Practical mini-project

Deep learning for object detection

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BUT3 INFO, 2023-2024

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Lab assignment

Practical mini-project R6.A.07: Deep learning for object detection

- Work in group of 4.
- 2 weeks of class/work + 1 week of presentation (oral)

- You have to choose one of the following tasks and search for public datasets that you would like to demonstrate (from Kaggle other public datasets available, **not too big** !!!!)
  - **Ship detection**
  - **Vehicle detection**
  - **Animal detection**
  - **Fish detection**
  - **Other object detection tasks**

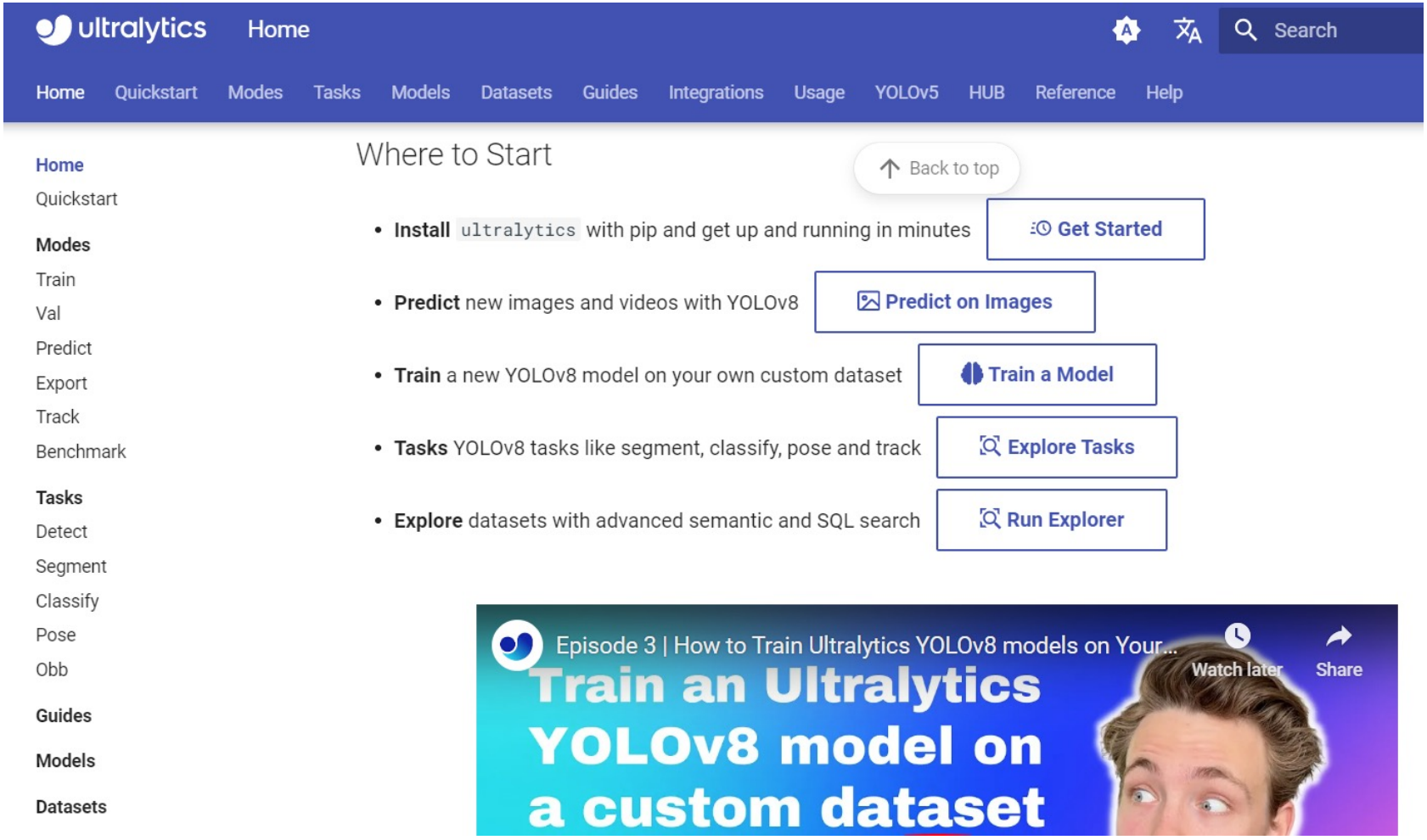
- Use **YOLOv8** or/and **Detectron2** to perform training/test of your object detection task ! (One is minimum, two for comparison is perfect !)

- Your submission (in a zip file named *R6A07_YourGroupName.zip*) should include:
  - A PDF presentation (max 15 slides)
  - A Jupyter notebook file that includes your implementation + compiled outputs

- **Evaluation:** presentation 60% + submission (slides+notebook) 40% + bonus (participation during presentations)

YOLOv8 Ultralytics

Site web: https://docs.ultralytics.com/
Github: https://github.com/ultralytics/ultralytics



Detectron2

Site web: https://ai.meta.com/tools/detectron2/
Github: https://github.com/facebookresearch/Detectron2