MAJOR: DATA SCIENCE (Computational Track)

Project: Transfer Learning for Custom Datasets in the Small-Data Regime

Project Number:20(Basement)

Project Member 1
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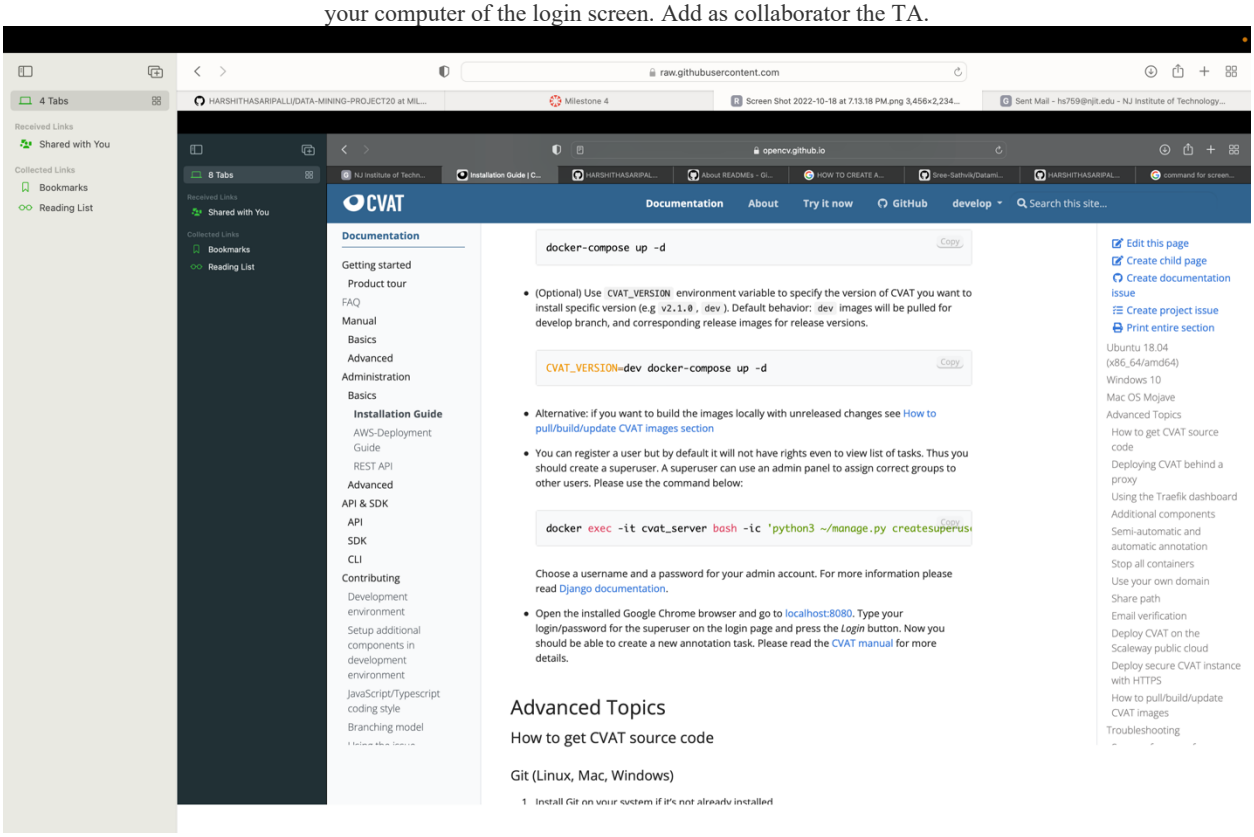
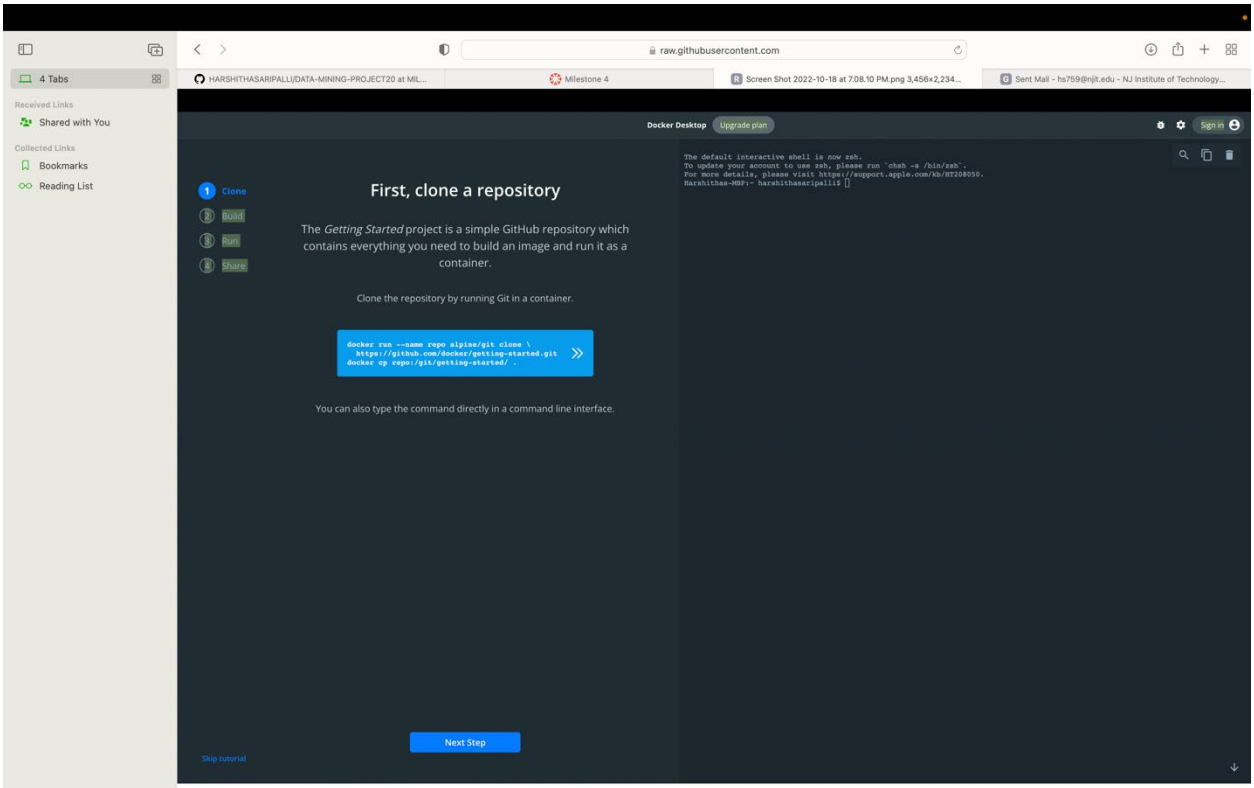
E-MAIL : sc2493@njit.edu

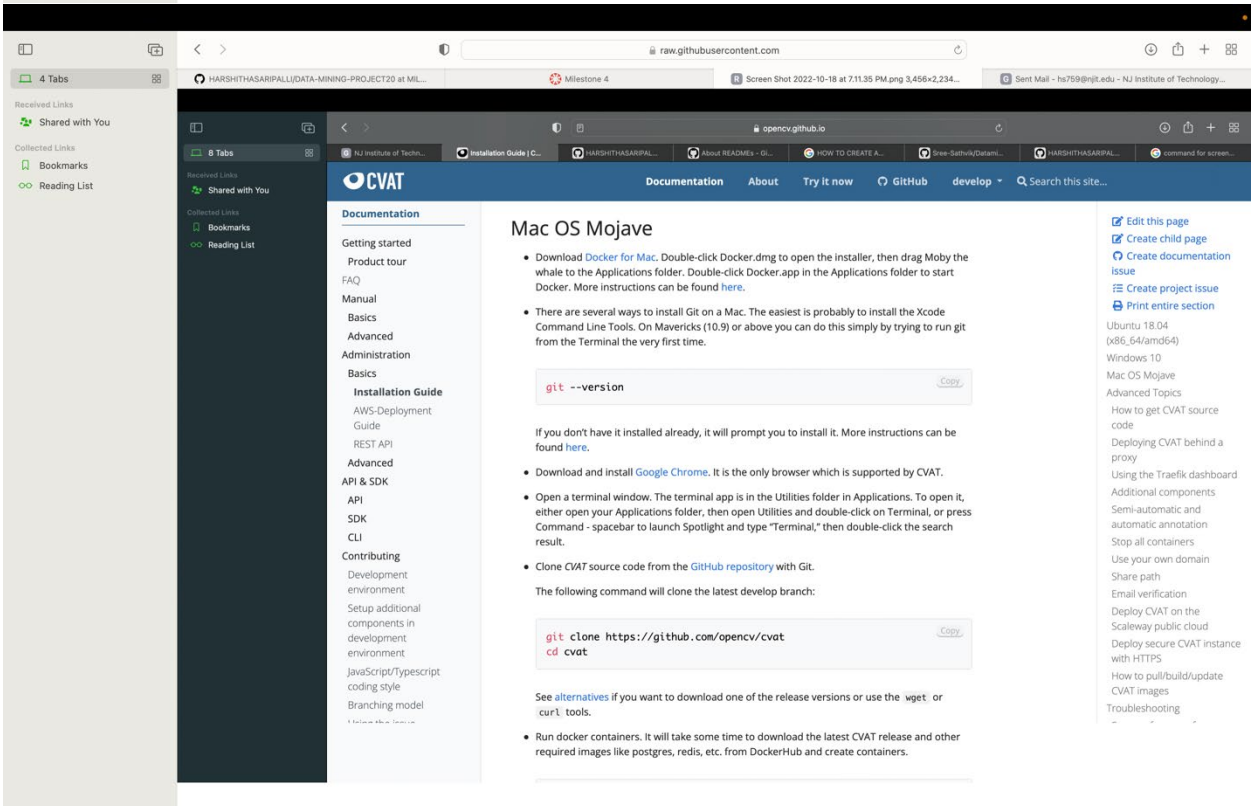
Professor : Pantelis Monogioudis

MILESTONE 1

In this stage you will be working with CVAT - you need to install CVAT locally to your laptop/desktop and we urge you to follow the docker setup instructions here PS: You can also create an account on the cvat.ai site but we don't offer any guarantees that the project can be delivered in its entirety with a cvat instance that is not managed by you. Submit a GitHub repository with a branch titled 'milestone-1' with the readme file containing the CVAT installation instructions you followed and a screenshot of your computer of the login screen. Add as collaborator the TA.




raw.githubusercontent.com
4 Tabs
Received Links
Shared with You
Collected Links
Bookmarks
Reading List
HARSHITHASARIPALLI/DATA-MINING-PROJECT20 at MIL...
Milestone 4
Screen Shot 2022-10-18 at 7.08.10 PM.png 3,456×2,234...
Sent Mail - hs759@njit.edu - NJ Institute of Technology...
Docker Desktop
Upgrade plan
Sign in
1 Clone
2 Build
3 Run
4 Share
First, clone a repository
The Getting Started project is a simple GitHub repository which contains everything you need to build an image and run it as a container.
Clone the repository by running Git in a container.
docker run --name repo alpine/git clone \
https://github.com/docker/getting-started.git
docker cp repo:/git/getting-started/ .
You can also type the command directly in a command line interface.
Next Step
Skip tutorial
The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
Harshithas-MBP:~ harshithasaripalli$


raw.githubusercontent.com
4 Tabs
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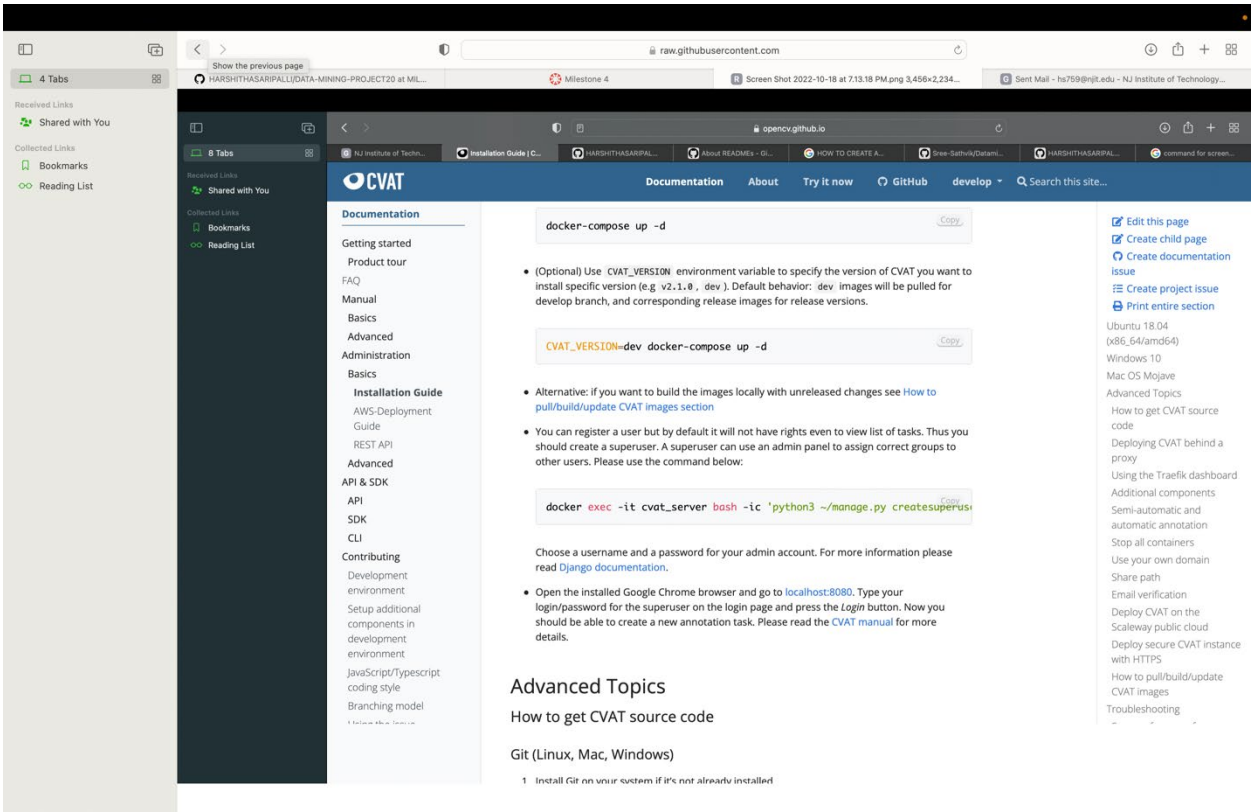
HARSHITHASARIPALLI/DATA-MINING-PROJECT20 at MIL...
Milestone 4
Screen Shot 2022-10-18 at 7.11.35 PM.png 3,456×2,234...
Sent Mail - hs759@njit.edu - NJ Institute of Technology...
opencv.github.io
8 Tabs
CVAT
Documentation
About
Try it now
GitHub
develop
Search this site...
Documentation
Getting started
Product tour
FAQ
Manual
Basics
Advanced
Administration
Basics
Installation Guide
AWS-Deployment Guide
REST API
Advanced
API & SDK
API
SDK
CLI
Contributing
Development environment
Setup additional components in development environment
JavaScript/Typescript coding style
Branching model
Mac OS Mojave
Download Docker for Mac. Double-click Docker.dmg to open the installer, then drag Moby the whale to the Applications folder. Double-click Docker.app in the Applications folder to start Docker. More instructions can be found here.
There are several ways to install Git on a Mac. The easiest is probably to install the Xcode Command Line Tools. On Mavericks (10.9) or above you can do this simply by trying to run git from the Terminal the very first time.
git --version
Copy
If you don't have it installed already, it will prompt you to install it. More instructions can be found here.
Download and install Google Chrome. It is the only browser which is supported by CVAT.
Open a terminal window. The terminal app is in the Utilities folder in Applications. To open it, either open your Applications folder, then open Utilities and double-click on Terminal, or press Command - spacebar to launch Spotlight and type "Terminal," then double-click the search result.
Clone CVAT source code from the GitHub repository with Git.
The following command will clone the latest develop branch:
git clone https://github.com/opencv/cvat
cd cvat
Copy
See alternatives if you want to download one of the release versions or use the wget or curl tools.
Run docker containers. It will take some time to download the latest CVAT release and other required images like postgres, redis, etc. from DockerHub and create containers.
Edit this page
Create child page
Create documentation issue
Create project issue
Print entire section
Ubuntu 18.04 (x86_64/amd64)
Windows 10
Mac OS Mojave
Advanced Topics
How to get CVAT source code
Deploying CVAT behind a proxy
Using the Traefik dashboard
Additional components
Semi-automatic and automatic annotation
Stop all containers
Use your own domain
Share path
Email verification
Deploy CVAT on the Scaleway public cloud
Deploy secure CVAT instance with HTTPS
How to pull/build/update CVAT images
Troubleshooting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opencv.github.io
CVAT
Documentation
About
Try it now
GitHub
develop
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Documentation
Getting started
Product tour
FAQ
Manual
Basics
Advanced
Administration
Basics
Installation Guide
AWS-Deployment Guide
REST API
Advanced
API & SDK
API
SDK
CLI
Contributing
Development environment
Setup additional components in development environment
JavaScript/Typescript coding style
Branching model
docker-compose up -d
CVAT_VERSION=dev docker-compose up -d
docker exec -it cvat_server bash -ic 'python3 ~/manage.py createsuperus
Edit this page
Create child page
Create documentation issue
Create project issue
Print entire section
Ubuntu 18.04 (x86_64/amd64)
Windows 10
Mac OS Mojave
Advanced Topics
How to get CVAT source code
Deploying CVAT behind a proxy
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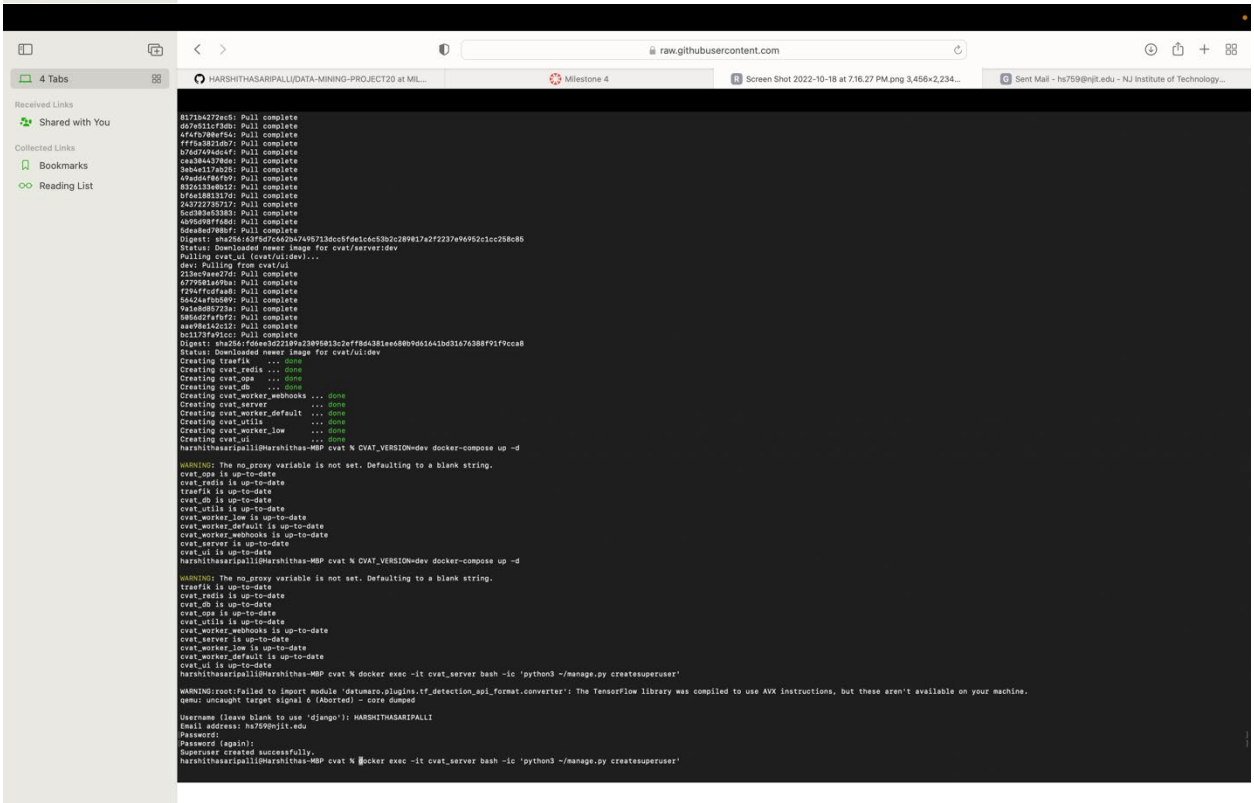
Stop all containers
Use your own domain
Share path
Email verification
Deploy CVAT on the Scaleway public cloud
Deploy secure CVAT instance with HTTPS
How to pull/build/update CVAT images
Troubleshooting
Advanced Topics
How to get CVAT source code
Git (Linux, Mac, Windows)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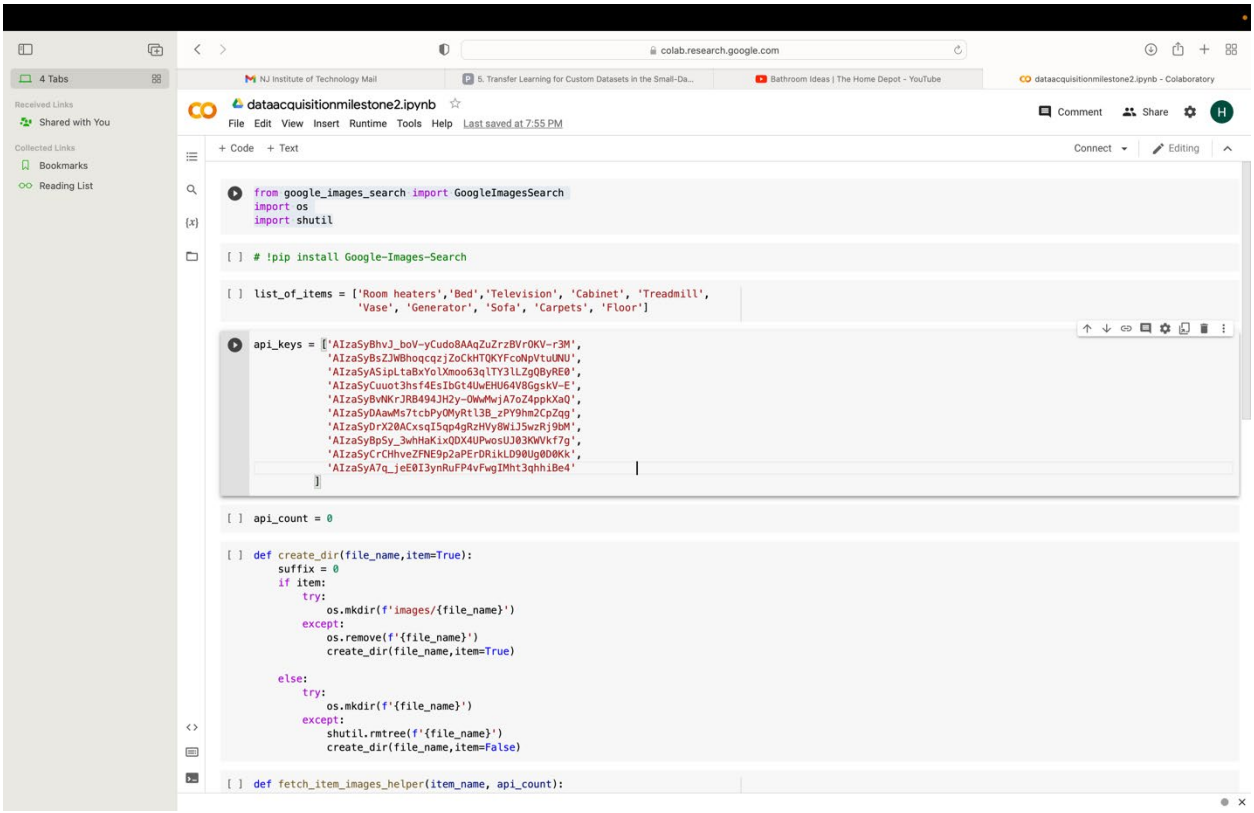
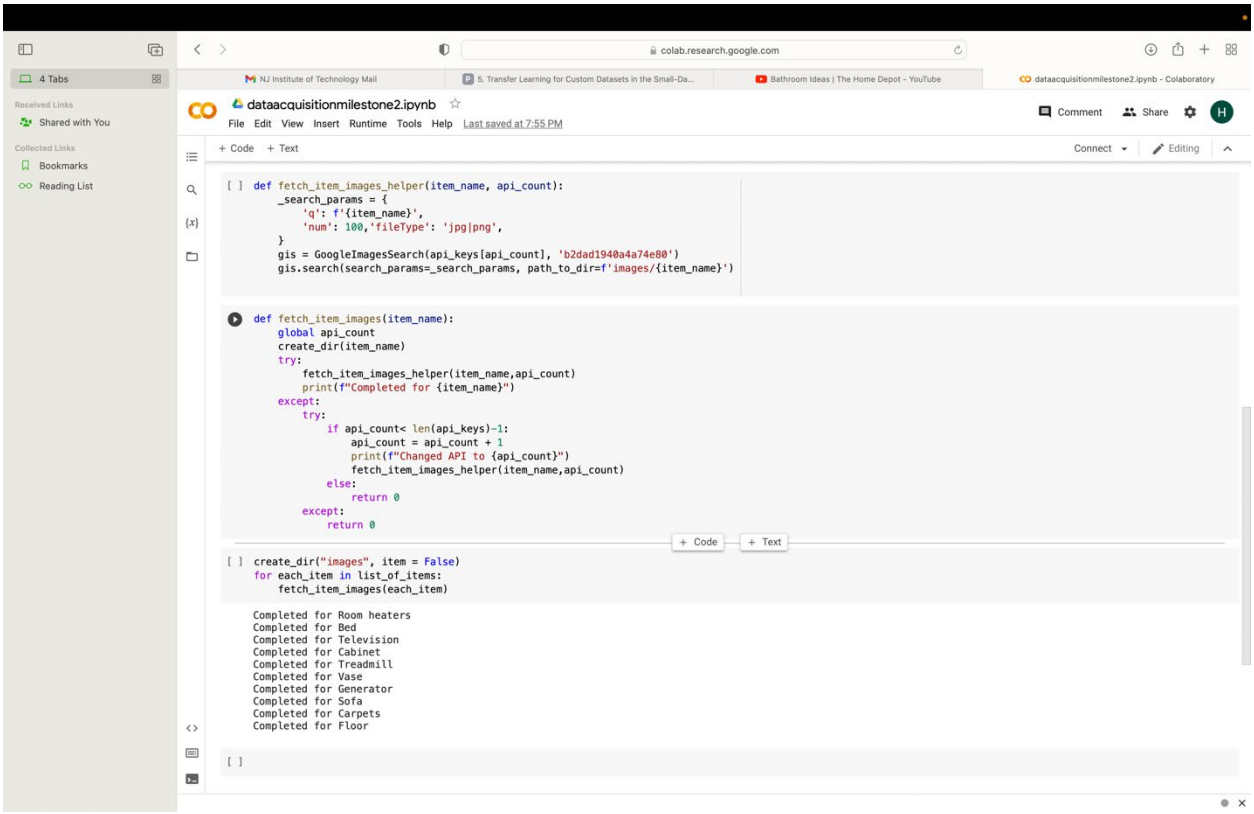
Status: Downloaded newer image for cvat/server:dev
Pulling cvat_ui (cvat/ui:dev)...
dev: Pulling from cvat/ui
213ec9aee27d: Pull complete
677950 1e69ba: Pull complete
f2914fcdfaa8: Pull complete
54424afbb589: Pull complete
9a1e8d85723a: Pull complete
5856d2fafbf2: Pull complete
aae98e142c12: Pull complete
bc1173fa91cc: Pull complete
Digest: sha256:fd6ee3d22189a23095013c2eff8d4381ee680b9d61641bd31676388f91f9cca8
Status: Downloaded newer image for cvat/ui:dev
Creating traefik ... done
Creating cvat_redis ... done
Creating cvat_opa ... done
Creating cvat_db ... done
Creating cvat_worker_webhooks ... done
Creating cvat_server ... done
Creating cvat_worker_default ... done
Creating cvat_utils ... done
Creating cvat_worker_low ... done
Creating cvat_ui ... done
harshithasaripalli@Harshithas-MBP cvat % CVAT_VERSION=dev docker-compose up -d
WARNING: The no_proxy variable is not set. Defaulting to a blank string.
cvat_opa is up-to-date
cvat_redis is up-to-date
traefik is up-to-date
cvat_db is up-to-date
cvat_utils is up-to-date
cvat_worker_low is up-to-date
cvat_worker_default is up-to-date
cvat_worker_webhooks is up-to-date
cvat_server is up-to-date
cvat_ui is up-to-date
harshithasaripalli@Harshithas-MBP cvat % CVAT_VERSION=dev docker-compose up -d
WARNING: The no_proxy variable is not set. Defaulting to a blank string.
traefik is up-to-date
cvat_redis is up-to-date
cvat_db is up-to-date
cvat_opa is up-to-date
cvat_utils is up-to-date
cvat_worker_webhooks is up-to-date
cvat_server is up-to-date
cvat_worker_low is up-to-date
cvat_worker_default is up-to-date
cvat_ui is up-to-date
harshithasaripalli@Harshithas-MBP cvat % docker exec -it cvat_server bash -ic 'python3 ~/manage.py createsuperuser'
WARNING:root:Failed to import module 'datumaro.plugins.tf_detection_api_format.converter': The TensorFlow library was compiled to use AVX instructions, but these aren't available on your machine.
qemu: uncaught target signal 6 (Aborted) - core dumped
Username (leave blank to use 'django'): HARSHITHASARIPALLI
Email address: hs759@njit.edu
Password:
Password (again):
Superuser created successfully.
harshithasaripalli@Harshithas-MBP cvat % docker exec -it cvat_server bash -ic 'python3 ~/manage.py createsuperuser'

MILESTONE-2

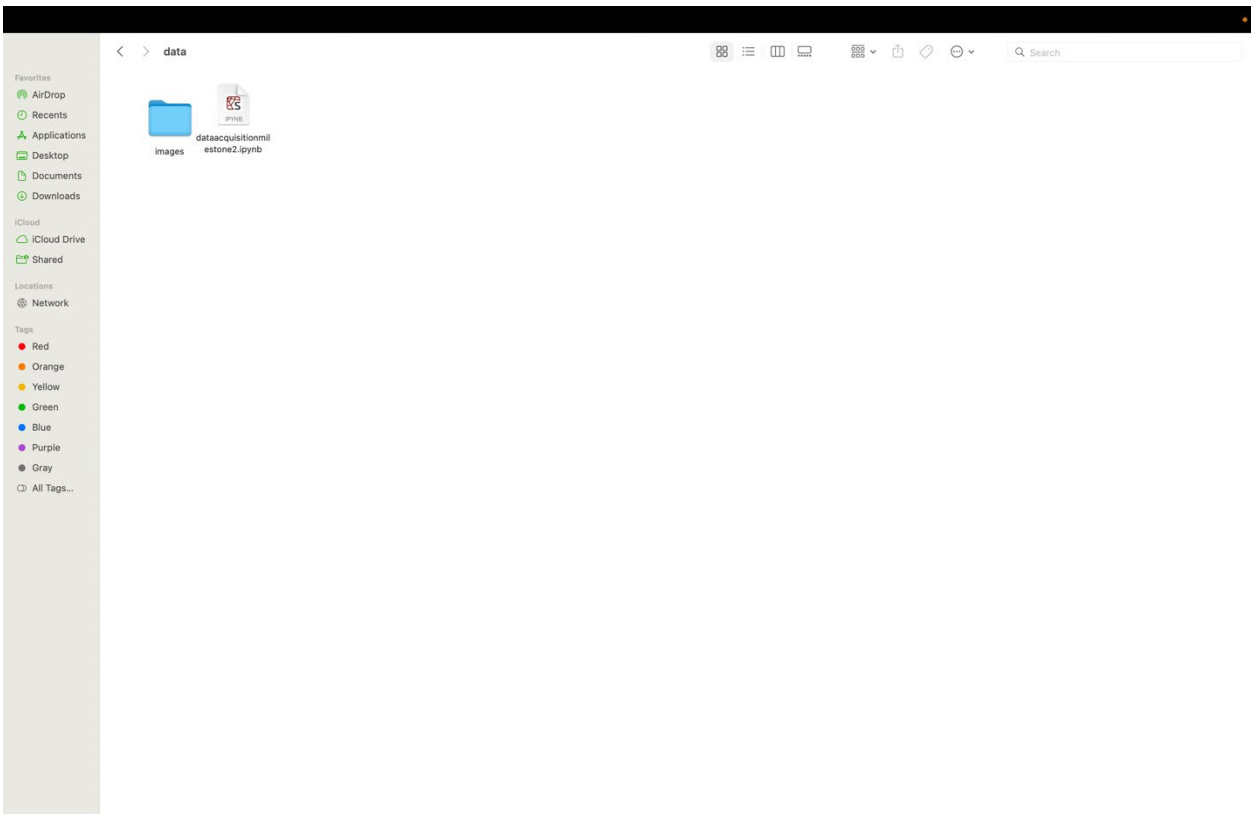
5.2. Milestone 2: Data Acquisition (20 points)

Project Team 1 is assigned home area 1 (Kitchen) just like Project Team 6, Project Team 3 is assigned home area 3 (Bedroom) just like Project Team 8 and so on …Select 10 product categories (eg sinks, faucets) that HD sells in each room and that are shown on their promotional video. You will need to scrape using beautiful soup or retrieve using the Google Custom Search API(better solution), 100 images of each of the selected product categories. Make sure you select products that are not included on the video, meaning if a specific sink is shown on the video, you srape / search different but similar sinks. Submit a Github branch titled 'data-acquisition' and a markdown file called data-acquisition.md. containing the code that achieve the milestone and a pytest test file that can show that the code works.




colab.research.google.com
dataacquisitionmilestone2.ipynb
File Edit View Insert Runtime Tools Help Last saved at 7:55 PM
Comment
Share
+ Code + Text
Connect
Editing
[ ] def fetch_item_images_helper(item_name, api_count):
_search_params = {
'q': f'{item_name}',
'num': 100,'fileType': 'jpg|png',
}
gis = GoogleImagesSearch(api_keys[api_count], 'b2dad1940a4a74e80')
gis.search(search_params=_search_params, path_to_dir=f'images/{item_name}')
def fetch_item_images(item_name):
global api_count
create_dir(item_name)
try:
fetch_item_images_helper(item_name,api_count)
print(f"Completed for {item_name}")
except:
try:
if api_count< len(api_keys)-1:
api_count = api_count + 1
print(f"Changed API to {api_count}")
fetch_item_images_helper(item_name,api_count)
else:
return 0
except:
return 0
+ Code + Text
[ ] create_dir("images", item = False)
for each_item in list_of_items:
fetch_item_images(each_item)
Completed for Room heaters
Completed for Bed
Completed for Television
Completed for Cabinet
Completed for Treadmill
Completed for Vase
Completed for Generator
Completed for Sofa
Completed for Carpets
Completed for Floor
[ ]

Output


data
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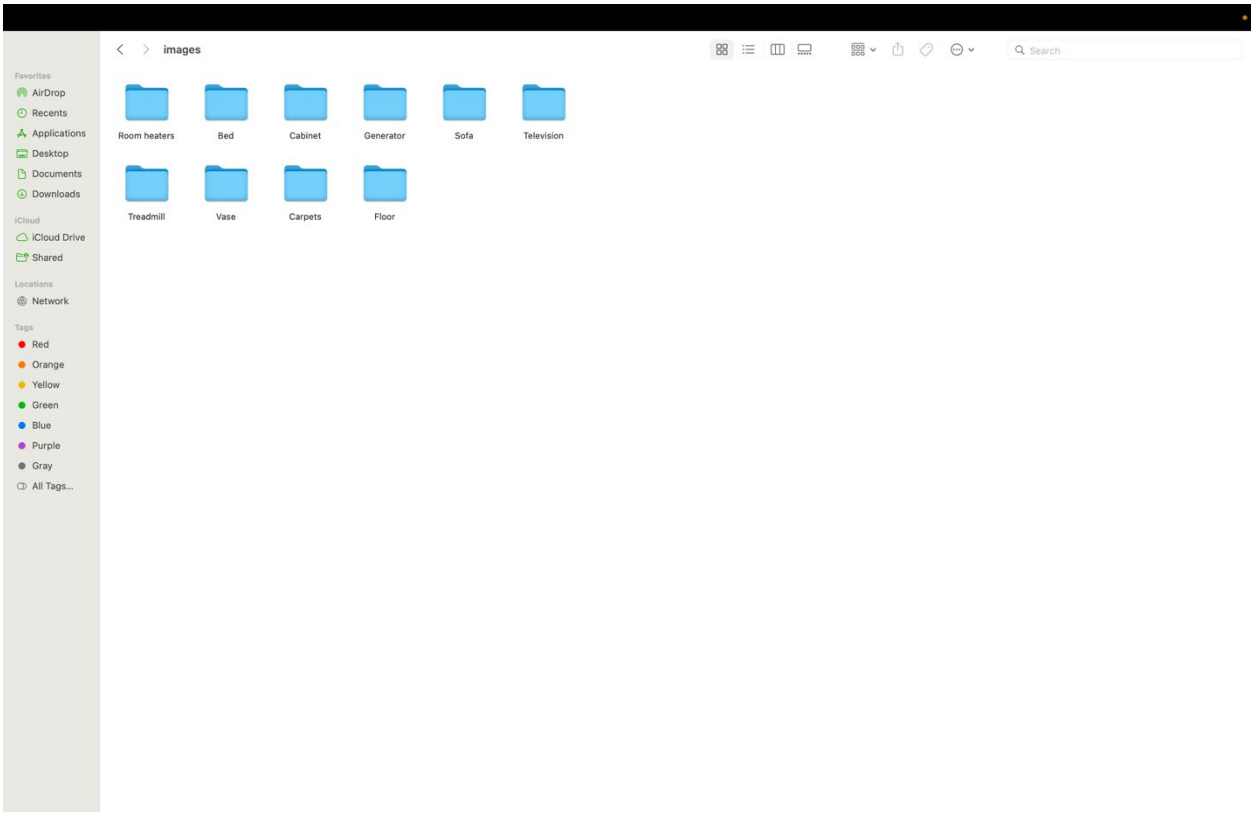
images
dataacquisitionmilestone2.ipynb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Search
Favorites
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Applications
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Documents
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iCloud
iCloud Drive
Shared
Locations
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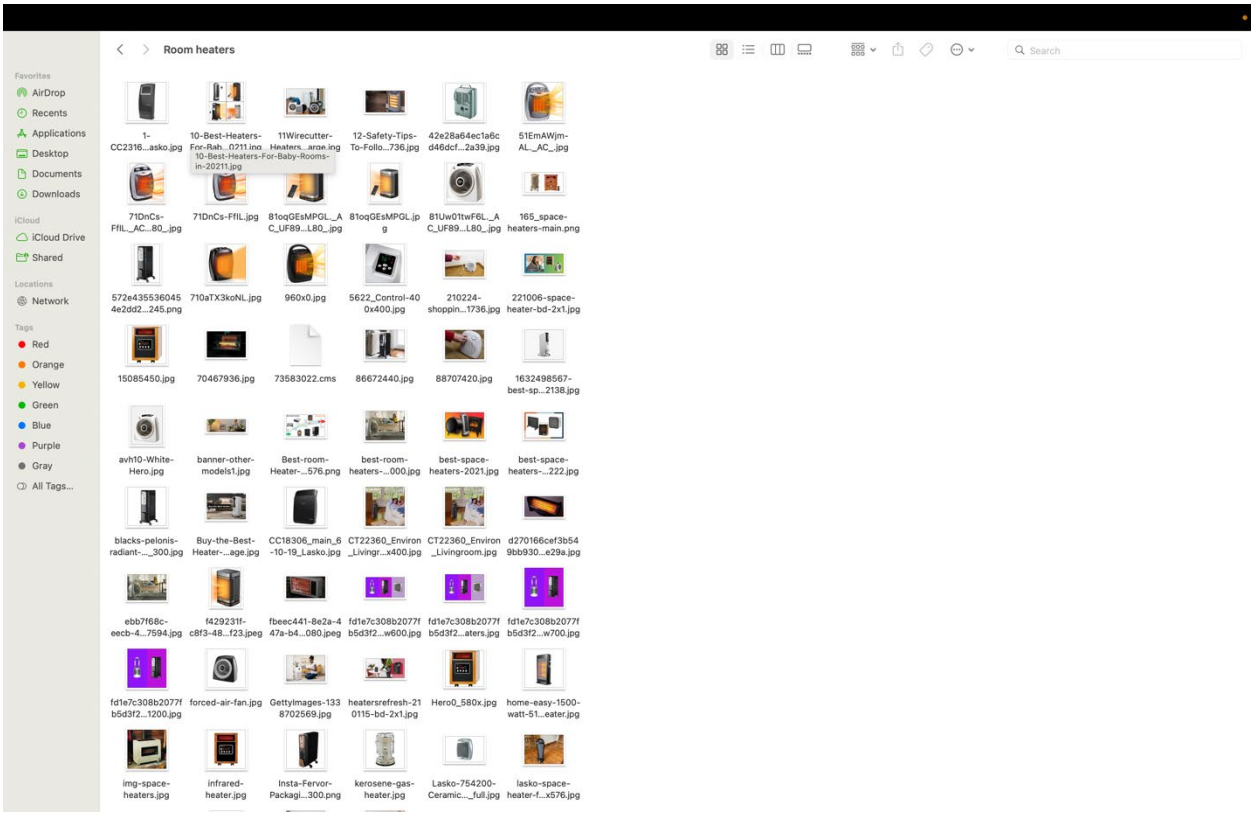
All Tags...
Room heaters
Bed
Cabinet
Generator
Sofa
Television
Treadmill
Vase
Carpets
Floor


Room heaters
Search
Favorites
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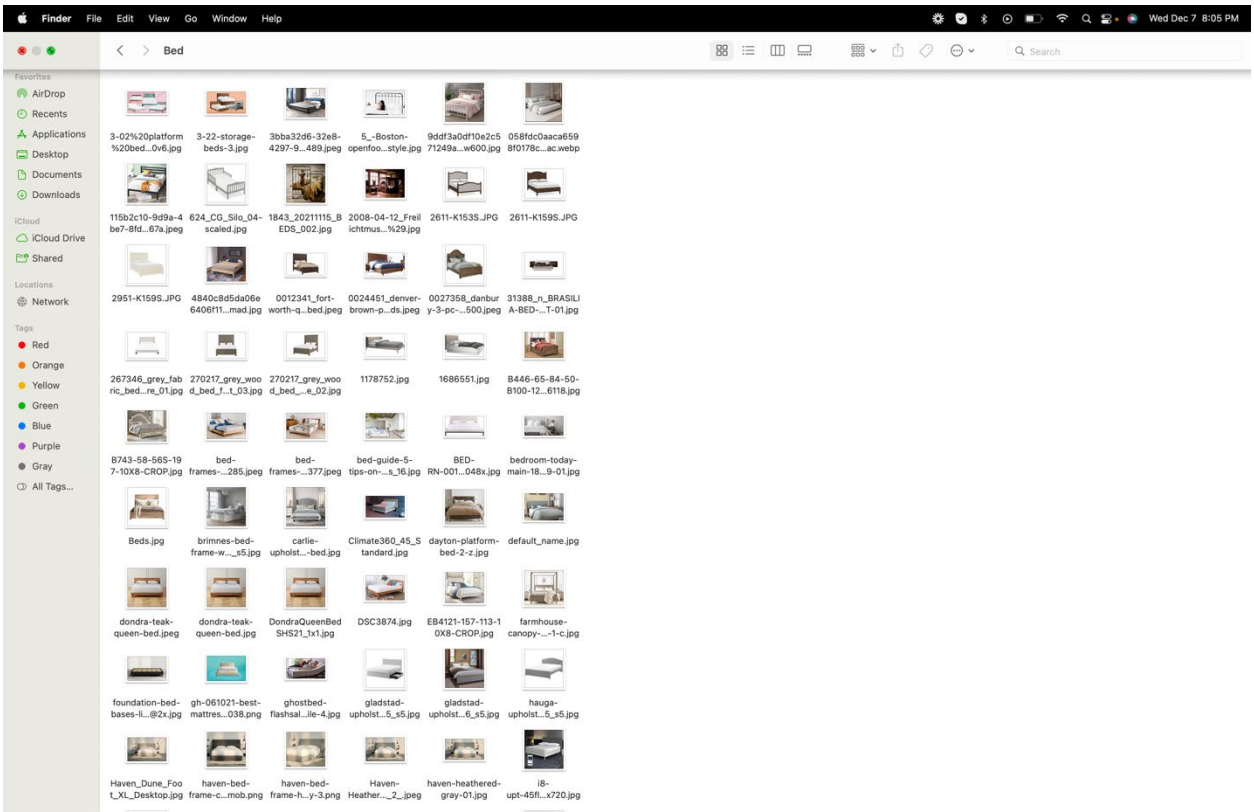
Finder File Edit View Go Window Help
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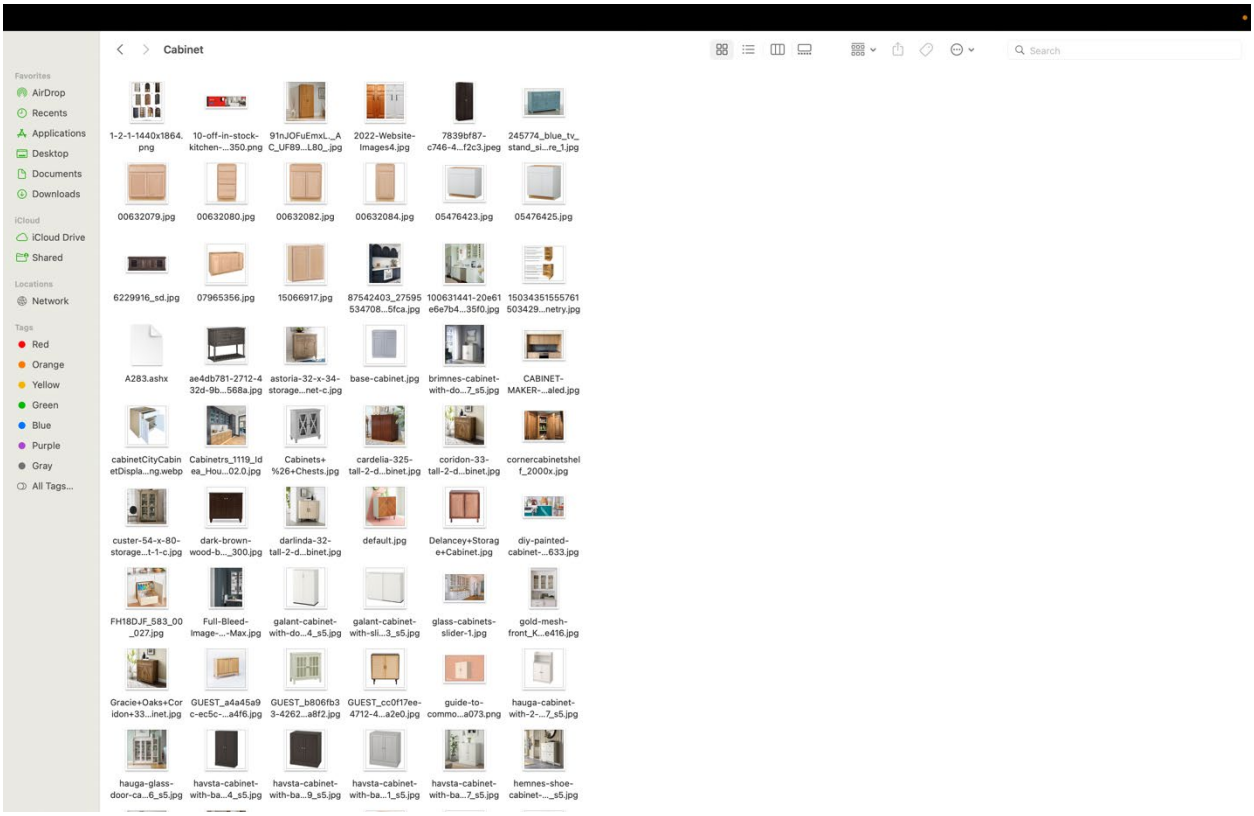
Cabinet
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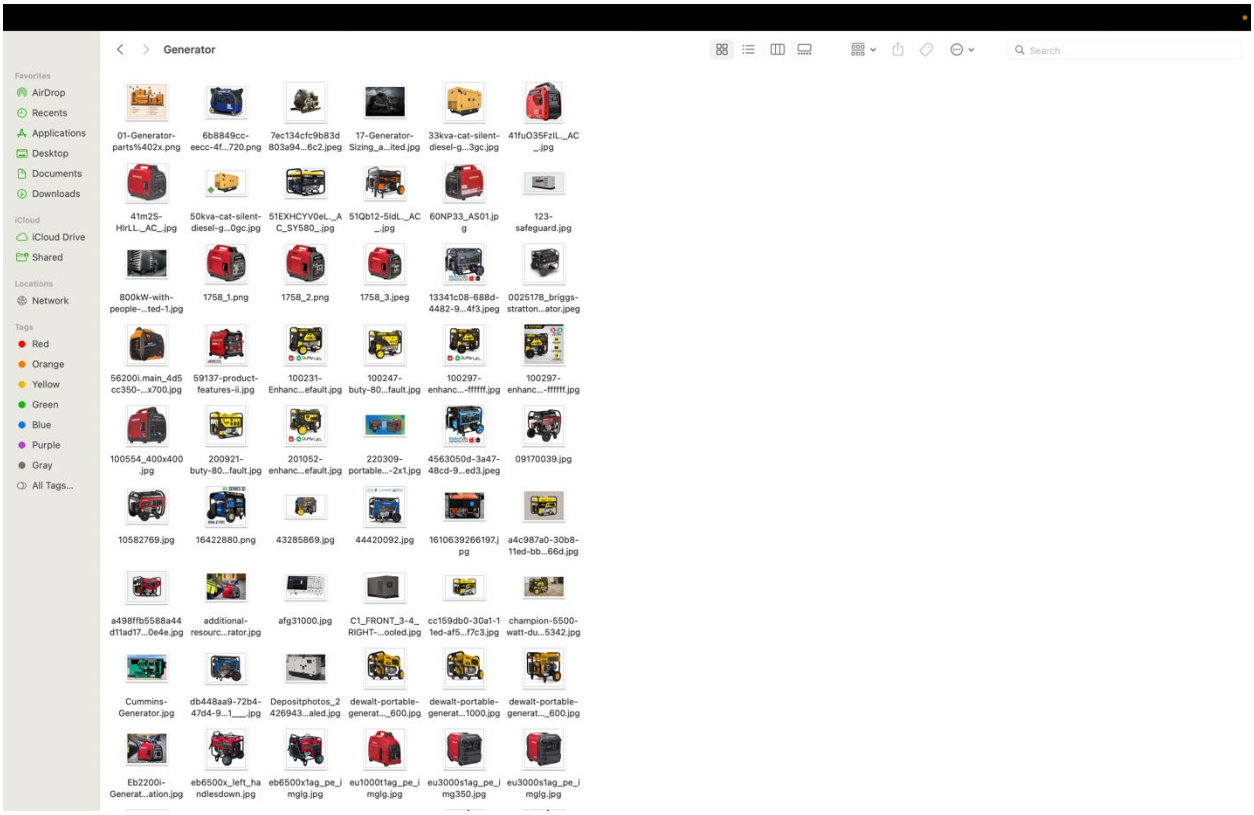
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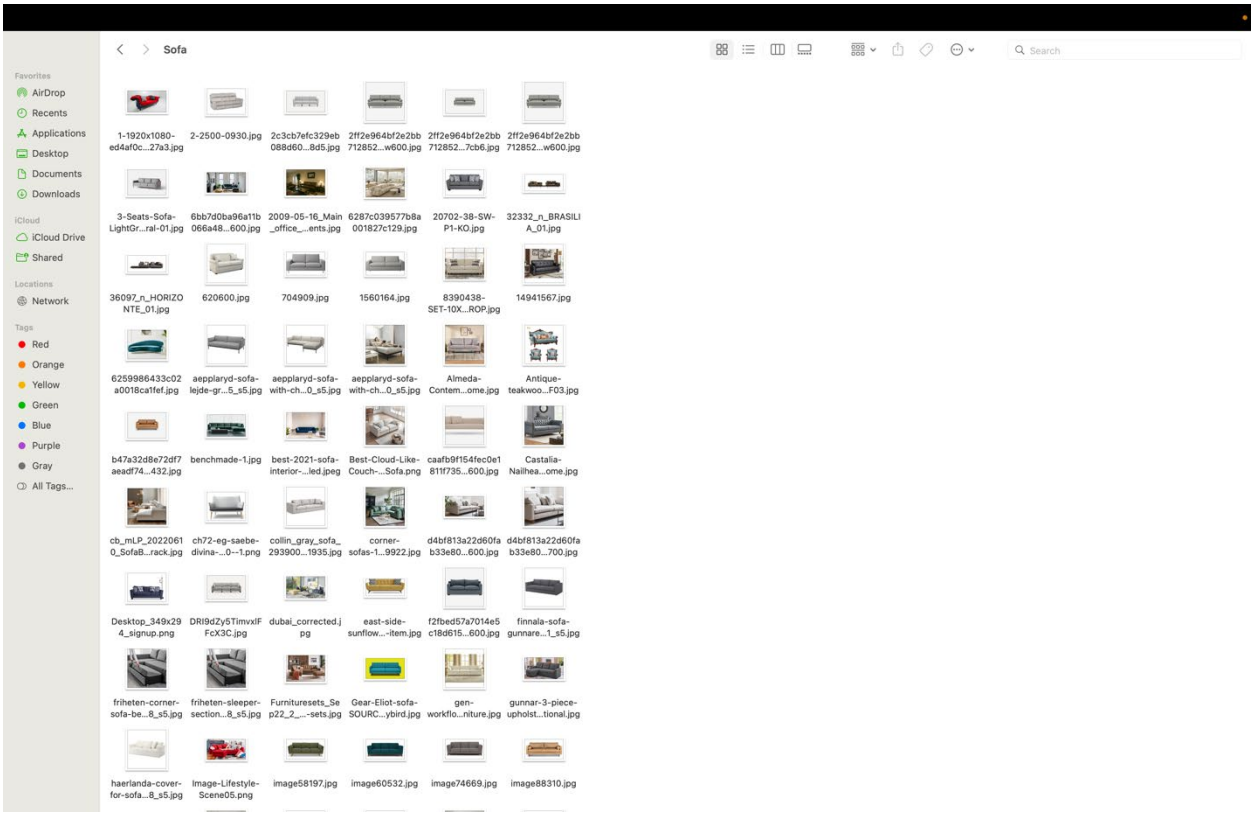
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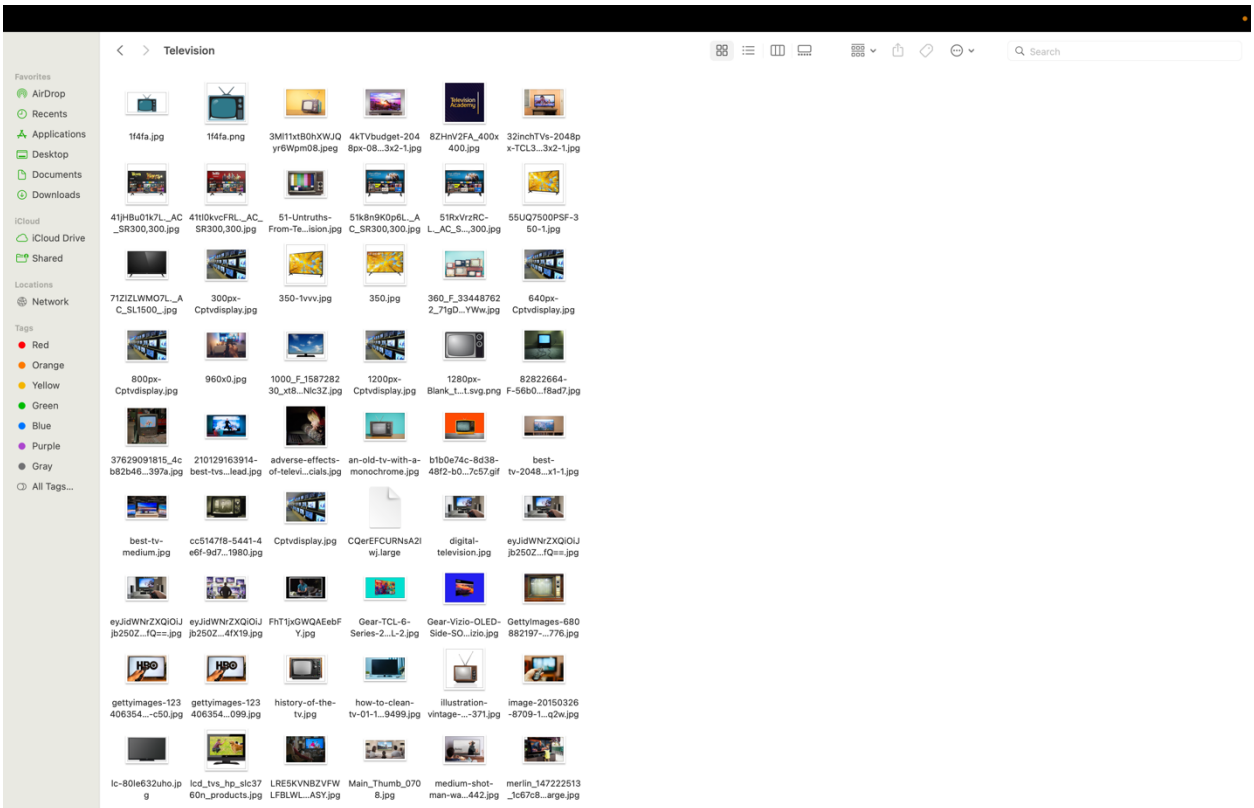
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MILESTONE-3

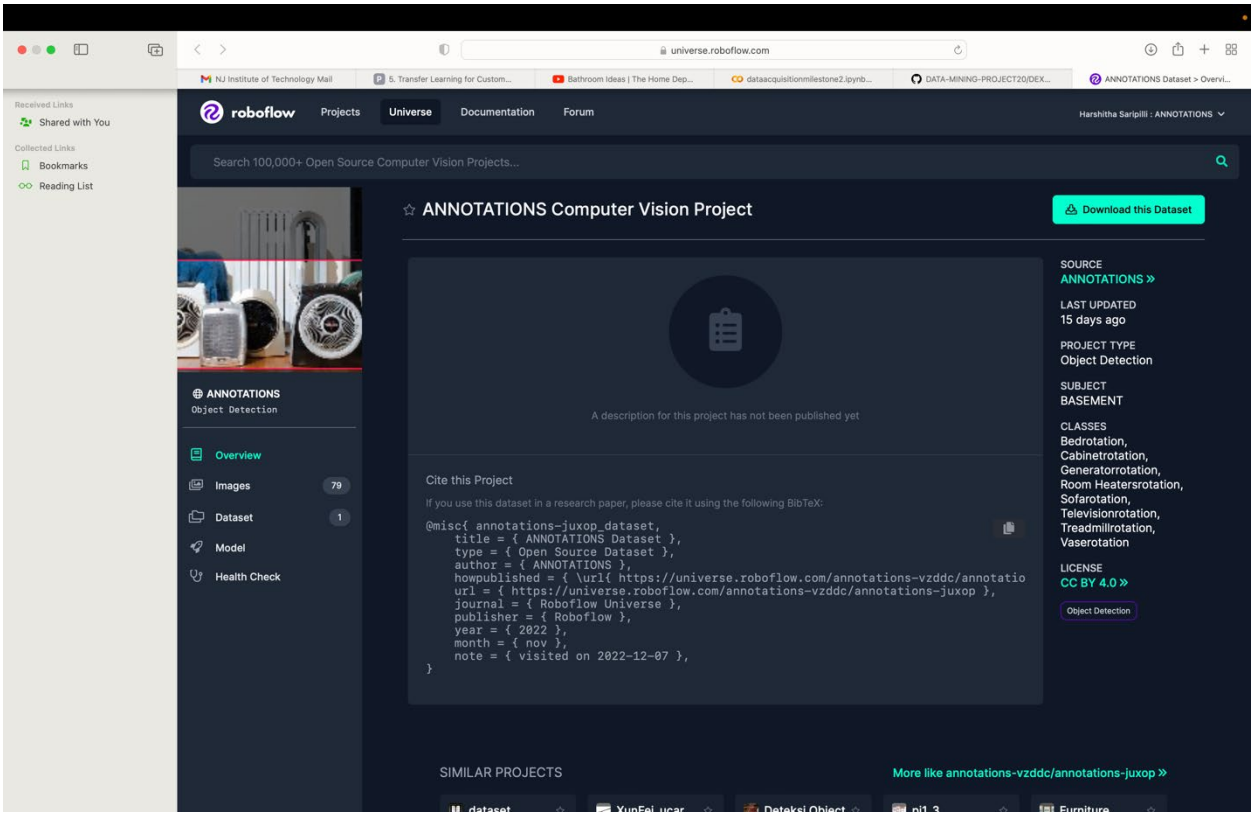
5.3. Milestone 3: Annotation (20 points)

Upload the images in your CVAT instance and annotate all object categories. This is a manual step and you will need to use the DEXTR cutter.Write a 2 page summary on how DEXTR works that can be understood by experts.
Ensure that the annotations can be read and seen by the fiftyone tool.Submit a Github branch titled 'annotation' containing the annotated dataset in MS COCO format and a markdown file called annotation.md containing the DEXTR description and the link with the 1000 annotated images (10 product categories x 100 images per category. You can collaborate with other teams on the annotation task to share the load.

https://universe.roboflow.com/annotations-vzddc/annotations-juxop

DEXTR is an AI-powered tool that is available to you from the start. It works by you placing four markers (or more) - one on the most northern edge of what you want to label, and one on the most eastern, northern, and western edges too. It is a powerful tool that can get you really good results in just four clicks. DEXTR requires a minimum of four markers to function. When your mouse pointer is over one of these edges, left-click or press "A" to create these markings. The DEXTR-model will "look" for any object inside of those four markers after you have provided four markers. You can keep adding points if you're unsatisfied with the choice. You should be aware, though, that occasionally, the outcomes might not be the best. In our experience, adding more over 10 frequently results in subpar performance, even for complicated objects. By left-clicking, holding, and dragging markers to the correct location, you can move them. You can remove the marker you placed last by pressing "backspace". You can also select a marker that you want to delete by first clicking on it and then pressing "backspace" Tolerance When DEXTR has been activated, you will be able to see a "Threshold" in the top left corner. This threshold can be set from 0-100% by you, the user. It controls how strict the model should be when generating results. The higher the threshold, the smaller and more precise the result will be. Reset the tool If you are unhappy with your selection and want to start over, you can press "esc". Convert to object When you are satisfied with your selection you can turn it into an object by pressing "enter", or by clicking the "convert" button in the tool settings toolbar. DEXTR might take a couple of minutes to activate the first time you annotate as well as when you open up a project where no one has been annotating for the last 30 minutes. Dexter's Offering

AI forecasting for energy trading Dexter offers load and imbalance time-series forecasting throughout the mid-term and short-term trading cycle. Big data management Dexter combines large amounts of different external data sources (i.e. weather data) with customer data (historic time-series) to give the most accurate forecast possible. Cloud and API-based services The forecasting engine runs in the cloud and is able to on-board and connect with existing IT infrastructure in a seamlessly easy way.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ANNOTATIONS
Object Detection
Overview
Images 79
Dataset 1
Model
Health Check
A description for this project has not been published yet
Cite this Project
If you use this dataset in a research paper, please cite it using the following BibTeX:
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Bedrotation,
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Generatorrotation,
Room Heatersrotation,
Sofarotation,
Televisionrotation,
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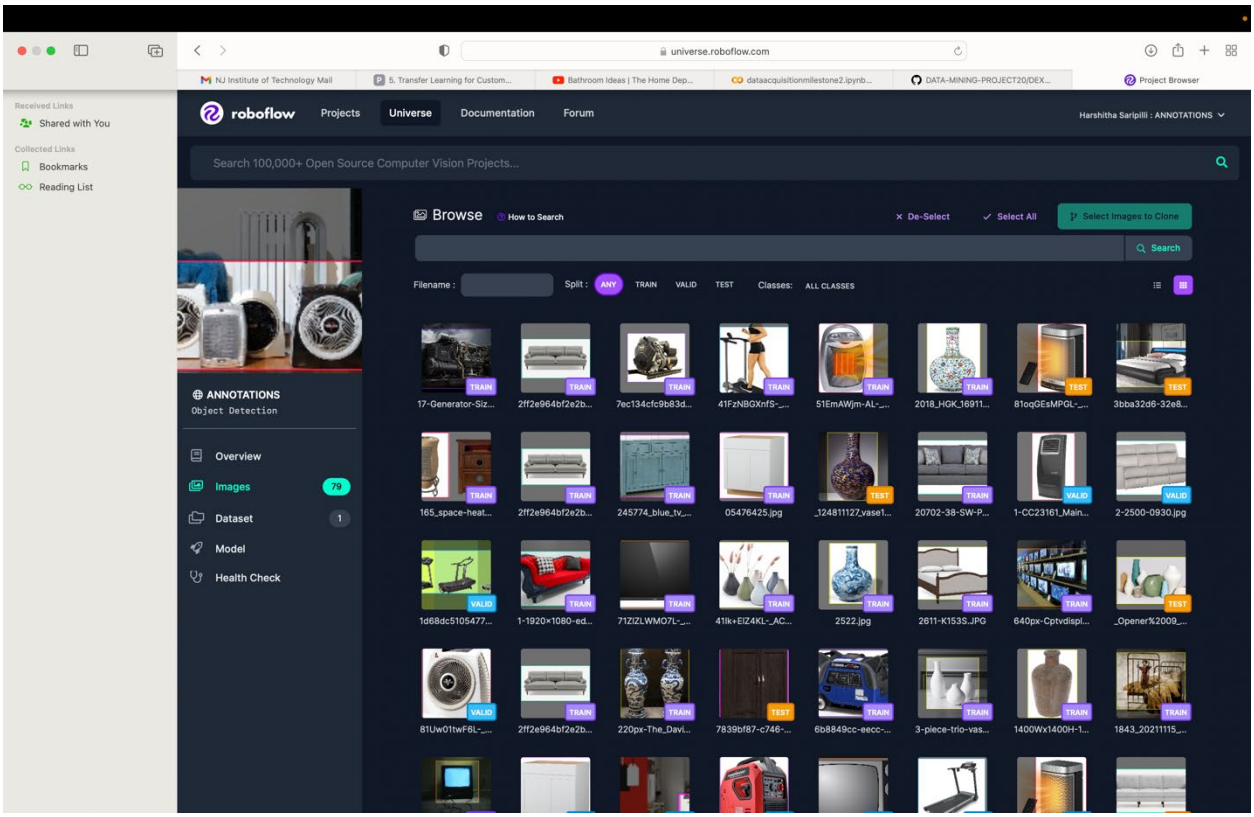
SIMILAR PROJECTS
More like annotations-vzddc/annotations-juxop »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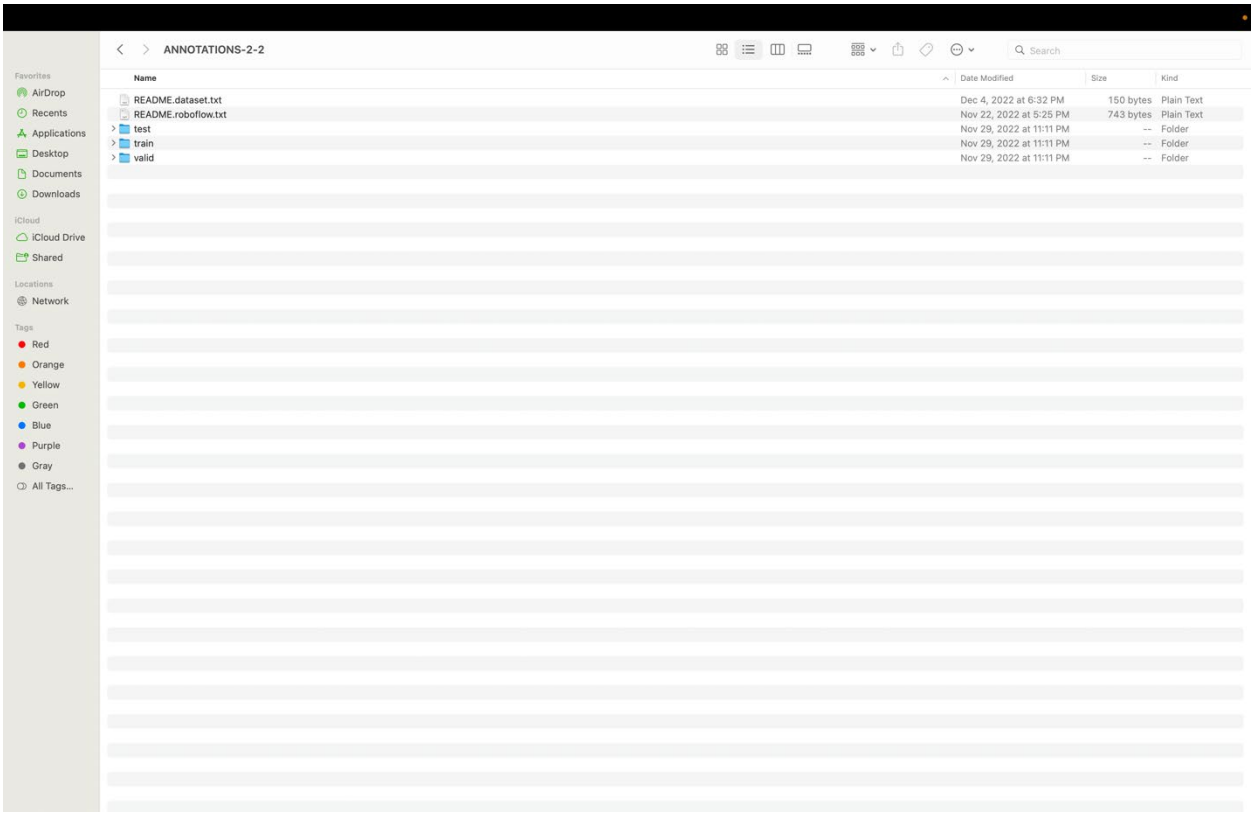
ANNOTATIONS
Object Detection
Overview
Images 79
Dataset 1
Model
Health Check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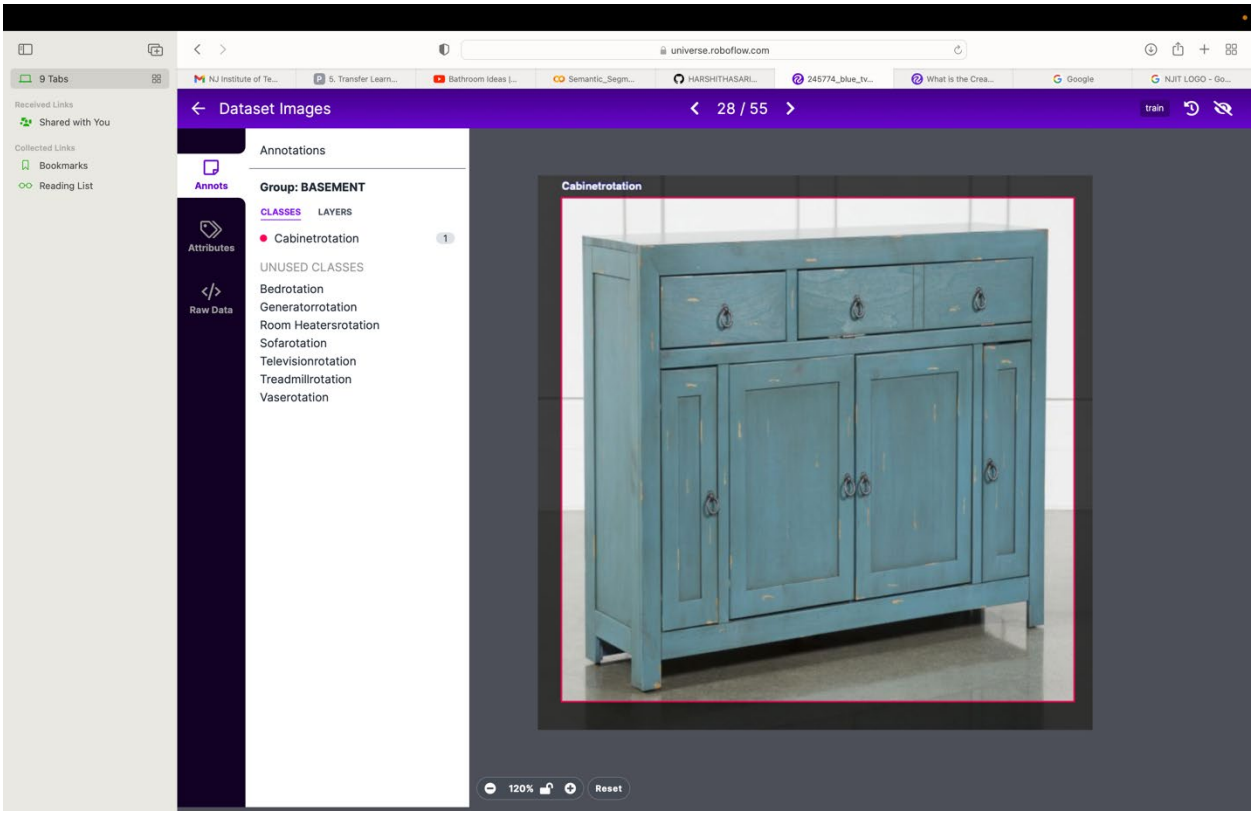

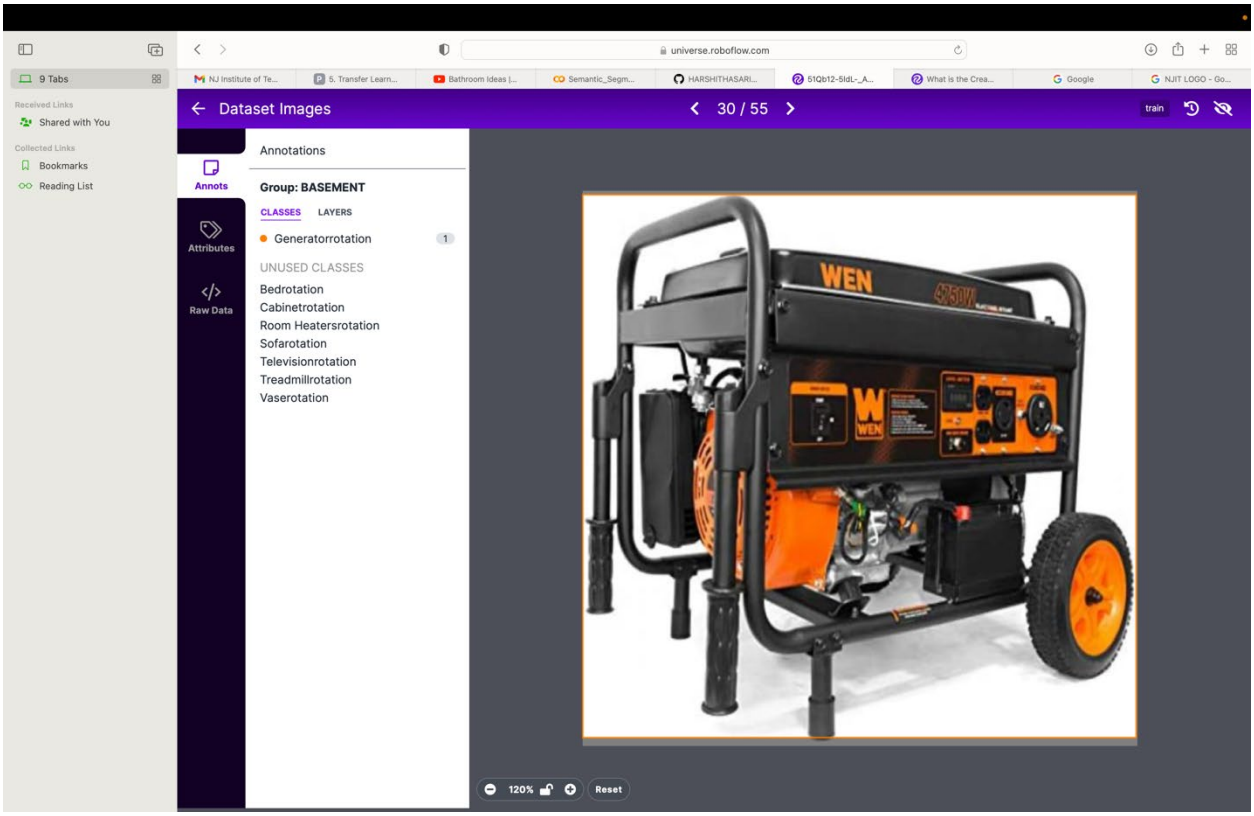
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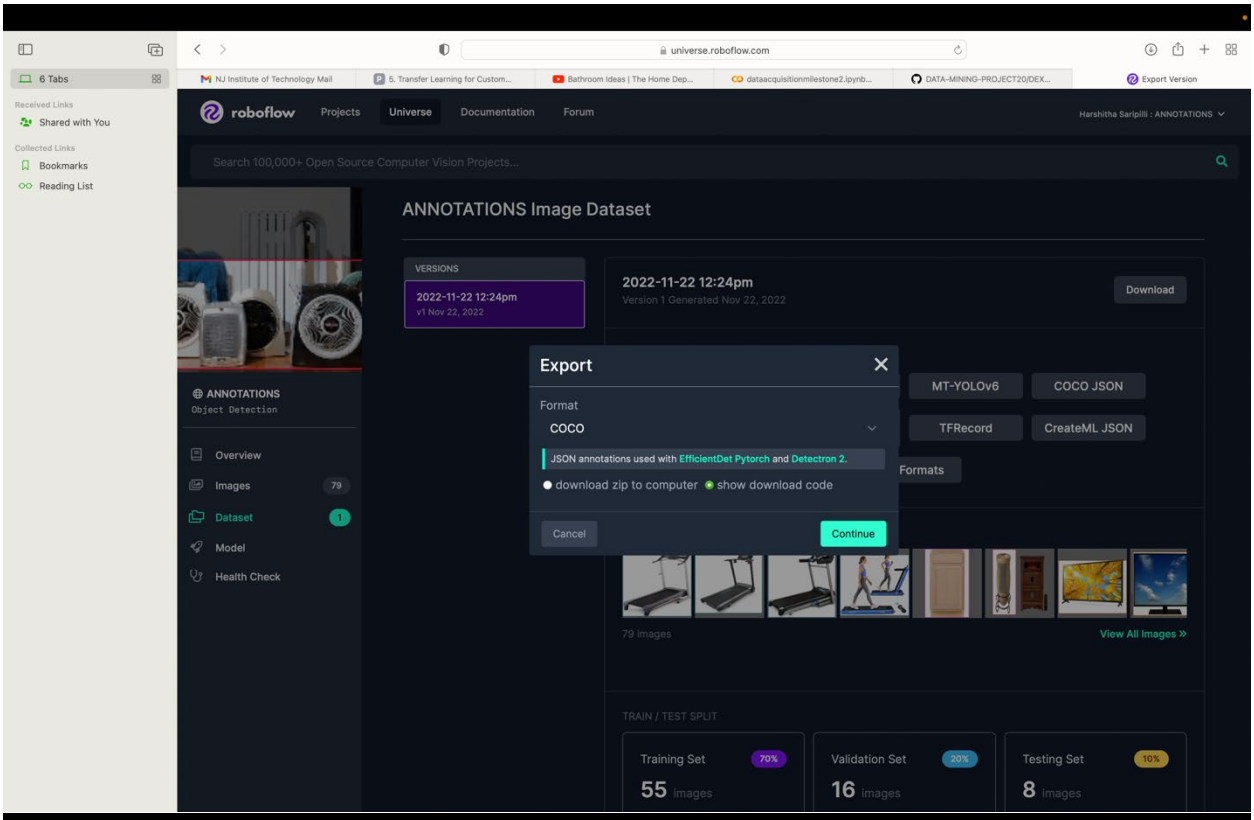
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JSON annotations used with EfficientDet Pytorch and Detectron 2.
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TFRecord
CreateML JSON
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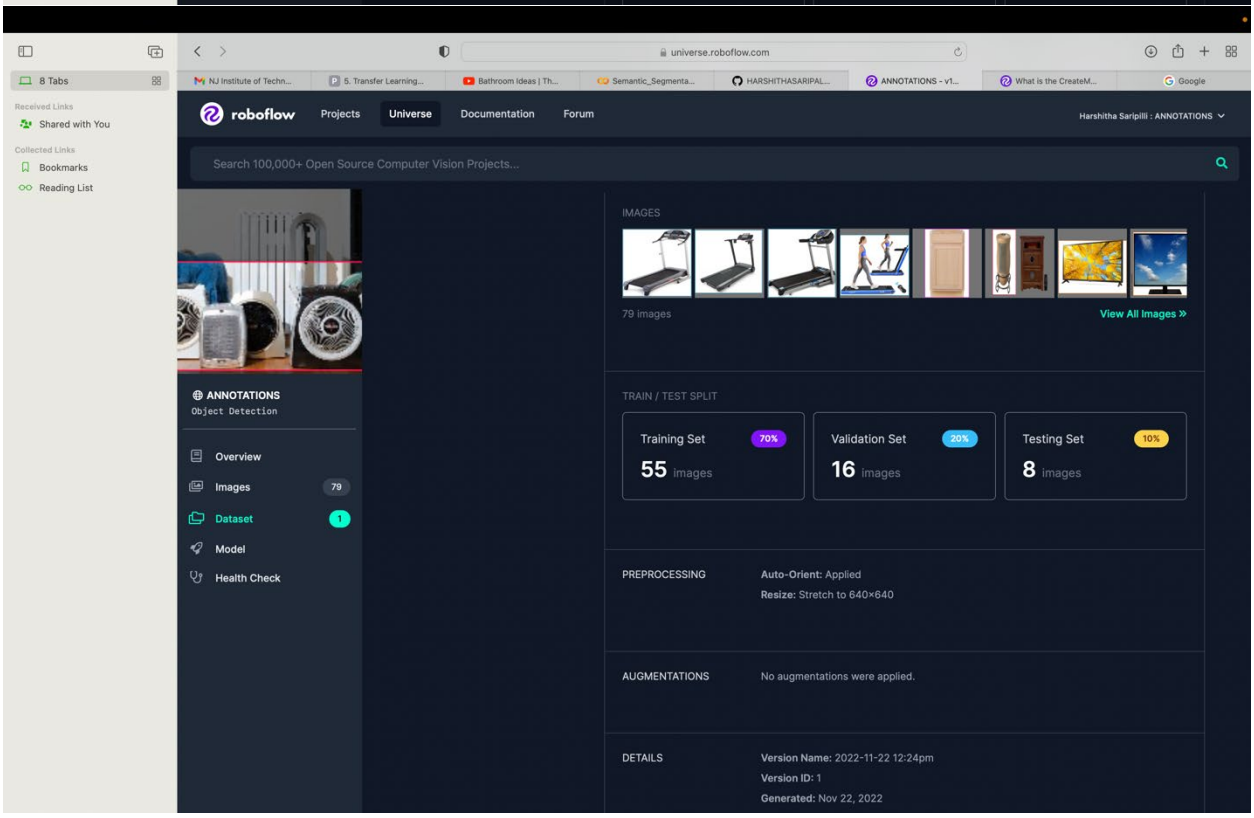
ANNOTATIONS
Object Detection
Overview
Images 79
Dataset 1
Model
Health Check
79 images
View All Images »
TRAIN / TEST SPLIT
Training Set 70%
55 images
Validation Set 20%
16 images
Testing Set 10%
8 images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Dataset 1
Model
Health Check
TRAIN / TEST SPLIT
Training Set 70%
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Validation Set 20%
16 images
Testing Set 10%
8 images
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Version ID: 1
Generated: Nov 22, 2022

MILESTONE-4

5.4. Milestone 4: Semantic Segmentation (40 points)

Use this template or an equivalent template if you are using Tensorflow to implement a semantic segmentation pipeline based on either MaskRCNN (project team number is odd number) or UNet (project team number is even) that will successfully segment the selected objects on the input room video.You can use frameworks such as https://github.com/facebookresearch/detectron2 for this task.Ensure you describe how you tuned and what values you ended up using for the network hyperparametersSubmit a Github branch titled 'segmentation' containing the segmentation code and a markdown file called segmentation.md containing the full description of the semantic segmentation network you used and the performance results you got.

Semantic image segmentation seeks to assign a class to each pixel in an image that corresponds to the concept it is intended to convey. This task is sometimes known as "dense prediction" because we are making predictions for each and every pixel in the image.

The fact that we are just interested in the category of each pixel is crucial to keep in mind because we are not distinguishing between instances of the same class. To put it another way, the segmentation map does not automatically recognize two objects of the same category as independent ones if they are present in the input image. Instance segmentation models are a different class of models that can discriminate between different items belonging to the same class.

Each "block" in the architecture is represented by a set of convolution operations in the typical U-Net model. There are a variety of more sophisticated "blocks" that can be used instead of stacked convolutional layers, as I covered in my piece on popular convolutional network topologies.

Drozdzal et al. substitute residual blocks for the fundamental stacked convolution blocks. In addition to the long skip connections that already exist between the relevant feature maps of the encoder and decoder modules in the normal U-Net layout, this residual block also includes short skip connections (inside the block). They claim that training can be completed more quickly and with deeper models because to the brief skip connections.

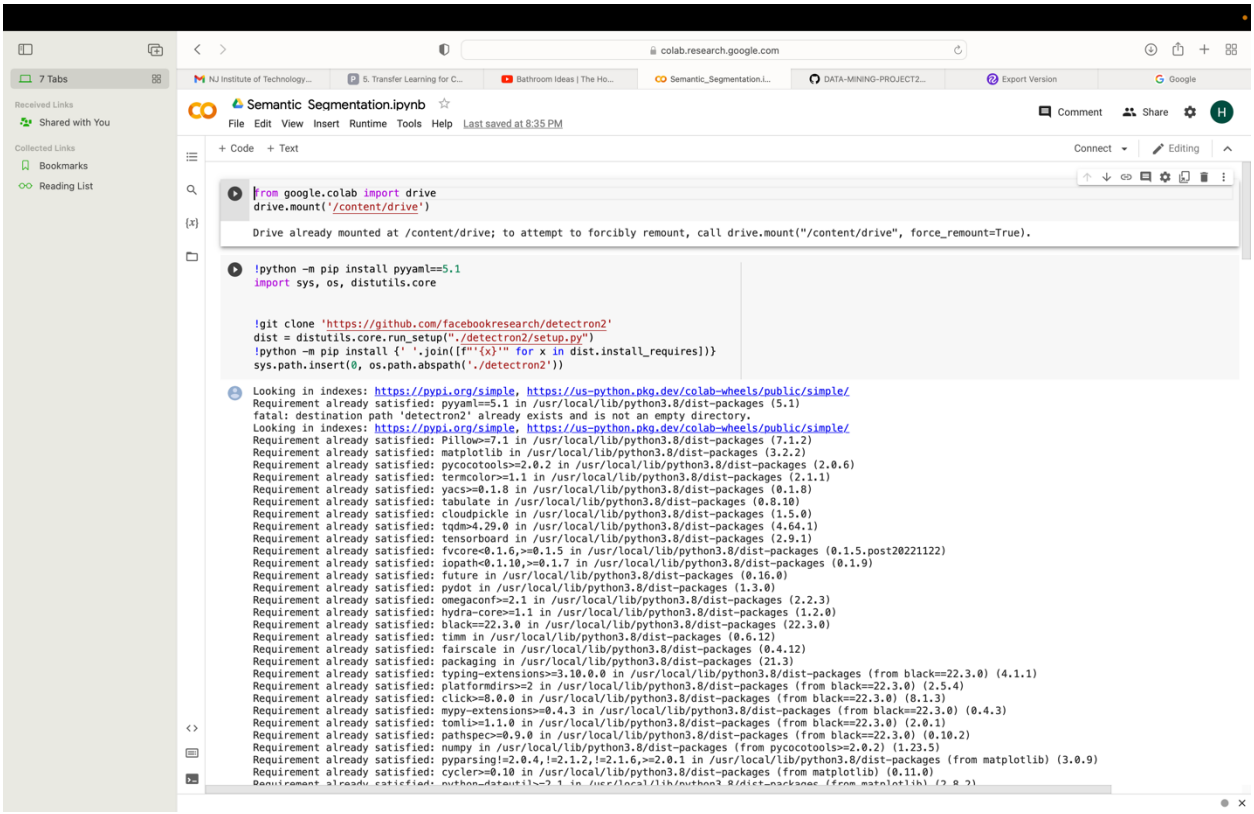
Jegou et al. elaborated on this by suggesting the use of dense blocks, still having a U-Net structure, saying that the "characteristics of DenseNets make them a very good fit for semantic segmentation as they naturally produce skip connections and multi-scale supervision." These dense blocks are advantageous because they allow for very effective feature reuse by carrying lower level features from earlier layers side by side with higher level features from more recent layers.

Facebook AI Research (FAIR) came up with this advanced library, which gave amazing results on object detection and segmentation problems. Detectron2 is based upon the maskrcnn benchmark. Its implementation is in PyTorch. It requires CUDA due to the heavy computations involved.It supports multiple tasks such as bounding box detection, instance segmentation, keypoint detection, densepose detection, and so on. It provides pre-trained models which you can easily load

Many pre-trained models of Detectron2 can be accessed at model zoo. These models have been trained on different datasets, and are ready to be used.

Even when people are training their custom dataset, they use these pre-trained weights to initialize their model. It has proven to reduce the training time and improve the performance. The model we'll be using is pretrained on the COCO dataset.

First, we have to define the complete configuration of the object detection model. We imported the 'get_cfg' function from the detectron2.config module, we will be using it now. I have chosen the Coco Instance segmentation configuration (YAML file). There are other options available too. You also have to set the model's threshold score (usually set between 0.4 to 0.6). You can load the pretrained weights for the configuration from the checkpoint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Semantic_Segmentation.ipynb
File Edit View Insert Runtime Tools Help Last saved at 8:35 PM
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from google.colab import drive
drive.mount('/content/drive')
Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).
!python -m pip install pyyaml==5.1
import sys, os, distutils.core
!git clone 'https://github.com/facebookresearch/detectron2'
dist = distutils.core.run_setup("./detectron2/setup.py")
!python -m pip install {' '.join([f"'{x}'" for x in dist.install_requires])}
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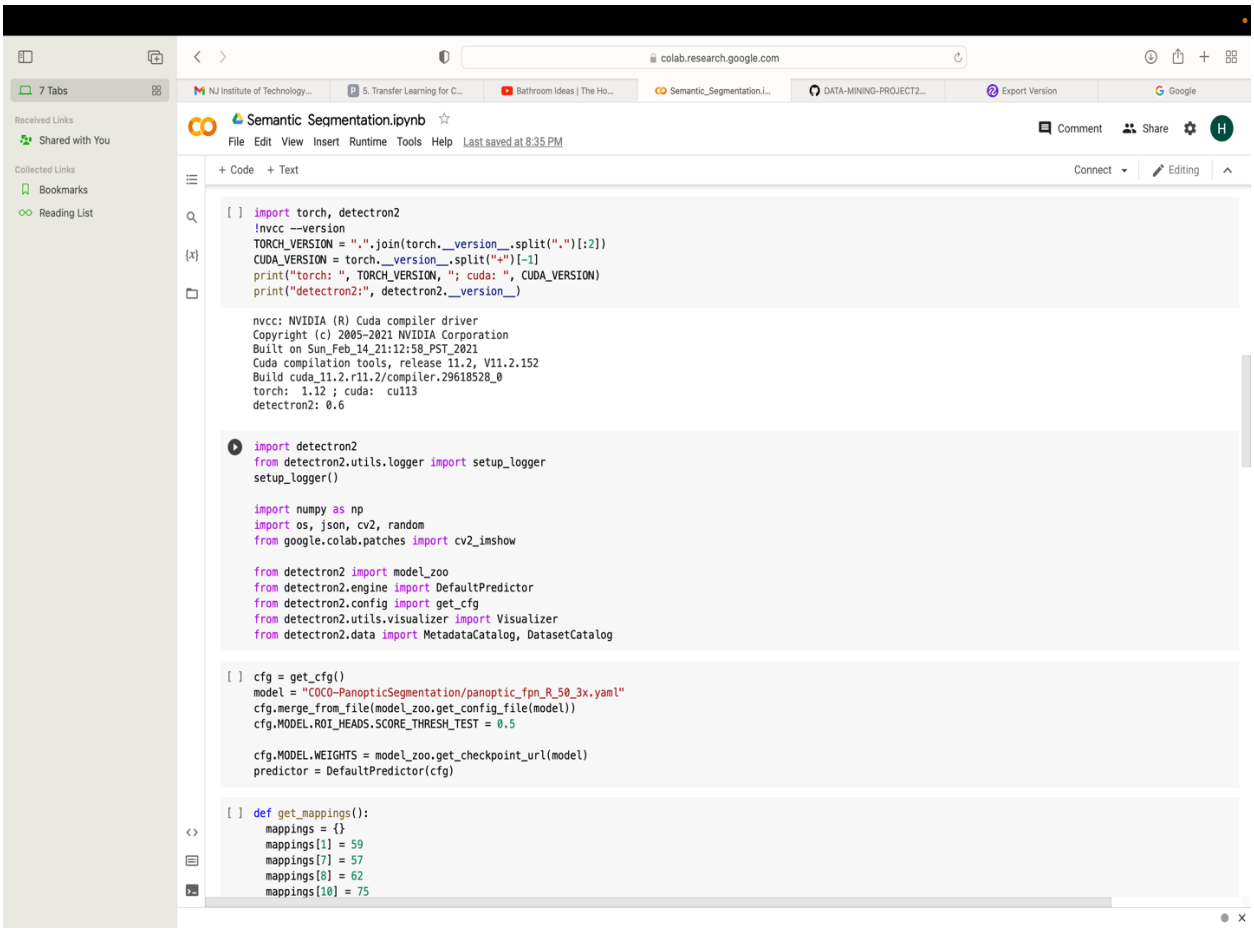
Requirement already satisfied: pydot in /usr/local/lib/python3.8/dist-packages (1.3.0)
Requirement already satisfied: omegaconf>=2.1 in /usr/local/lib/python3.8/dist-packages (2.2.3)
Requirement already satisfied: hydra-core>=1.1 in /usr/local/lib/python3.8/dist-packages (1.2.0)
Requirement already satisfied: black==22.3.0 in /usr/local/lib/python3.8/dist-packages (22.3.0)
Requirement already satisfied: timm in /usr/local/lib/python3.8/dist-packages (0.6.12)
Requirement already satisfied: fairscale in /usr/local/lib/python3.8/dist-packages (0.4.12)
Requirement already satisfied: packaging in /usr/local/lib/python3.8/dist-packages (21.3)
Requirement already satisfied: typing-extensions>=3.10.0.0 in /usr/local/lib/python3.8/dist-packages (from black==22.3.0) (4.1.1)
Requirement already satisfied: platformdirs>=2 in /usr/local/lib/python3.8/dist-packages (from black==22.3.0) (2.5.4)
Requirement already satisfied: click>=8.0.0 in /usr/local/lib/python3.8/dist-packages (from black==22.3.0) (8.1.3)
Requirement already satisfied: mypy-extensions>=0.4.3 in /usr/local/lib/python3.8/dist-packages (from black==22.3.0) (0.4.3)
Requirement already satisfied: tomli>=1.1.0 in /usr/local/lib/python3.8/dist-packages (from black==22.3.0) (2.0.1)
Requirement already satisfied: pathspec>=0.9.0 in /usr/local/lib/python3.8/dist-packages (from black==22.3.0) (0.10.2)
Requirement already satisfied: numpy in /usr/local/lib/python3.8/dist-packages (from pycocotools>=2.0.2) (1.23.5)
Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1 in /usr/local/lib/python3.8/dist-packages (from matplotlib) (3.0.9)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.8/dist-packages (from matplotlib) (0.11.0)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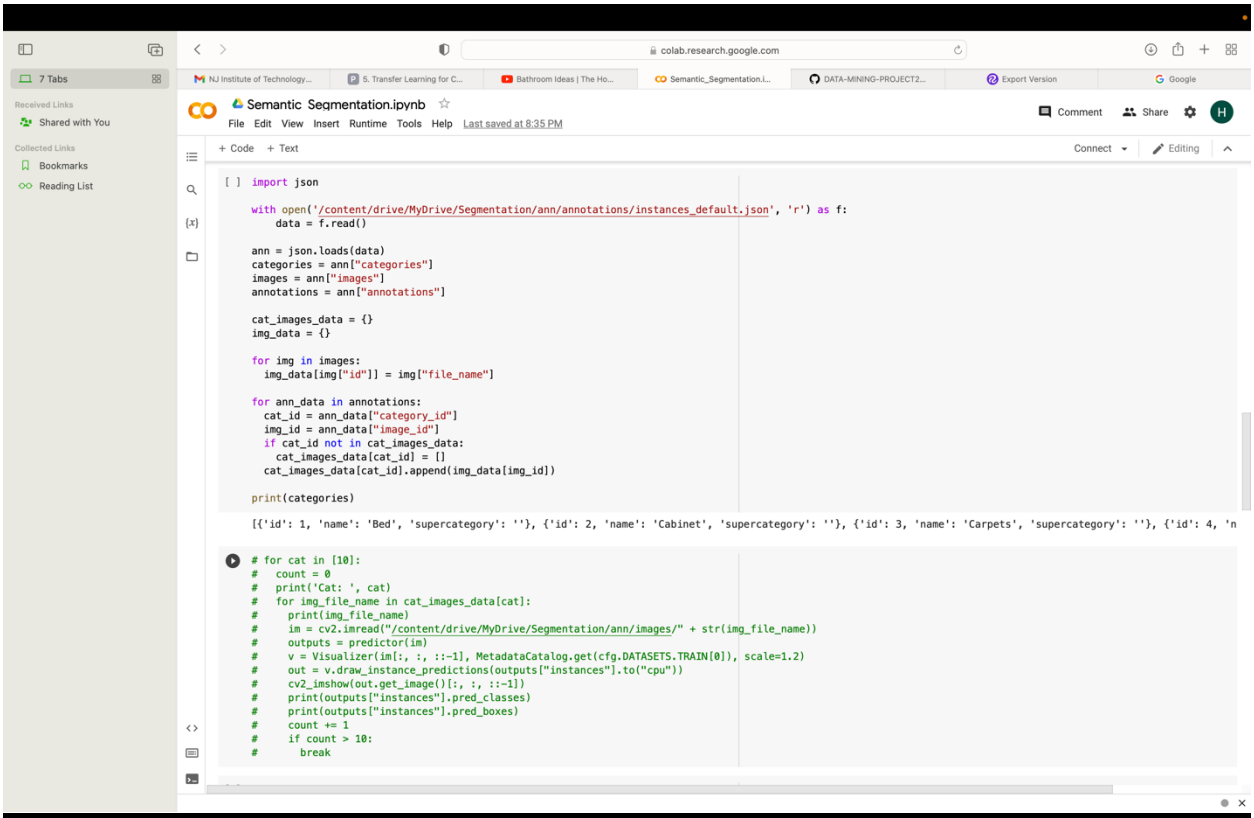
[ ] import torch, detectron2
!nvcc --version
TORCH_VERSION = ".".join(torch.__version__.split(".")[:2])
CUDA_VERSION = torch.__version__.split("+")[-1]
print("torch: ", TORCH_VERSION, "; cuda: ", CUDA_VERSION)
print("detectron2:", detectron2.__version__)
nvcc: NVIDIA (R) Cuda compiler driver
Copyright (c) 2005-2021 NVIDIA Corporation
Built on Sun_Feb_14_21:12:58_PST_2021
Cuda compilation tools, release 11.2, V11.2.152
Build cuda_11.2.r11.2/compiler.29618528_0
torch: 1.12 ; cuda: cu113
detectron2: 0.6
import detectron2
from detectron2.utils.logger import setup_logger
setup_logger()
import numpy as np
import os, json, cv2, random
from google.colab.patches import cv2_imshow
from detectron2 import model_zoo
from detectron2.engine import DefaultPredictor
from detectron2.config import get_cfg
from detectron2.utils.visualizer import Visualizer
from detectron2.data import MetadataCatalog, DatasetCatalog
[ ] cfg = get_cfg()
model = "COCO-PanopticSegmentation/panoptic_fpn_R_50_3x.yaml"
cfg.merge_from_file(model_zoo.get_config_file(model))
cfg.MODEL.ROI_HEADS.SCORE_THRESH_TEST = 0.5
cfg.MODEL.WEIGHTS = model_zoo.get_checkpoint_url(model)
predictor = DefaultPredictor(cfg)
[ ] def get_mappings():
mappings = {}
mappings[1] = 59
mappings[7] = 57
mappings[8] = 62
mappings[10] = 75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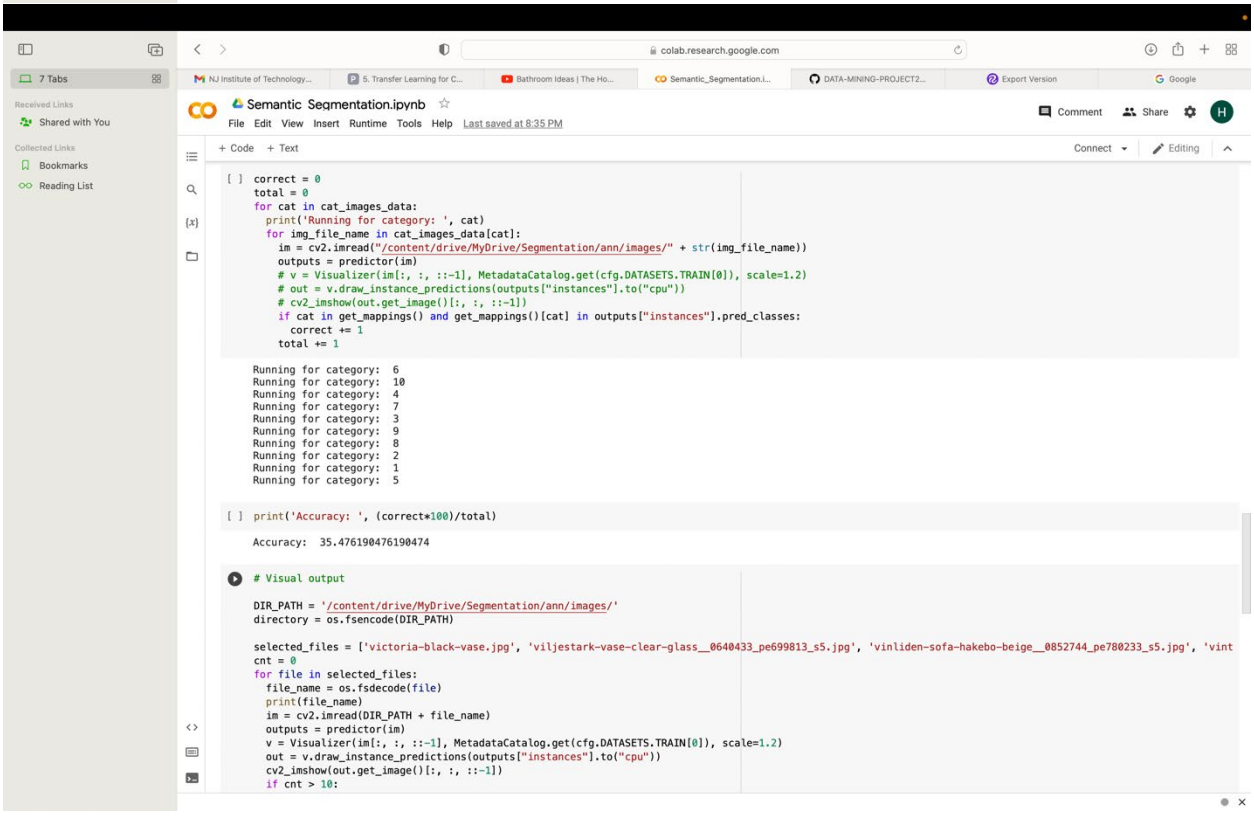
[ ] import json
with open('/content/drive/MyDrive/Segmentation/ann/annotations/instances_default.json', 'r') as f:
data = f.read()
ann = json.loads(data)
categories = ann["categories"]
images = ann["images"]
annotations = ann["annotations"]
cat_images_data = {}
img_data = {}
for img in images:
img_data[img["id"]] = img["file_name"]
for ann_data in annotations:
cat_id = ann_data["category_id"]
img_id = ann_data["image_id"]
if cat_id not in cat_images_data:
cat_images_data[cat_id] = []
cat_images_data[cat_id].append(img_data[img_id])
print(categories)
[{'id': 1, 'name': 'Bed', 'supercategory': ''}, {'id': 2, 'name': 'Cabinet', 'supercategory': ''}, {'id': 3, 'name': 'Carpets', 'supercategory': ''}, {'id': 4, 'n
for cat in [10]:
count = 0
print('Cat: ', cat)
for img_file_name in cat_images_data[cat]:
print(img_file_name)
im = cv2.imread("/content/drive/MyDrive/Segmentation/ann/images/" + str(img_file_name))
outputs = predictor(im)
v = Visualizer(im[:, :, ::-1], MetadataCatalog.get(cfg.DATASETS.TRAIN[0]), scale=1.2)
out = v.draw_instance_predictions(outputs["instances"].to("cpu"))
cv2_imshow(out.get_image()[:, :, ::-1])
print(outputs["instances"].pred_classes)
print(outputs["instances"].pred_boxes)
count += 1
if count > 10:
break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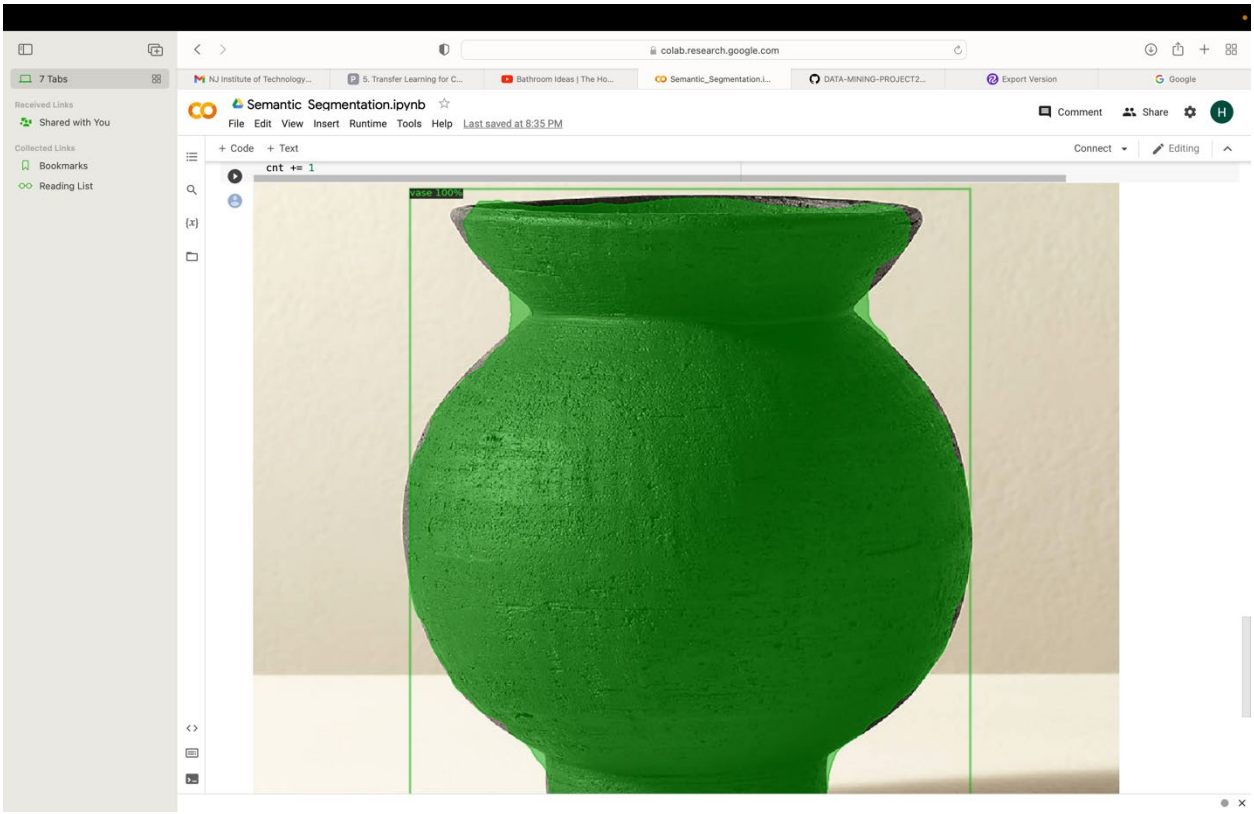
[ ] correct = 0
total = 0
for cat in cat_images_data:
print('Running for category: ', cat)
for img_file_name in cat_images_data[cat]:
im = cv2.imread("/content/drive/MyDrive/Segmentation/ann/images/" + str(img_file_name))
outputs = predictor(im)
# v = Visualizer(im[:, :, ::-1], MetadataCatalog.get(cfg.DATASETS.TRAIN[0]), scale=1.2)
# out = v.draw_instance_predictions(outputs["instances"].to("cpu"))
# cv2_imshow(out.get_image()[:, :, ::-1])
if cat in get_mappings() and get_mappings()[cat] in outputs["instances"].pred_classes:
correct += 1
total += 1
Running for category: 6
Running for category: 10
Running for category: 4
Running for category: 7
Running for category: 3
Running for category: 9
Running for category: 8
Running for category: 2
Running for category: 1
Running for category: 5
[ ] print('Accuracy: ', (correct*100)/total)
Accuracy: 35.476190476190474
# Visual output
DIR_PATH = '/content/drive/MyDrive/Segmentation/ann/images/'
directory = os.fsencode(DIR_PATH)
selected_files = ['victoria-black-vase.jpg', 'viljestark-vase-clear-glass__0640433_pe699813_s5.jpg', 'vinliden-sofa-hakebo-beige__0852744_pe780233_s5.jpg', 'vint
cnt = 0
for file in selected_files:
file_name = os.fsdecode(file)
print(file_name)
im = cv2.imread(DIR_PATH + file_name)
outputs = predictor(im)
v = Visualizer(im[:, :, ::-1], MetadataCatalog.get(cfg.DATASETS.TRAIN[0]), scale=1.2)
out = v.draw_instance_predictions(outputs["instances"].to("cpu"))
cv2_imshow(out.get_image()[:, :, ::-1])
if cnt > 10: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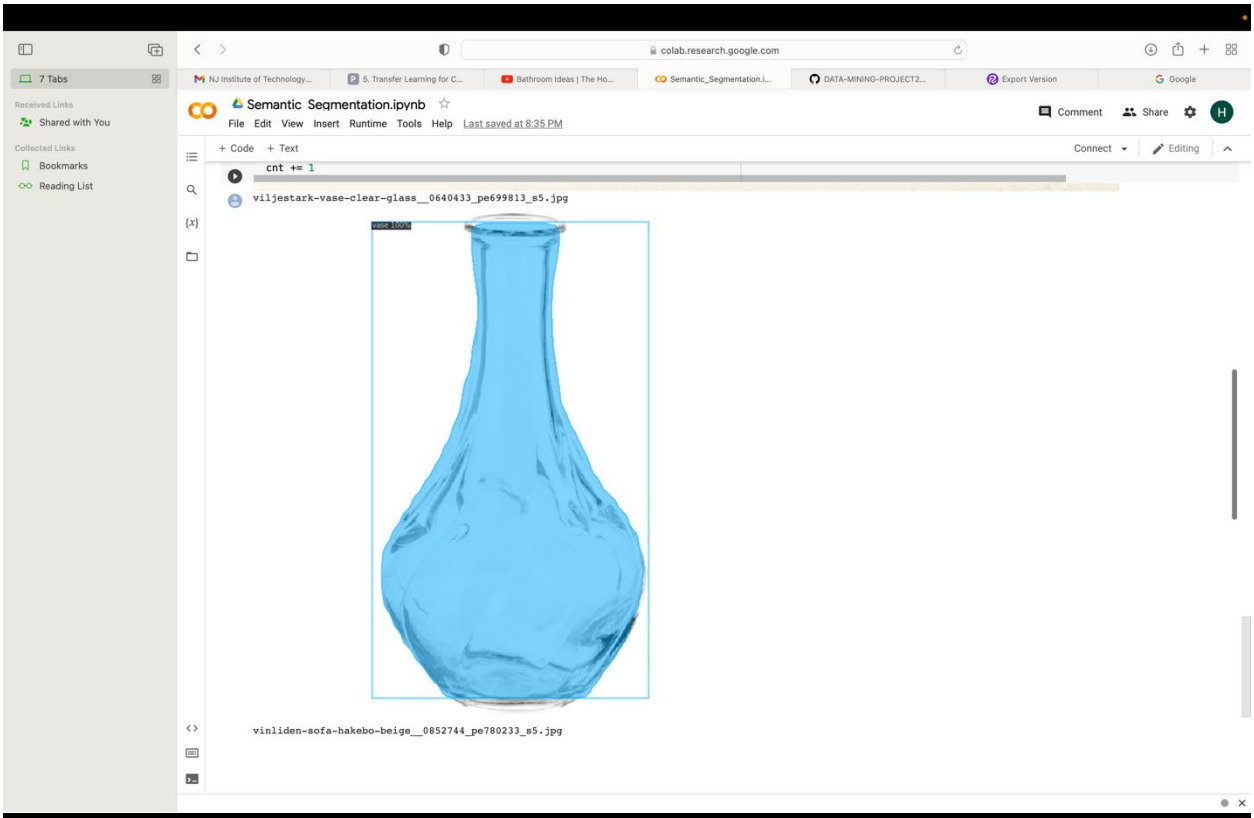
cnt += 1
vase 100%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cnt += 1
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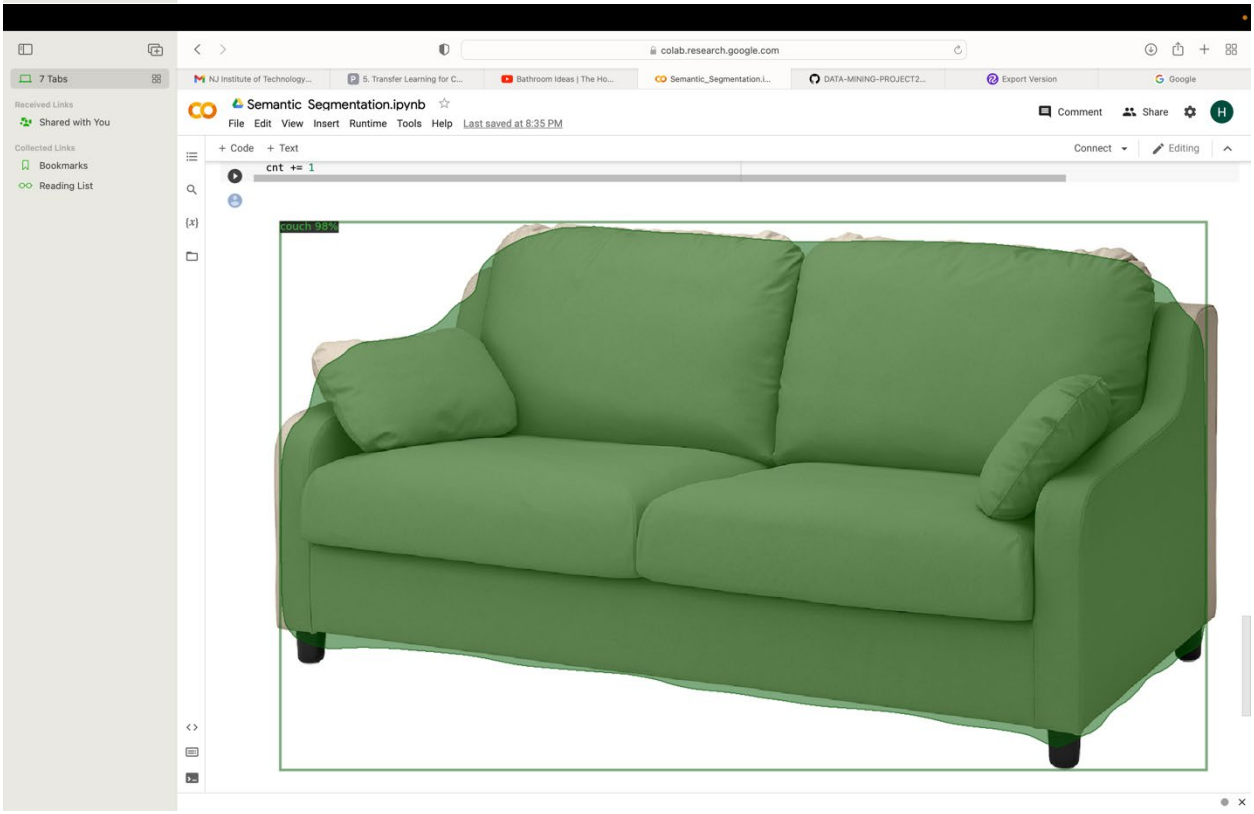
vase 100%
vinliden-sofa-hakebo-beige__0852744_pe780233_s5.jpg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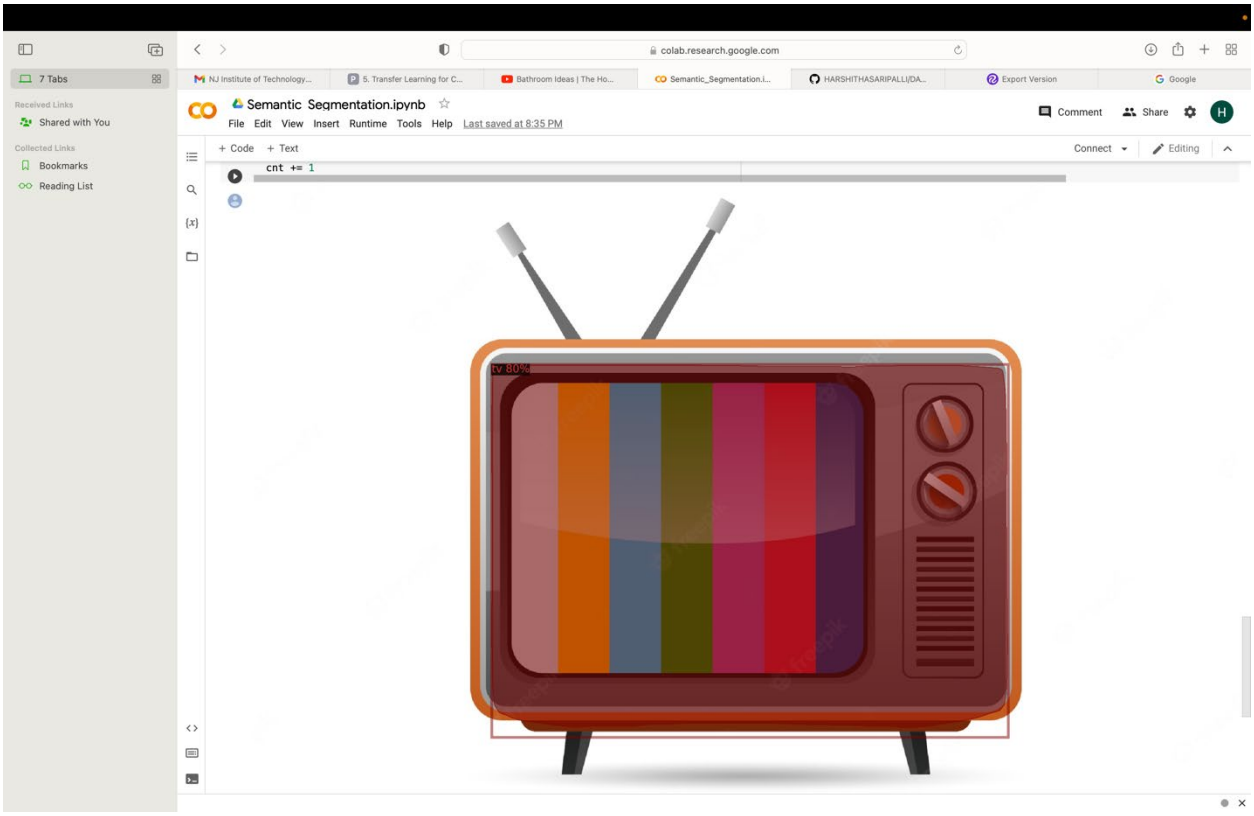
cnt += 1
couch 98%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cnt += 1
tv 80%