Project Title: Dice Adder for Various Dice Types

Team Members: Sarah Brown

Overview

- Project Goals
  - Process a video stream of dice rolling into a tray to display and sum the result. This project will focus on a standard 7 polyhedral dice set (potentially minus the d4 due to camera angles involved). In addition, I would like to be able to count 6-sided dice with pips on them instead of numbers.
- Project Scope
  - This project will require identifying which dice is which type of dice (d4, d6, d8, d10, d12, d20, d%), which side of the die was facing up, and processing what number was on the side facing up. This project will focus on shape recognition and text processing to be able to identify die type and numbers.

Plan

- Progress Report Objectives
  - By the time of the progress report, I will have collected images to use as a testing dataset and filter them with edge detection and other methods. I will be able to identify die type based on shape. In addition, I will also focus on working through different examples focused on topics related to identifying text with different packages.
- Plan to Achieve Objectives
  - Collect images to test with
  - Filter images to dice
  - Identify die type based on shape
  - Work through examples on text recognition