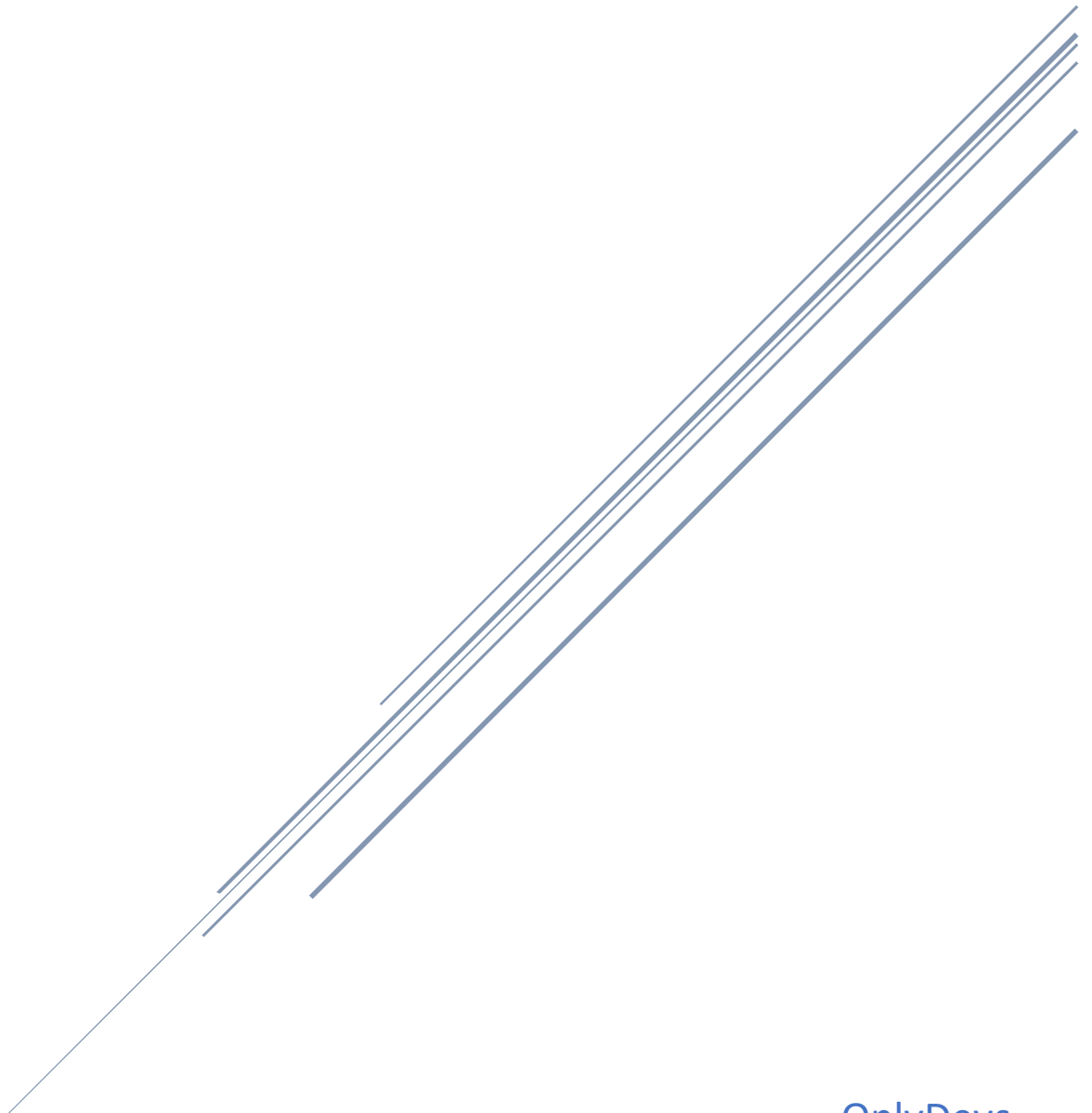


LICENSE PLATE READER

Implementation strategy document



OnlyDevs
Software Engineering Semester 3

Setup

1. Cloning baseline code
2. Creating a virtual environment
3. Installing dependencies
4. Installing Tensorflow Object Detection
5. Cloning pre-trained models

Data

1. Cloning images from Kaggle
2. Creating a training and testing partition

Training

1. Updating the LabelMap
2. Creating TF records
3. Updating transfer learning config
4. Training the model

Detecting plates

1. Detecting plates from an image
2. Detecting plates from video

Applying OCR

1. Splitting GPU
2. Setup EasyOCR
3. Applying detection thresholding
4. Extract image width and height
5. Loop through detections and apply OCR
6. Filtering algorithm
7. Final OCR function
8. Applying ANPR in real time

Saving results

1. Importing dependencies
2. Building a save function
3. Saving plates from video

Using the saved results in our application