

## Project: Credit card detection

### Method

1. Edge detection for the input image is performed. Detected edges will be helpful in extracting structural objects in the image. Edge detection is done using cv2.canny function.
2. Contours are obtained using cv2.findContours function. Detected edge map is passed as input to the function.
3. The contours are sorted in decreasing order of area. This is done to avoid selection of minute details in the next step.
4. The contours are processed to check if the contour approximates a quadrilateral.
5. The contour approximating a polygon with 4 corners is selected and drawn on the input image to explicitly show the detected contour.

### Results and Evaluation

#### Positive Examples

INPUT IMAGE

DETECTED CONTOUR





## Failure cases

Wrong contour detected



The pattern in card causes prediction of incomplete contour of the card and the quadrilateral check fails. This causes detection of smaller polygon.