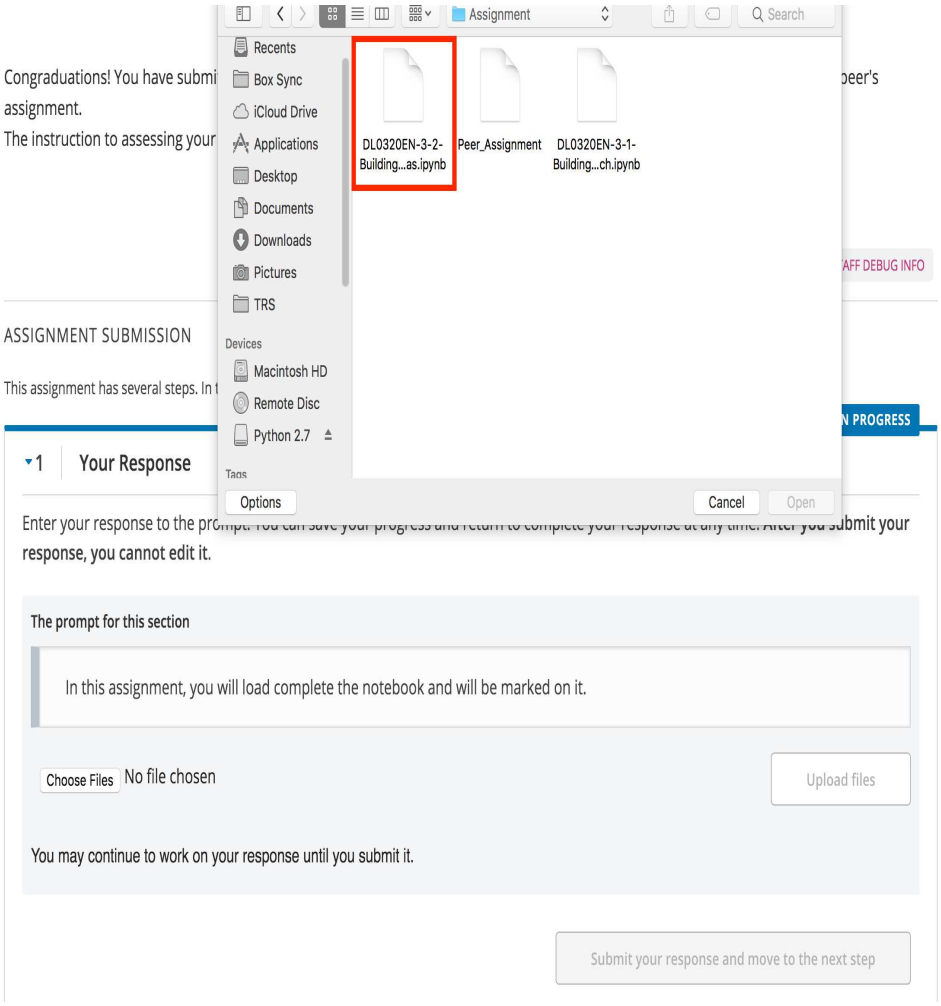
Peer Review: Training Models - Keras

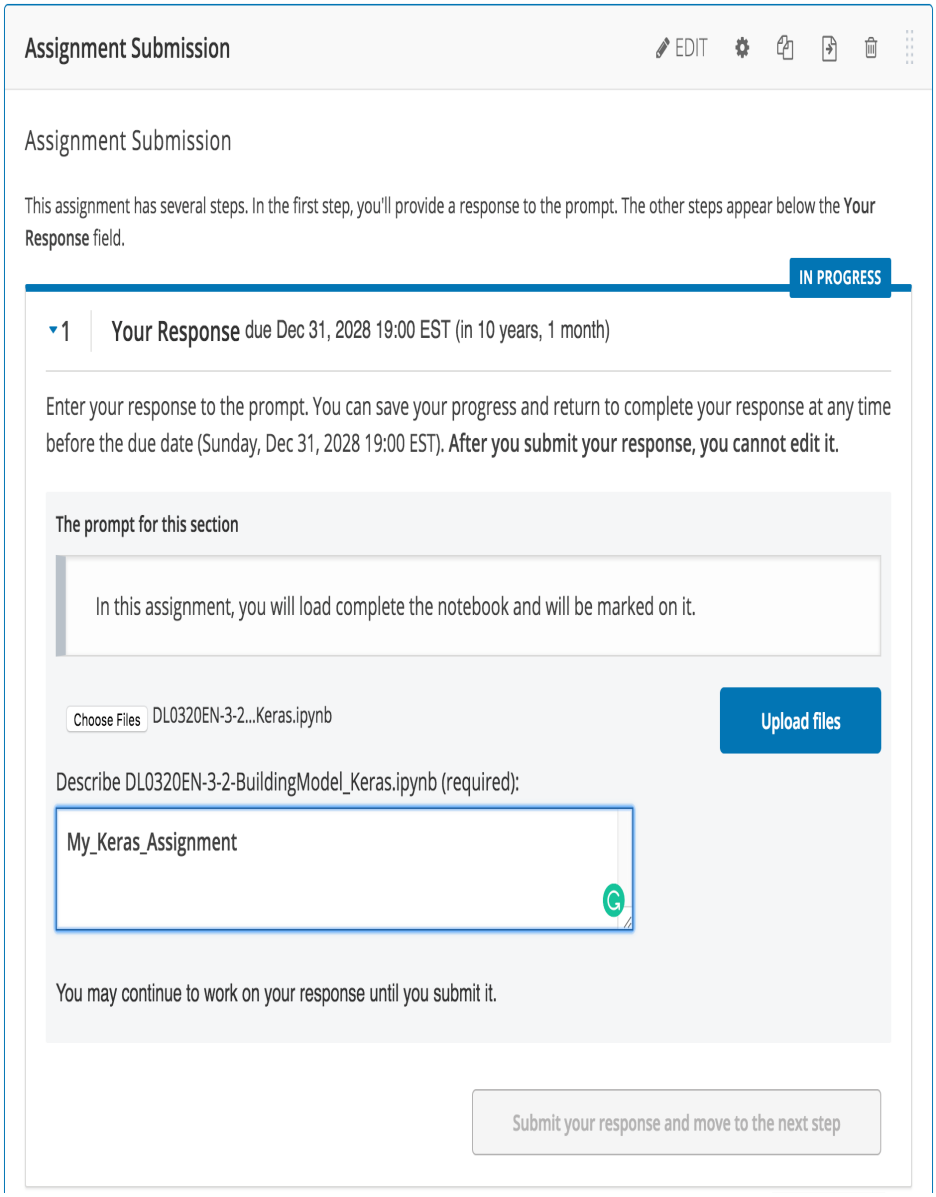
4. Submit your assignment for Peer Review

Instruction to Submitting Your Assignment

1. Below, in the section **Your Response**; click on the button **Choose Files**; then click on "DL0320EN-3-2-BuildingModel_Keras.ipynb" then press **Choose**.



2. Before you can upload your file you need to give it a name, give it a meaningful name such as "my_Keras_assignment" then click on **Upload files**, and then click on **Submit your response and move to the next step**. Make sure to mention "Keras" in the name of your assignment.



Way to go! You have submitted your assignment, the last step left to getting your mark for this assignment is to assess your peer's assignment.
The instruction to assessing your peer's assignment is given below.

ASSIGNMENT SUBMISSION

Status

You have completed this assignment. Your final grade will be available when the assessments of your response are complete.

Your Response due Jan 1, 2029 08:00 +08 (in 10 years) ✔

COMPLETE

Assess Peers ✔ COMPLETE (1)

Status

You have successfully completed all of the required peer assessments for this assignment. You may assess additional peer responses if you want to. Completing additional assessments will not affect your final grade.

Read and assess the following response from one of your peers.

The question for this section

> The following is the link to a template to the solution to the assignment, you can use it as a reference when marking your peer's assignment.
>
> Solution Template
>
> This is a solution template, please only use the output of the cells of the questions in this notebook as a reference when grading your peer's assignment. Your the output on peer's project may differ from the output in this notebook but they might still be correct as long as they satisfy the criteria in the grading rubric.

Associated Files

my_Keras_assignment

Caution: These files were uploaded by another course learner and have not been verified, screened, approved, reviewed, or endorsed by the site administrator. If you access the files, you do so at your own risk.)

Question 3.1: Preparation

After filling in the missing codes, your peer should be able to load the pre-trained model resnet50. Setting the parameter pre-trained to be true resnet50 returns a model that was pre-trained on the ImageNet database. Since ImageNet contains 1000 classes the last layer of resnet50 has 1000 outputs. But for this assignment, your peer is classifying the Denomination of the Euro. And there are seven different denomination of the European banknotes so your peer needs to modify the last layer of their model has 7 outputs.

○ **Poor**

Your peer did not load the pre-trained model resnet50.

0 POINTS

○ **Good**

Your peer loaded the pre-trained model but did not modify the last layer to have 7 outputs.

3 POINTS

○ **Excellent**

Your peer had loaded the pre-trained model resnet50 and modify its last layer to have 7 outputs.

5 POINTS

Comments

Question 3.2: Train the model

After setting up their model, your peer has to train their model on the training dataset of images of European Denomination.

○ **Poor**

Your peer did not train their model.

0 POINTS

○ **Fair**

Your peer trained their model but did not get a validation accuracy greater

than 0.5.

1 POINTS

○ **Good**

Your peer trained their model and got a validation accuracy greater than 0.5.

3 POINTS

○ **Excellent**

Your was able to train their model to reach a validation accuracy of greater than 0.5, and plotted a graph of Average Loss per Epoch vs Epoch and a graph of validation Accuracy vs Epoch.

5 POINTS

▼ Question 3.3: Plot 5 Random Images with their Predictions

After your peer trained their model they should randomly pick 5 images from your test dataset, predict the value of the European banknote in the test images that were randomly chosen.

○ **Poor**

Did not print the images of 5 randomly chosen images from test dataset.

0 POINTS

○ **Fair**

Printed 5 randomly chosen test images from the test dataset, but did not show the predicted values using their model.

2 POINTS

○ **Excellent**

Printed 5 randomly chosen test images from the test dataset, and showed the predicted values using their model. And printed out "Correctly Classified" if the image of the banknote matches the predicted value of the banknote, or "Mis-classified" if the image of the banknote matches the predicted value of the banknote.

3 POINTS

▼ Question 3.4: Use the second model VGG16 to do the prediction

VGG16 is another pre-trained model for image classification. In this question, you will repeat Question 3.1 and Question 3.2 using VGG16 instead of resnet50.

○ **Poor**

Your peer did not train VGG16 on the training dataset of European banknotes.

0 POINTS

○ **Good**

Your peer trained VGG16 on the training dataset of European banknotes and achieved a validation accuracy of greater than 0.9.

5 POINTS

Please provide some feedback to your peers.

I think that this response...

Submit your assessment and review another response

▼ Your Grade: Waiting for Assessments

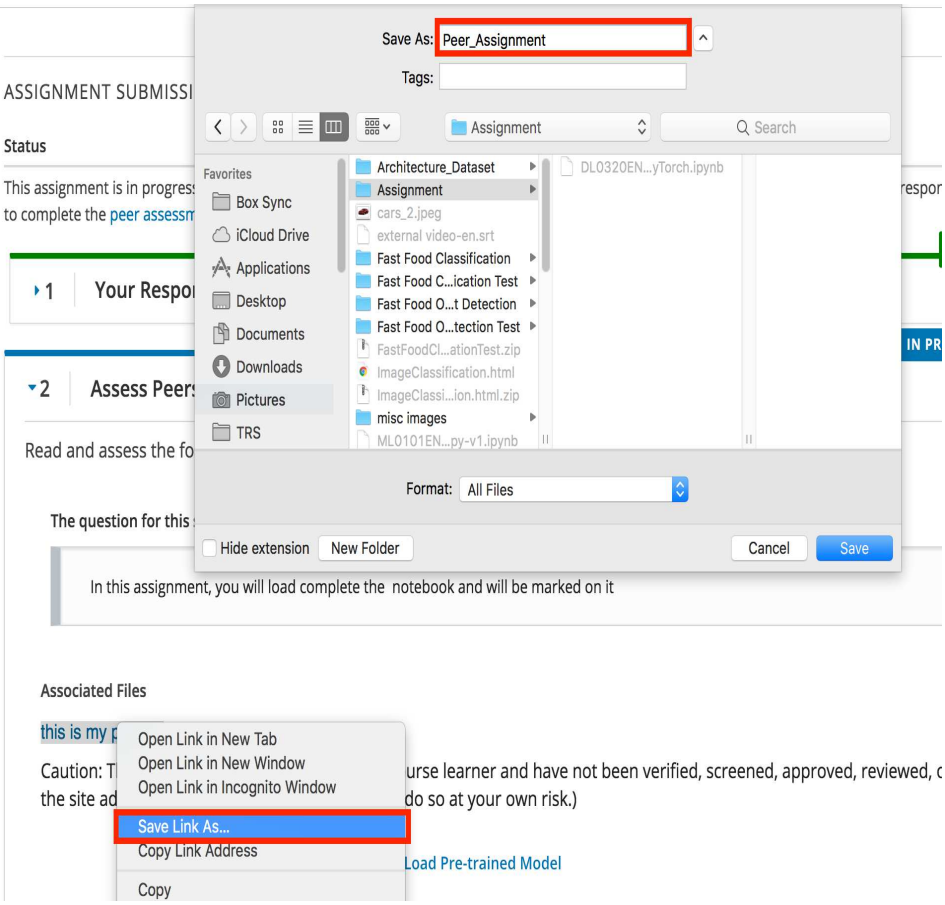
You have completed your steps in the assignment, but some assessments still need to be done on your response. When the assessments of your response are complete, you will see feedback from everyone who assessed your response, and you will receive your final grade.

Instruction to Assessing Your Peer's Project

To evaluate you peer's project you must load their Jupyter file on **Cognitive Class - Labs** and run it there.
Below are the instructions to opening your assignment on **Cognitive Class - Labs**

1. After you submitted your assignment, you are in the section "Assess Peers", the file to your peer's assignment is under **Associated Files**.

   Right right click on the file and click on **Save Link As...**, give the file a meaningful name such as "Peer_Assignment", and then click **Save**.



2. If your **Cognitive Class - Labs** is already opened go to it, if it is not you can click the **View resource in a new window** below to open the lab environment to run your peer's assignment.

Opening Cognitive Class Labs (External resource)

View resource in a new window

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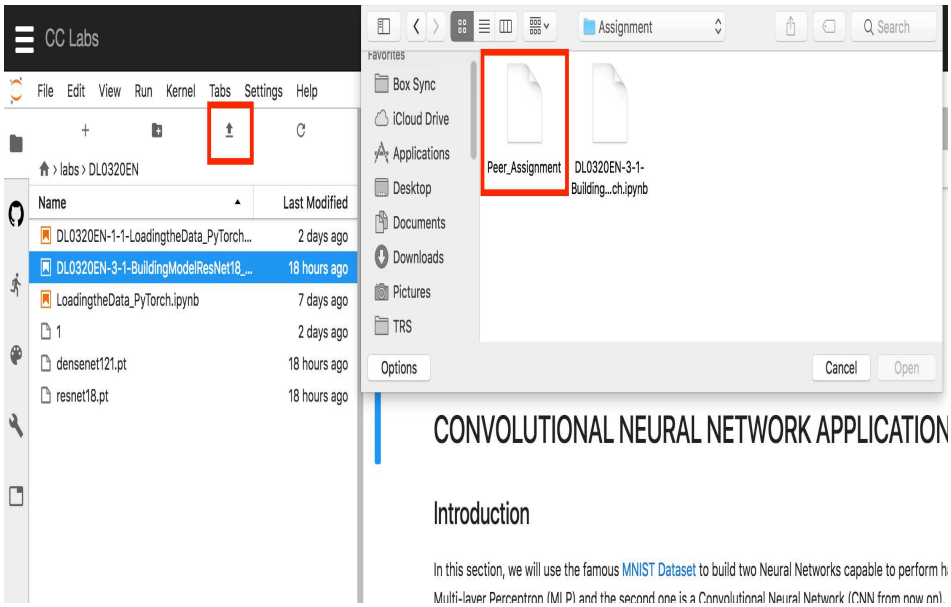
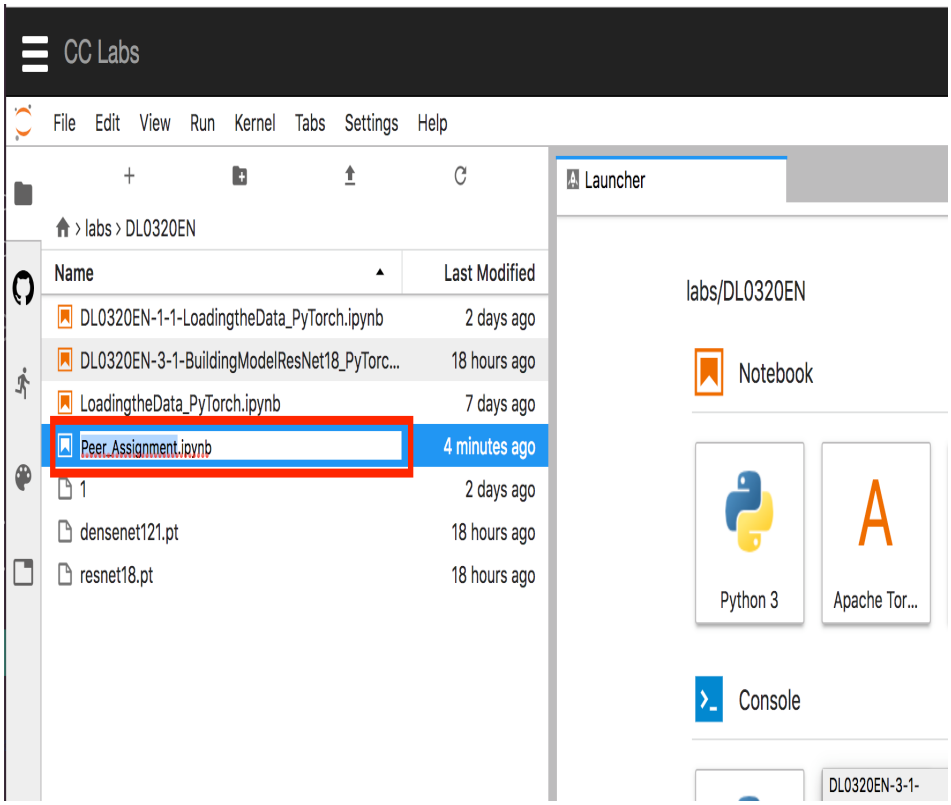
3. Once you are in **Cognitive Class - Labs** click on the upload button

highlighted with a red rectangular border in the image below. Then select your peer's assienment file to upload.



4. After you uploaded your peer's file on **Cognitive Class - Labs**, rename it by modifying its extension to **.ipynb**.



You are now set up to evaluate your peer's assignment.

Note!

- If you cannot download the file to your peer's project or if you see the error indicated below when you open your peer's project on **Cognitive Class - Labs**, it means that the link to your peer's project on EdX has been expired. You should refresh your EdX browser and repeat step 1 of **Assessing your Peer's Project.**