Exercise-3

Object detection Task:

Step-1: Download the dataset from https://public.roboflow.com/object-detection/website-screenshots

Step-2: Prepare the necessary files using the python codes **PINNDL**/Deep_learning_module-3/object_detection/exercise

Step-3: Use a model of your preference and train the model on the prepared dataset.

- Use the test dataset for evaluation

Step-4: Evaluate the results using both Pascal VOC (vanilla) and COCO detection metrics

Use Tensorboard to monitor the performances

Question:

Pipeline: An Optical Character Recognition Platform that is capable of reading text (Latin alphabet) from an image acquired using a mobile phone camera.

Given you have already trained the model on the object detection task (website screen shots), explain how you would now extend the training pipeline to build the OCR.

Evaluation points:

- How you would use the detector in hand to help building your OCR pipeline
- What are the necessary model(s) (apart from the detector) to achieve this task and the reason for selecting this/these model(s)
- What are the necessary mechanisms/processes to follow when transferring from detection to character prediction (think about the mobile phone image data)
- How you would now improve this OCR to generalise on latin and germanic languages