

# IVR Coursework 1

## Report

Weiting Goh (S1450710) and Tomas Markevicius(S1452595)

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## 1 Introduction

To recognise and count the coins in an image, Coinsy, have three subtasks: 1) Image processing, 2) Object recognition, and 3) Classification (also counting). For Coinsy to be a proficient counter, we have to first train it. The processes that Coinsy goes through for training differs from evaluation as described in figure 1. We will describe her training in the next section - methodology, and her evaluation results after. Lastly, we conclude with a discussion on Coinsy performance.

In the following subsections, we give an overview of the operation pipeline for each tasks.

There are similarities and differences in the process for training the Coinsy and using the classifier (such as in the demo, as described in the figures below. In order to have the same type of image that is not affected by light, Coinsy normalise any images that goes through it. Then it applies the same image segmentation algorithm to understand the objects present in the foreground. There after, the process for training and evaluating Coinsy differs.

## **1.1 Image Processing**

parts: 1) Pre processing of input image, 2) Image segmentation, 3) Object Identification and 4)

## **2 Methodology**

THIS IS THE TARGET

## **3 Result**

Appendix here