| TRUCK DETECTION TASKS | | | | | |
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| **TASK** | **Description** | **Points** | **Estimated Time** | **Assigned to** | **Problems/status** |
| **FALL** | | | | | |
| Create github repo | Set up repo for jupyter notebooks | 1 | < 1 hour | Hy Dang | **DONE** |
| Research helper technology | Look into scripts, small ultity applications (Bulk satellite image downlaoder), image "segmenter" and other helper tools that will make development easier. | 3 | 1 hour | Hy Dang | **DONE** |
| Get images from mapbox | Set up mapbox functionality | 3 | 8+ | Minh | **DONE** |
| Create Dataset | Need a centralized data set to pull from. Store in google drive folder | 3 | ~4 | Hy and Minh | **DONE** |
| Label images | Hand label images | 5 | 10 sec per image ~5hrs per person | ALL | **DONE** |
| Research Data Model | Find best model to use for imag segmentation | 3 | ~4 | Ben, Trang | **DONE** |
| Create Baseline | Pytorch Model of the researched data model - UNET | 3 | ~4 | Hy Dang | **DONE** |
| Image Processing | Map image into same dimensions | 3 | ~4 | Minh | **DONE** |
| Train Model | Upload weights to google drive | 2 | ~4 | Trang | **DONE** |
| Document Work | Everyone will fill out a google document per task to infrom team on what they did and where they are at with the work | 1 | ~1 | ALL | **DONE** |
| Create Presentation IAB | | 1 | 1 | Ben | **DONE** |
| Present Project | | 1 | 4 min | Ben | **DONE** |
| **WINTER BREAK** | | | | | |
| Grow dataset to around 50-100 truck images | Pick images with trucks from MapBoxAPI | 4 | 20 | ALL | **DONE** |
| Augment Dataset, grow number of truck images to around 3-500 | Scale up the dataset | 3 | 5 | Ben | **DONE** |
| Transition baseline to truck dataset | | 3 | 5 | Trang, Ben, Dorian | **DONE** |
| Train model on truck dataset | Train model with truck dataset | 2 | 10 | Trang | **DONE** |
| Set up meeting with Greg to clarify project outcomes. | | 3 | 2 | Ben | **DONE** |
| Researching solving problem with instance segmentation | Researching solving problem | 5 | 10 | Trang, Hy | **DONE** |
| Transition to Detectron2 | Solving instance segmentation problem | 5 | 10 | Trang, Hy | **DONE** |
| **SPRING** | | | | | |
| **TRUCK DETECTION PROJECT** | | | | | |
| Researching Engineering Problem | Make the Notebook well-engineering | 5 | 5 | Hy | **DONE** |
| Meeting to discuss about Engineering problem | Raise topic | 3 | 2 | ALL | **DONE** |
| **Python Script Transition** | | | | | |
| Convert getting images | Convert gettiing images notebook to python script | 3 | 2 | Hy | **DONE** |
| Setup File for training model | Setup file to train the model | 3 | 3 | Ben | **DONE** |
| Setup Requirements System | Setup versions/check versions | 3 | 4 | Hy | **DONE** |
| Setup Predict Model | Predicting file script | 5 | 5 | Hy | **DONE** |
| Setup Training Model | Training file script | 4 | 5 | Hy | **DONE** |
| Batching prediction | Predicting multiple images | 4 | 3 | Hy | **DONE** |
| Divided Work Solution | Storaging problem solver | 4 | 7 | Hy | **DONE** |
| Testing | Testing | 4 | 5 | Hy | **DONE** |
| Google Cloud Platform | Create VM | 4 | 5 | Dorian | **DONE** |
| Implement the code on VM | | 4 | 6 | Dorian | **DONE** |
| Document the codes | Implement pydoc | 3 | 3 | Ben | **DONE** |
| Final Presentation | | | | ALL | **DONE** |
| **SALES PREDICTION PROJECT** | | | | | |
| Research Dataset | | 4 | 4 | Minh, Trang | **DONE** |
| Research Model | | 5 | 3 | Minh, Trang | **DONE** |

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|---|---|---|---|---|---|
| Make the code run with FastAI | | 4 | 5 | Minh, Trang | **DONE** |
| Preprocessing the dataset | | 6 | 6 | Minh, Trang | **DONE** |