

Portfolio – Sprint 2 – Team 5

Main tasks for this sprint:

- Pre-processing for objects of interest,
- Image acquisition
- Basic feature extraction (color, area, perimeter and centroid)
- Other features (color-shape-textures)
- Features selection
- Classifier implementation
- Training phase (hyperparameter optimization)
- Test phase (performance estimation)
- Graphical interface
- Demo & Pecha Kucha preparation
- Presentation

The main object for this sprint was to classify the objects of interest according to color and shape by obtaining many features and later classifying the objects by analyzing these features. Different methods of classification were implemented and later compared.

Task	Done by who
Taking new images	Morris & Malcolm
Pre-processing for objects of interest	Morris
Basic feature extraction (color, area, perimeter and centroid)	Malcolm & Morris
Other features (color-shape-textures) OpenCV	Ole
Feature selection	Morris & Malcolm
Training phase and labeling	Ole & Malcolm
Developing KNN classifier	Malcolm
Developing Aspect Ratio classifier	Ole
Developing Bayes Classifiers	Ole
Classifier implementation	Morris
Graphical interface	Ole
Demo & Pecha Kucha preparation	Ole & Malcolm
Holding Presentation	Ole