

# **Image Processing Project**

## **Object recognition for coins calculation**

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# Agenda

- Notes
- Project progress
- Project Overview
- Project Analysis
- GUI
- Conclusion

# Notes

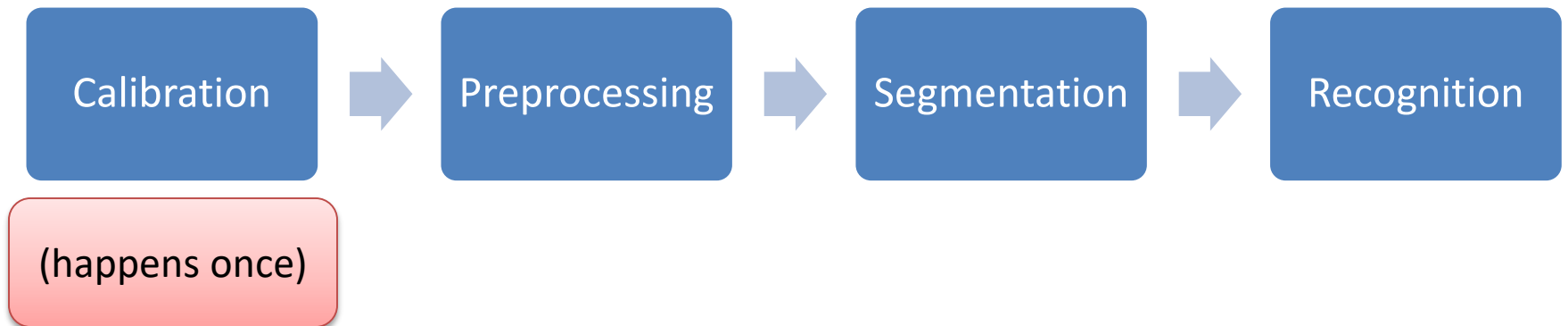
- Shared dataset: If existed calibration is not suitable, build yours!
- Report: more diagrams & visual outputs, less words (Not enough! → readme.txt & code comments)

# Project progress

## Coin calculation

- Object recognition
- Money estimation

# Project Overview



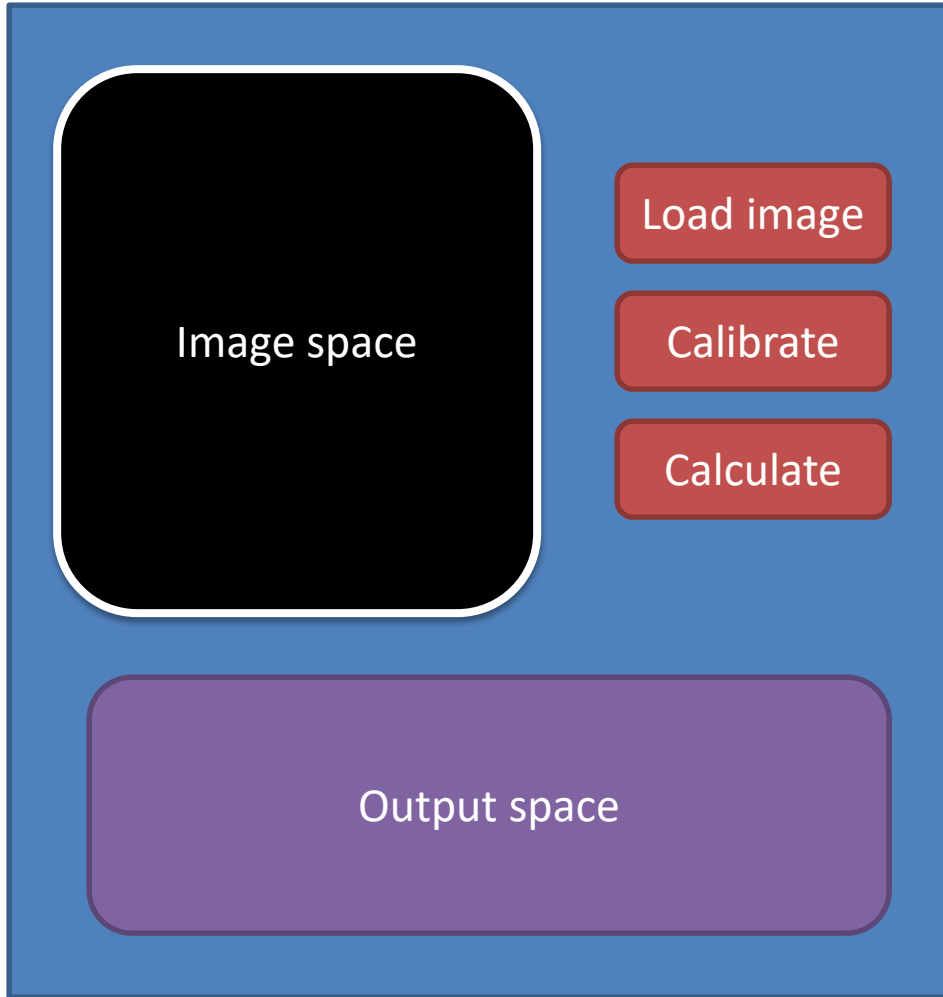
# Project Analysis I

- Qualitative
  - Correct and incorrect results.
- Quantitative
  - Table (No. Success, No. Fail, Accuracy, and total summary) using your own dataset and provided dataset [Image-Oriented].

# Project Analysis II

- Noise Study
  - $[G(x,y) = f(x,y) / r + N]$  where  $r$  is ranging value  $[0.1, 0.2, \dots, 1]$  and  $N$  is constant additive white noise.
  - Graph (x-axis: accuracy, y-axis:  $r$ )
  - Hint:  $N \rightarrow \text{imnoise}(\text{im2double}(\text{Org})/r, \text{'gaussian'})$

# GUI





# Conclusion

- Look at project handout
- Deadline: 25 Jan 2017
- Clean code & clear report
- TP review: cons & pros
  
- Good Luck!