

## To Do's before Tuesday the 8th of June, 19:00

To be full prepared for Tuesday's online session, you should do:

**[MUST]** A few weeks ago, you have worked on your own model before. Now, as a final exercise, go back to that model and apply all the things you have learned since then to improve the model accuracy. All means are good as long as they work. We expect every student to make a visible improvement compared to the last time.

- 1) **[MUST]** Complete all the steps in [Chapter 4, MNIST Basics](#) using the full MNIST datasets (that is, for all digits, not just 3s and 7s). You'll need to do some of your own research to figure out how to overcome some obstacles you'll meet on the way.  
Hints: feel free to use this simplified [notebook](#) to make your work easier.

**Try to aim for an error\_rate of the trained MNIST model within or below 1%.**

- 2) **[MUST]** Prepare a summary of your progress with your own model:

Your summary should include but not limited to:

- What was your model's prediction accuracy last time you presented and what's it now?
- What optimization, additional data, data wrangling, augmentation, learning approach, ...did you use to improve the accuracy of your classification model?
- Be ready to tell why you think you cannot improve the accuracy of your model further. What other optimization techniques or ways you could possibly take that you couldn't try/use yet.

Also give a quick overview of your achievement with the MNIST full dataset:

- Whether you managed to run it to some result? If not, where were you blocked and what you tried to overcome the problem.
- What accuracy have you achieved?
- Any learning you think are good to share with your fellow students