



Professional training

Number recognition

Summary: In this Module you will learn about TO DO.

Version: 1.00

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Chapter I

A word about this Professional training

Welcome !

You will begin the first module of this Professional training of cloud computing. We want to both show you what the cloud is , and at the same time experience peer-learning, an educational model of 42.

Rather than giving you a course with only one solution for each problem, and which will probably be outdated in a few years, we have chosen to put you in a peer-learning situation. You are going to look for the elements that could serve you for your challenge, sort out those that are actually interesting by testing and manipulating them. To do this, discuss with others, exchange your points of view, find new ideas together, and finally test for yourself.

Peer-evaluation is a key moment to discover other ways of doing things, as well as special cases that you have not thought of and that could undermine your program. Like different clients who don't pay attention to the same things, each reviewer will be different from the last. And who knows, you might have made new acquaintances for later collaborations.

At the end of this cursus, you will not have done the same things as the other participants, you will not have validated the same projects, you will have chosen to do one challenge rather than anotherand that's normal! It's both a collective and a personal experience. Everyone will benefit from what he or she experiences during this time.

Good luck to all.

Chapter II

Introduction

What this Module will show you:

- Discovery of available cloud providers.
- Research information on the advantages and disadvantages of each provider.
- Creation of a free account that will be useful for the rest of these modules!
- TO DO

Chapter III


General instructions

Unless explicitly specified, the following rules will apply every day of this Professional training.

- This subject is the one and only trustable source. Don't trust any rumor.
- This subject can be updated up to one hour before the turn-in deadline.
- The assignments in a subject must be done in the given order. Later assignments won't be rated unless all the previous ones are perfectly executed.
- Be careful about the access rights of your files and folders.
- Your assignments will be evaluated by your peers.
- You must not leave in your turn-in your workspace any file other than the ones explicitly requested By the assignments.
- You have a question? Ask your left neighbor. Otherwise, try your luck with your right neighbor.
- Every technical answer you might need is available in the **man** or on the Internet.
- By Thor, by Odin! Use your brain!!!

Chapter IV

Tools

	Exercise
Tools	
Turn-in directory : <i>ex/</i>	
Files to turn in : None	
Allowed functions : None	

Pour cette formation nous allons utiliser [colab](#) c'est un outils en ligne avec tout deja pres instaler.

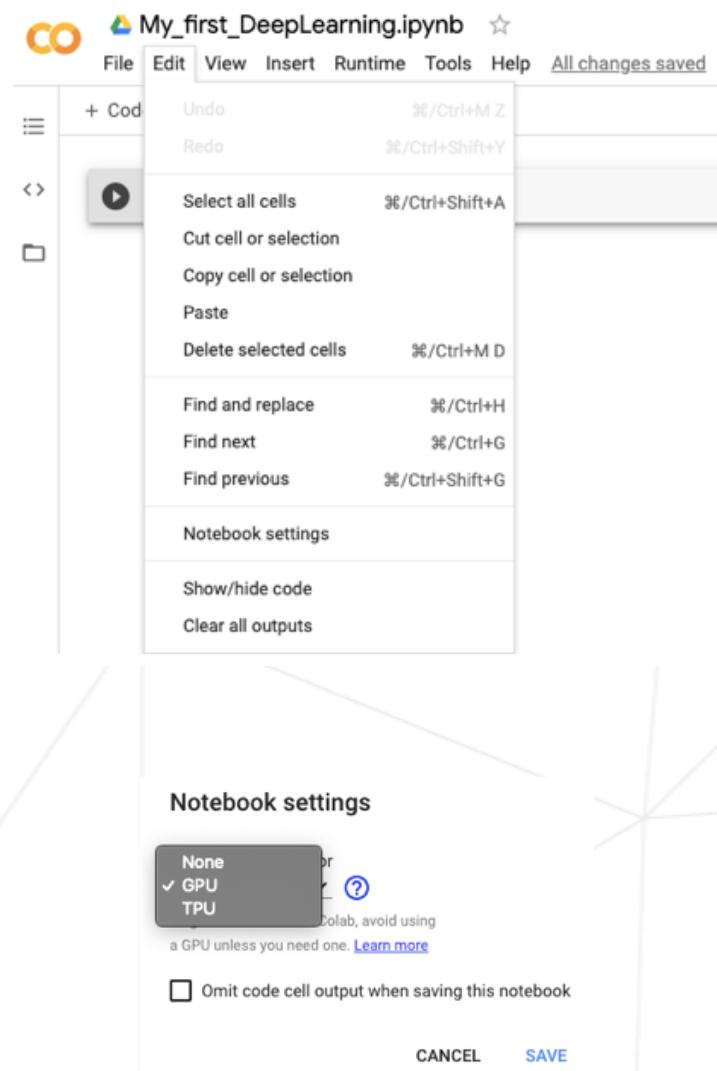
Vous avez peut-être installé Anaconda sur votre ordinateur local et utiliser le notebook Jupyter. Si tel est le cas, vous apprendrez rapidement à utiliser Google Colab. Colab est un environnement de notebook Jupyter gratuit qui s'exécute entièrement dans le cloud. Il n'y a pas de processus de configuration. Les blocs-notes que vous créez peuvent être modifiés simultanément par les membres de votre équipe, tout comme vous modifiez des documents dans Google Docs. Colab prend en charge de nombreuses bibliothèques d'apprentissage automatique populaires. Google Colab a déjà des bibliothèques préinstallées telles que pandas, numpy, Tensorflow, Keras, OpenCV, vous n'avez donc pas besoin d'exécuter «pip install» par vous-même.

Vous pouvez commencer a faire le tutoriel sur la page d'accueil



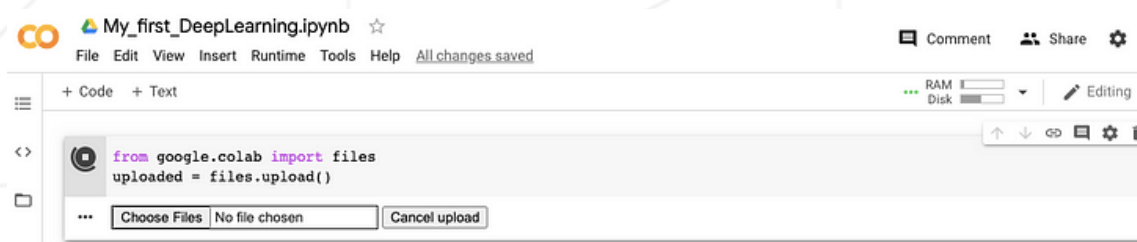
You need have a mail google to use colab

Enable GPU computing (for PyTorch for exemple):



telecharger les sources poc_formation_pro.ipynb et train.csv sur l'intra (TO DO on met ces sujets sur l'intra ?)

```
from google.colab import files
uploaded = files.upload()
```






You can use shift + enter to execute the cells

TO DO passer google en anglais et faire des captures d'écrans de colab


Chapter V

Exercise 02

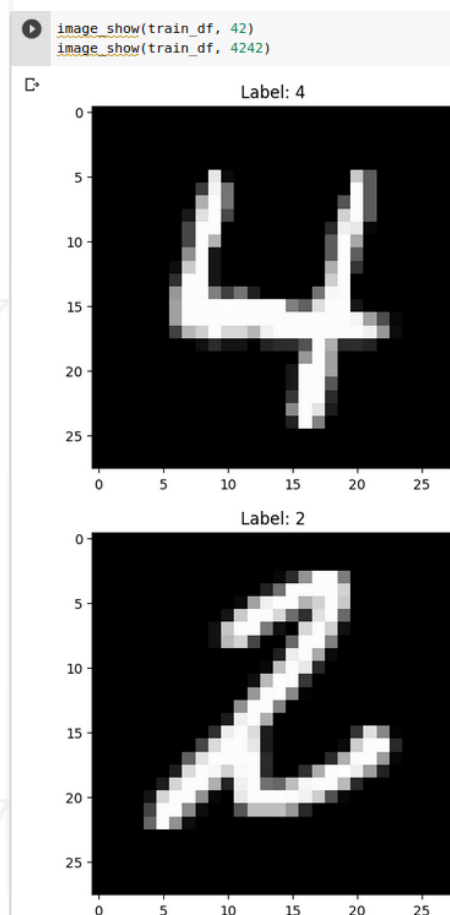
	Exercise 02
Tools 02 : 0-1 Number recognition	
Turn-in directory : <i>ex02/</i>	
Files to turn in : <code>poc_formation_pro.ipynb</code>	
Allowed functions : None	

Chapter VI

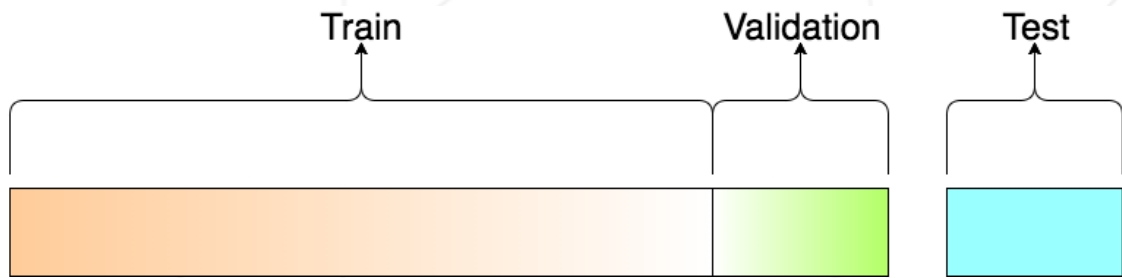
Exercise 02

	Exercise 02
Tools 02 : 0-9 Number recognition	
Turn-in directory : <i>ex02/</i>	
Files to turn in : <i>My_first_DeepLearning.ipynb</i>	
Allowed functions : None	

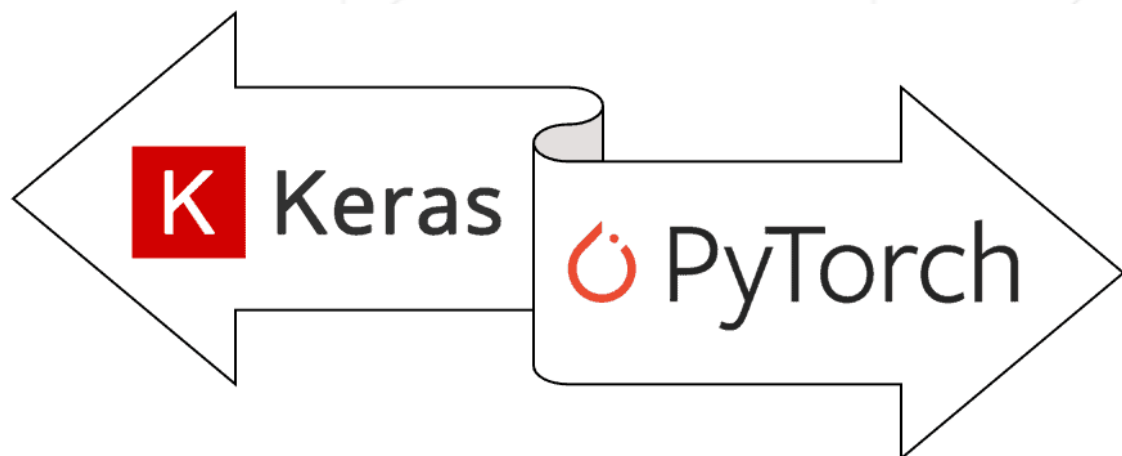
Data exploration: ecrivez du code pour afficher les images souhaiter de votre data set



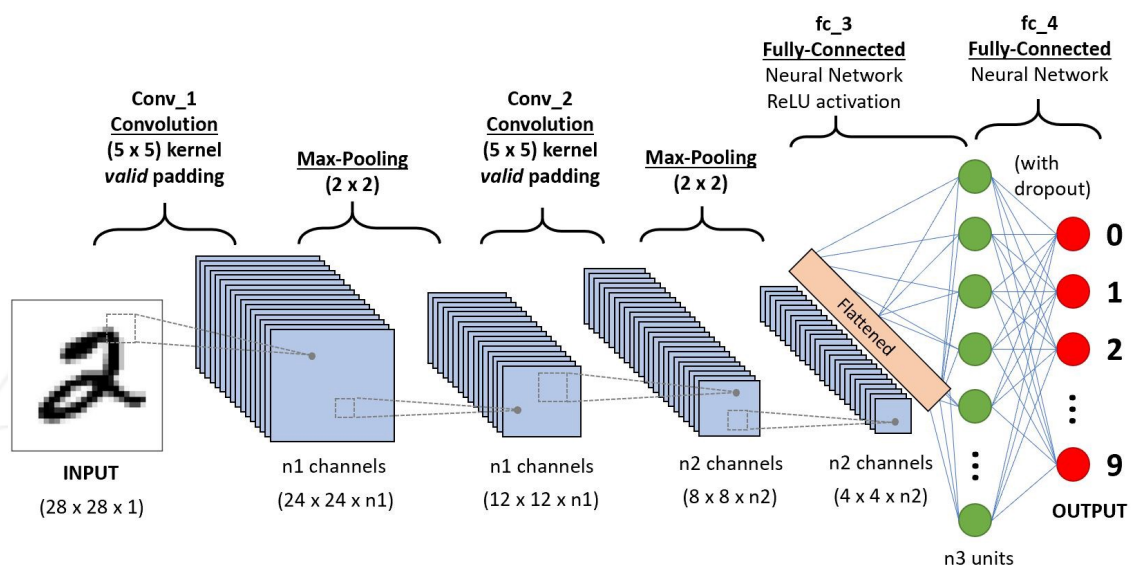
Separer votre data set en train et valid, (le test set sera donner au moment de l'évaluation)



Créer un réseau de neurones avec [Keras](#) ou [pytorch](#) (vous pouvez faire l'exo avec les 2 librairies si vous voulez/avez le temps, la librairie Keras est plus simple pour les débutants)



Comme dans le schéma ci-dessous créer votre propre réseau de neurones, avec les couches demandées.



Chapter VII

Bonus part

If you have some time, you can try to validate this little bonus. It is not mandatory, so don't waste too much time doing it.

So you have created your `Readme.md` file, but why use this `md` extension?

We invite you to try to understand what is the format used in general with this extension. Once you understand what the format is, you can adapt your file accordingly.



You will need to use special characters, there are many resources online to make your rendering visible if necessary.



The bonus part will only be assessed if the mandatory part is PERFECT. Perfect means the mandatory part has been integrally done and works without malfunctioning. If you have not passed ALL the mandatory requirements, your bonus part will not be evaluated at all.

Chapter VIII

Submission and peer-evaluation

- Create a `professional_training` folder at the root of your home, and move around in it.
- Create a new `module00` folder and navigate to it.
- From now on, all exercises should be in the correct folder rendering. Exercise 00 in the `ex00` folder, Exercise 01 in the `ex01` folder, etc ... you get the logic.



Please note, during your defense anything that is not present in the folder for the day will not be checked.