Automatic License Plate Recognition

Approach taken for license plate detection:

- Collect images of all cars – found the dataset on Kaggle
- Annotate car images for license plate detection
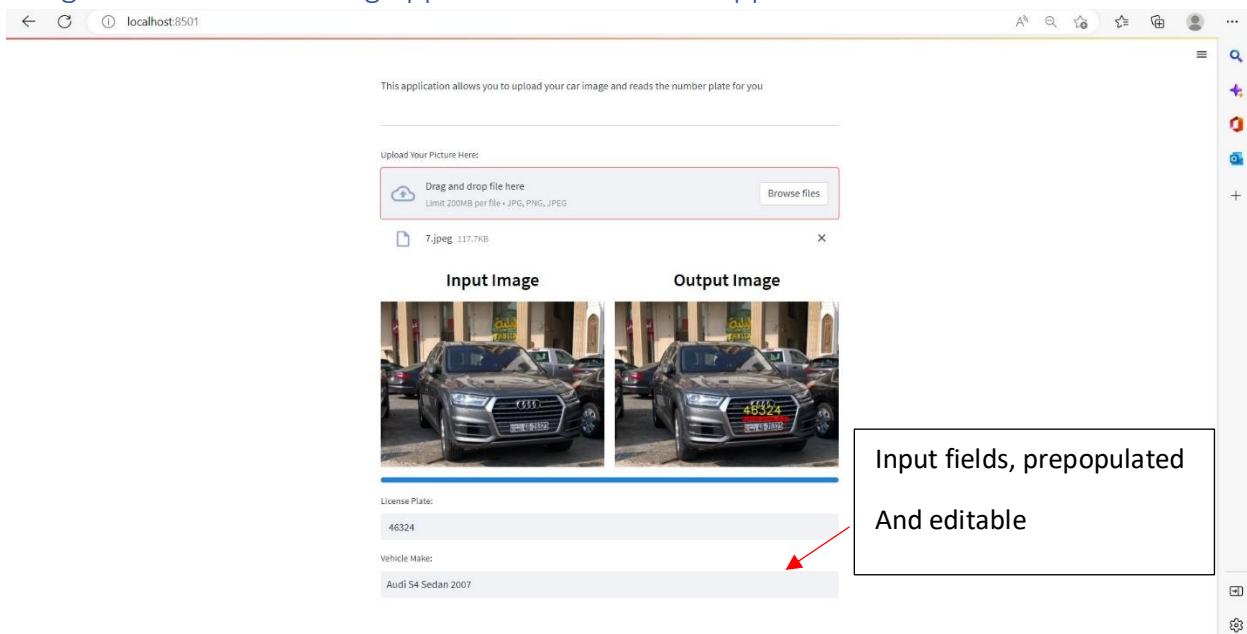- Trained object detection model YOLO v3 for license plate detection

Approach taken for reading license plate:

- Used pytesseract to read a number plate
- language set to English
- Psm set to 8
- Oem to 3
- Image pre-processing:
  - Grayscale + Thresh binary Inv + dilatation + contour
  - Height of the bounding box on letters to be greater than a certain threshold *(set by experiment – to only read the number)*

Approach taken for identifying car make:

- Scrapped data for 195 different car models, with 45 images of each car.
- Trained a Keras classifier to classify car images.

Integrated all the following approaches into a web-app

Drag and drop file here
Limit 200MB per file • JPG, PNG, JPEG

Browse files

📄 5.jpeg 321.4KB   ✕

Input Image

Output Image

License Plate:

366987

Press Enter to apply

Vehicle Make:

Mercedes-Benz 300

Input Image

Output Image

License Plate:

3175560

Press Enter to apply

Vehicle Make:

Dodge Caravan Minivan 1997