University Of The Punjab

Gujranwala Campus

Department Of Information Technology

Computer Vision Assignment

Feature Extraction

Boundary Detection

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Boundary Detection:

Code:

```
% Read the image
Coins = imread('coins.png');
% Convert the image to binary
CoinsBW = im2bw(Coins);
% Fill holes in the binary image
FilledCoinsBW = imfill(CoinsBW, 'holes');
% Extract boundaries of objects
boundaries = bwboundaries(FilledCoinsBW);
% Display the original image
imshow(Coins);
hold on;
% Plot the boundary of the 2nd object in red
plot(boundaries{2}(:,2), boundaries{2}(:,1), 'r', 'LineWidth', 2);
% Plot the boundary of the 7th object in green
plot(boundaries{7}(:,2), boundaries{7}(:,1), 'g', 'LineWidth', 2);
hold off;
CoinsBW = imbinarize(rgb2gray(Coins));
```

OUTPUT: