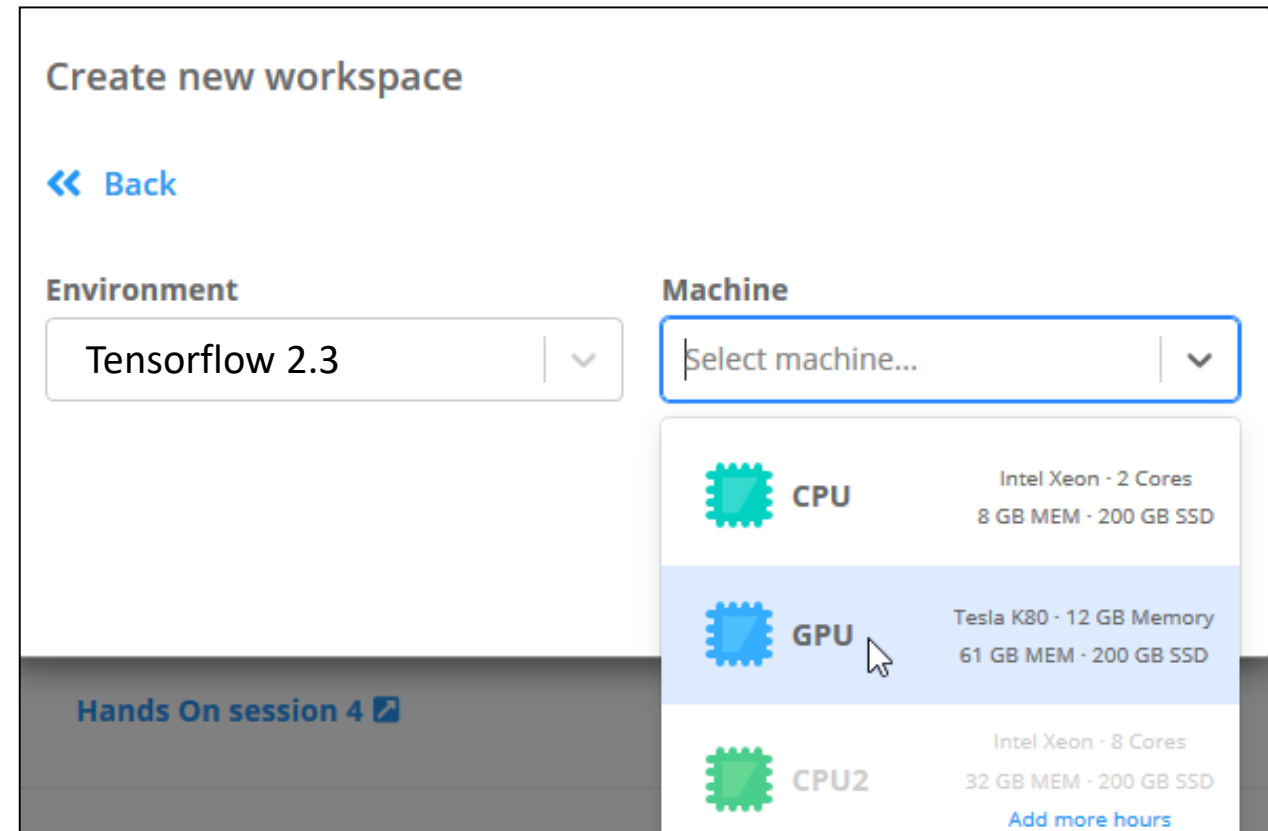
- On the following window, select “**Start from scratch**”



# 1- Create a new workspace and launch it

- Then you have to select the environment : **Tensorflow 2.3**
- Also, select the Machine on which your code will run.

→ If you have correctly associate your project to the team (owner) you can select **GPU**



The screenshot shows a web interface for creating a new workspace. At the top, it says "Create new workspace" with a "Back" button. Below this, there are two main sections: "Environment" and "Machine".

The "Environment" section has a dropdown menu currently set to "Tensorflow 2.3".

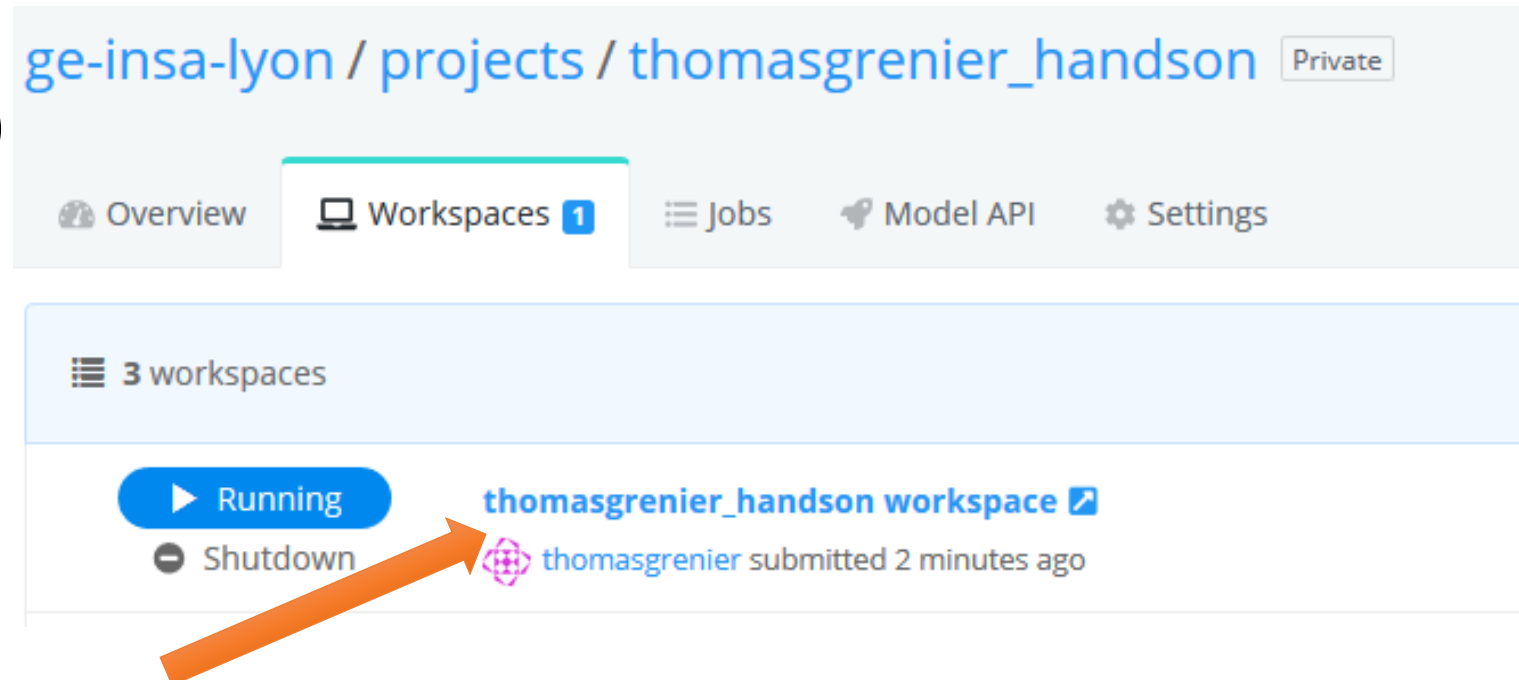
The "Machine" section has a dropdown menu labeled "Select machine...". Below this, there are three machine options listed:

- CPU**: Intel Xeon - 2 Cores, 8 GB MEM - 200 GB SSD
- GPU**: Tesla K80 - 12 GB Memory, 61 GB MEM - 200 GB SSD (This option is highlighted with a blue background and a mouse cursor is pointing at it.)
- CPU2**: Intel Xeon - 8 Cores, 32 GB MEM - 200 GB SSD

At the bottom of the interface, there is a link for "Hands On session 4" and a button for "Add more hours".

# 1- Create a new workspace and launch it

- You then create finalize the workspace creation by clicking the “Create Workspace”
- Attention please : when a workspace is created, it is automatically started !
  - To open it click on its name
  - You can wait 2 seconds or 20 minutes (provisioning)





- You then enter to the *jupyterlab* of the workspace

Rename the workspace here (see coming slides)

Launcher tab: useful for unzip files (next slide)

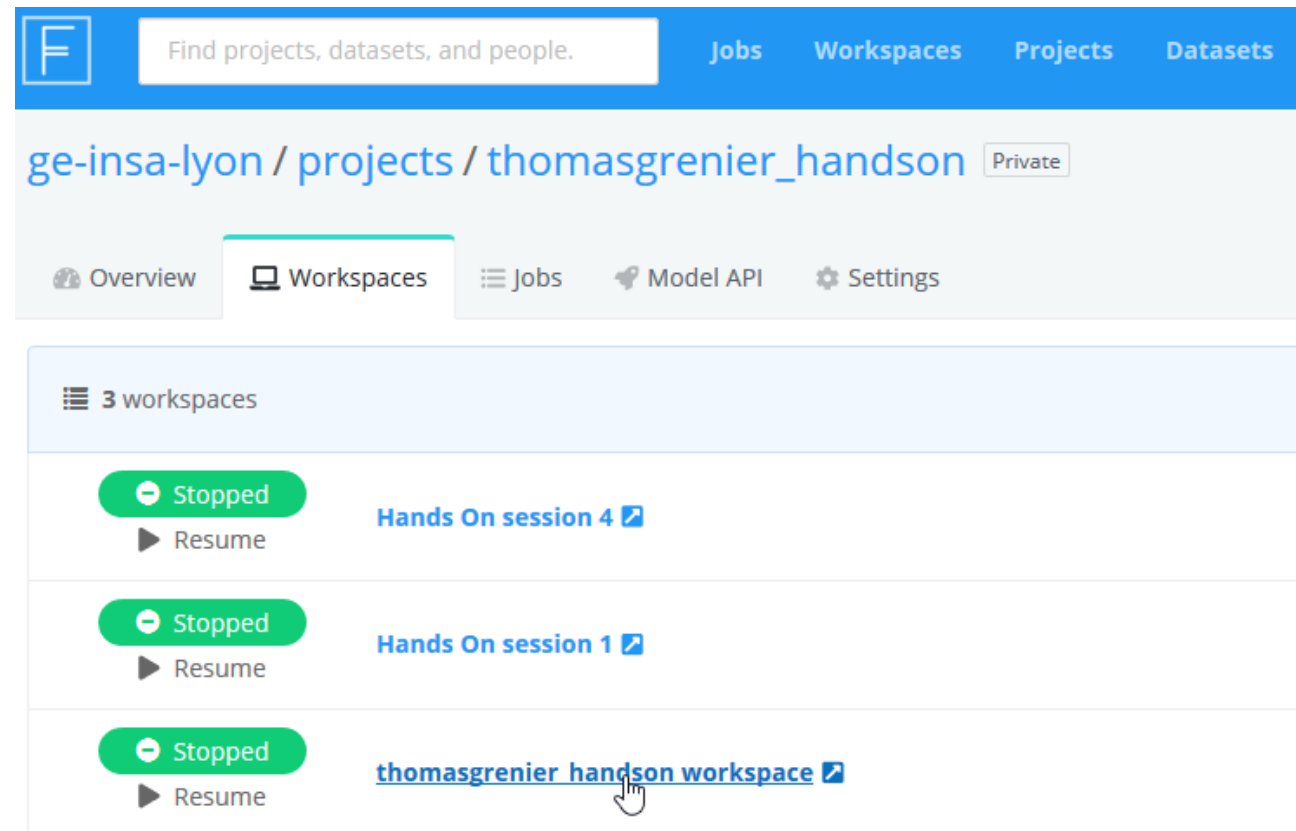
Information about machine and running/stopping workspace

The screenshot shows the JupyterLab workspace interface. At the top, the browser address bar displays 'thomasgrenier\_handson workspace'. Below it, a toolbar contains 'File', 'Edit', 'View', 'Run', 'Kernel', 'Tabs', 'Settings', and 'Help'. A file browser on the left shows a file named 'get\_started\_workspace.ipynb' with a red circle around the upload icon. The main area displays a 'Launcher' tab for 'get\_started\_workspace.ipynb' with a 'Python 3' kernel. The workspace content shows a 'Workspace' section with introductory text and a code editor. On the right, a sidebar contains 'Data', 'Settings', and 'Help' tabs. Under 'Data', there are sections for 'Attached datasets' (with a 'Learn more' link), 'Add datasets' (with a 'Search data...' input), and 'Mount directory' (with 'training\_data' listed and an 'Attach dataset' button). A grey arrow points to the 'Attach dataset' button.

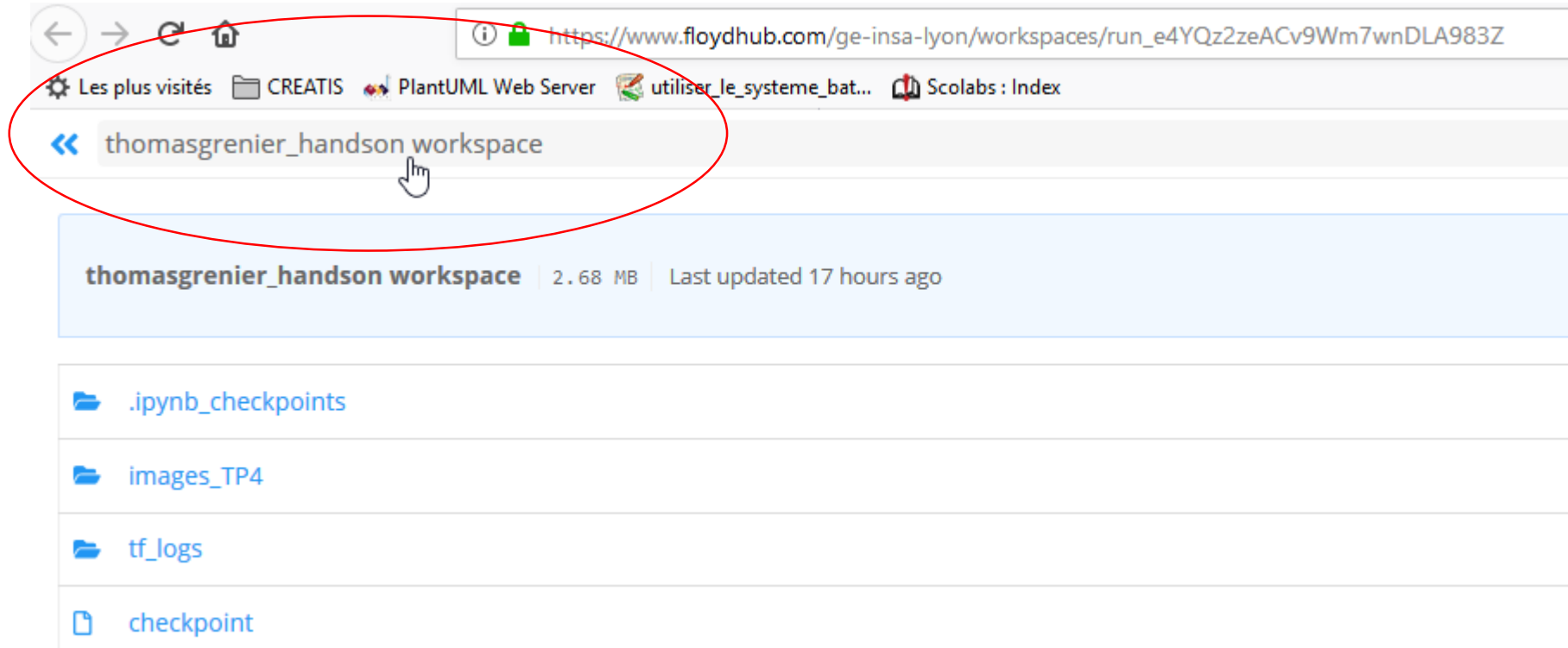
Drag and drop files here (or via the upload button)

Datasets can be attached to the workspace here

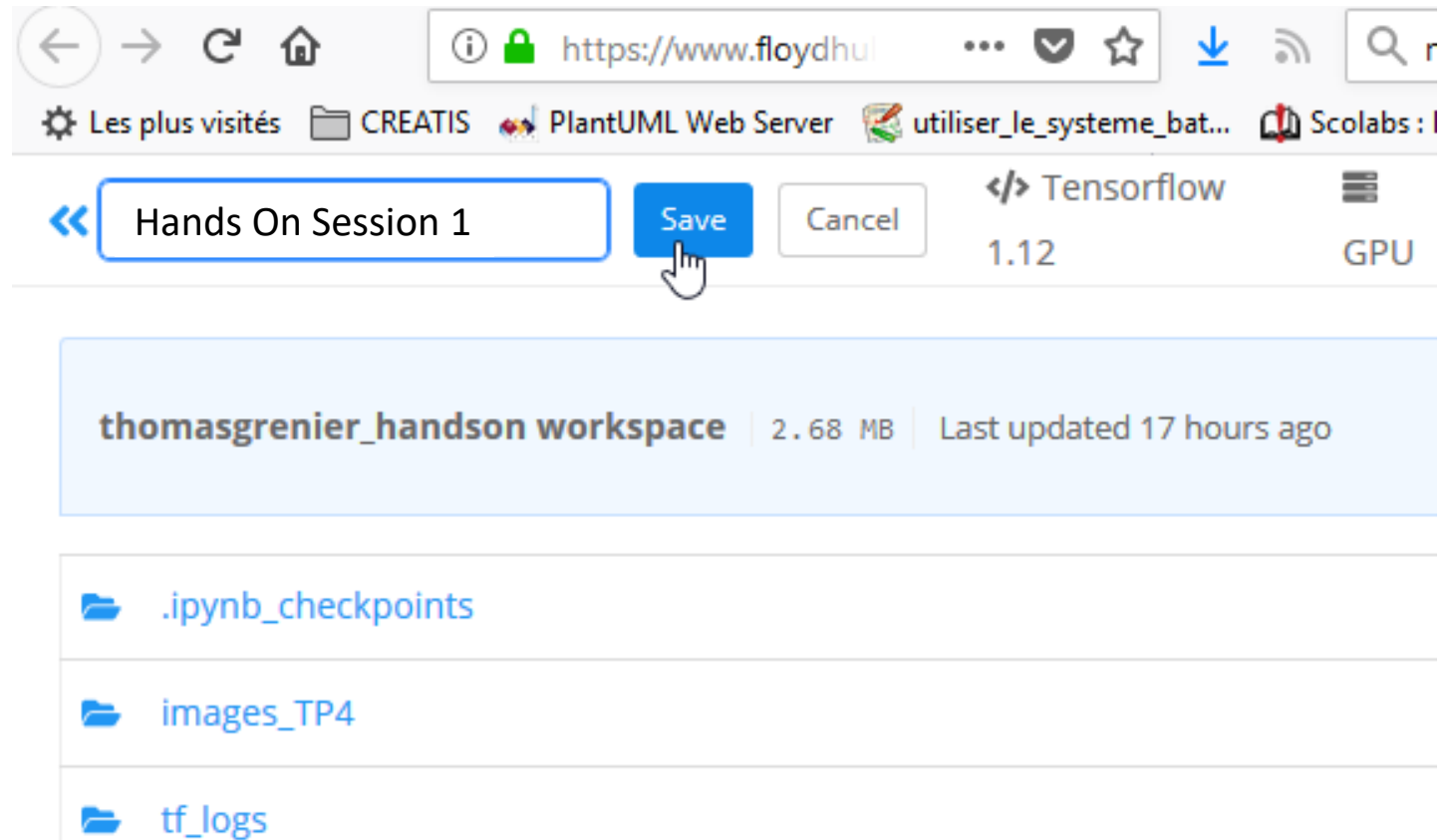
- **Recommended:** rename your workspace as you will have –at least- 4 workspaces in your project
  - First select the one you want to rename, simply clicking on it (the workspace can be running as in previous slide)



- Then, click on the workspace name as shown bellow



- Rename the workspace
- Don't forget to save your changes (click the Save button)
- Note that the “<<” allow you to return to your project page (in a new tab)



2- Download the zip file of the  
source

[https://gitlab.in2p3.fr/thomas.grenier/tp1ss\\_classification/-/blob/master/TP1.zip](https://gitlab.in2p3.fr/thomas.grenier/tp1ss_classification/-/blob/master/TP1.zip)

3- Drag and drop TP1.zip file in  
your workspace

# 3- Drag and drop TP1.zip file in your workspace

The screenshot displays the JupyterLab workspace interface for 'thomasgrenier\_handson workspace'. The top bar shows 'Tensorflow 1.12', 'GPU', and a timer at '0:01:37'. The interface includes a menu bar (File, Edit, View, Run, Kernel, Tabs, Settings, Help) and a toolbar with icons for home, refresh, upload, and refresh. The file browser on the left shows a file named 'get\_started\_workspace.ipynb' with a last modified time of '2 minutes ago'. The main workspace area contains a 'Launcher' tab for 'get\_started\_workspace.ipynb' and a 'Markdown' view. The right sidebar has tabs for 'Data', 'Settings', and 'Help', with 'Attached datasets' and 'Add datasets' sections. A red arrow points from the 'upload' icon in the toolbar to the file list, and an orange arrow points from the text below to the same area.

thomasgrenier\_handson workspace

Tensorflow 1.12 GPU 0:01:37 Running Restart Shutdown

File Edit View Run Kernel Tabs Settings Help

home

Name	Last Modified
get_started_workspace.ipynb	2 minutes ago

Workspace

Workspace is an interactive environment (Jupyter Lab) for developing and running code. You can run Jupyter notebooks, Python scripts and much more. All the files and data in your workspace will be preserved for you, across restarts. You can think of it as your persistent, on-demand machine on the cloud.

Attached datasets

No datasets attached to your workspace. [Learn more](#)

Add datasets

Data

Mount directory

Attach dataset

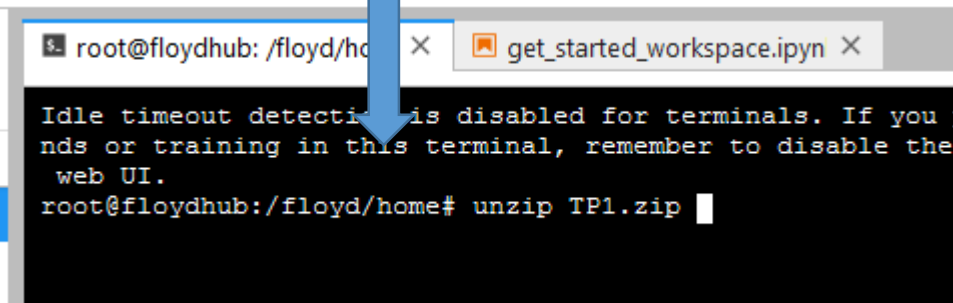
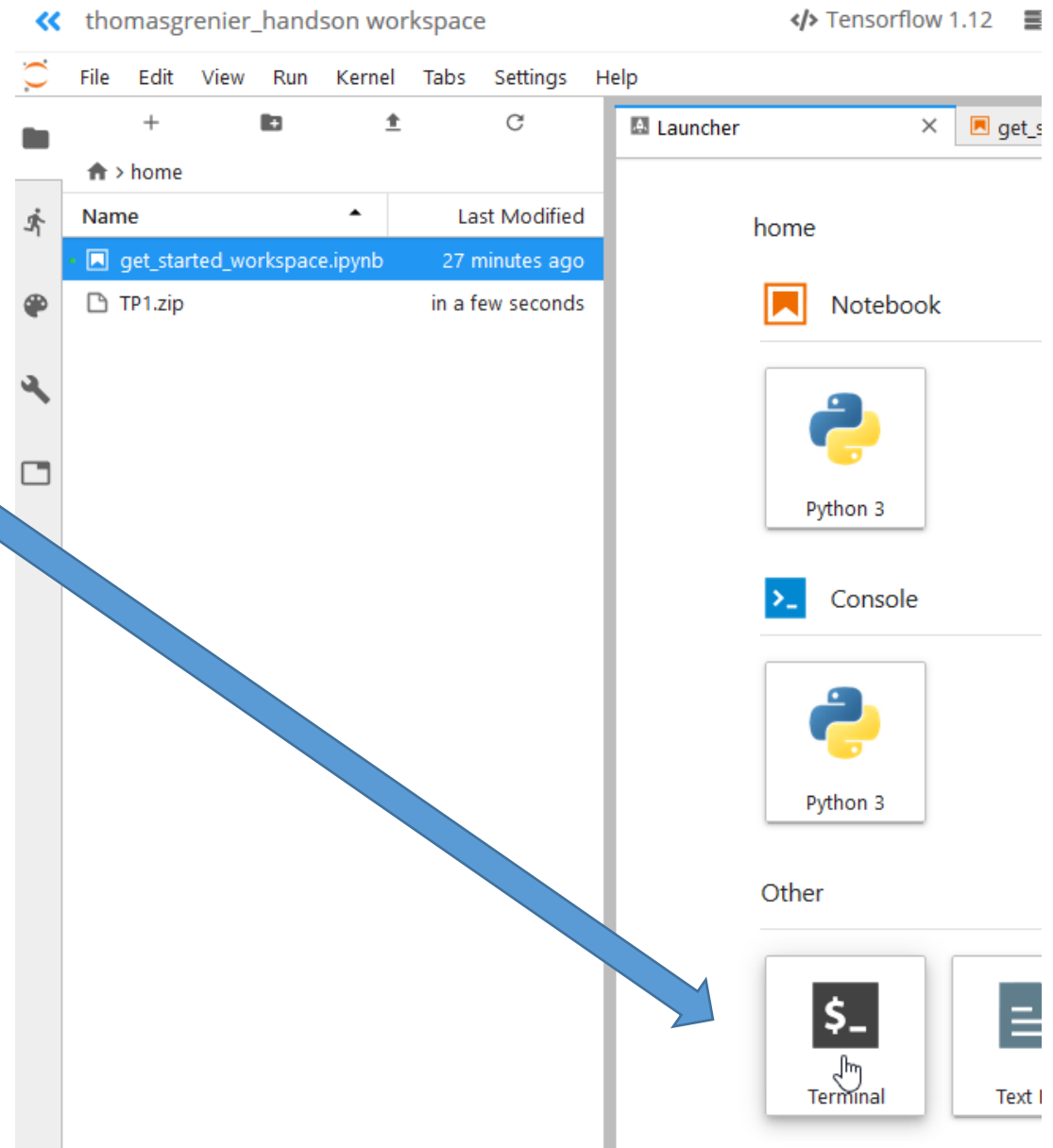
Drag and drop file here (or via the upload button)

4- Unzip the file in /floyd/home



- Here, we unzip the file TP1.zip that was drag-dropped/uploaded

- Select launcher tab
- Select “Terminal”
- Then, enter “unzip TP1.zip”
- **Done !**



# 5- Double clic on **01\_Classification\_TF22.ipynb**

And follow instructions of the notebook

(advanced users can look at **09\_GradAndAutoGrad.ipynb** to explore gradient descent optimization with tensorflow 2.x)