Code

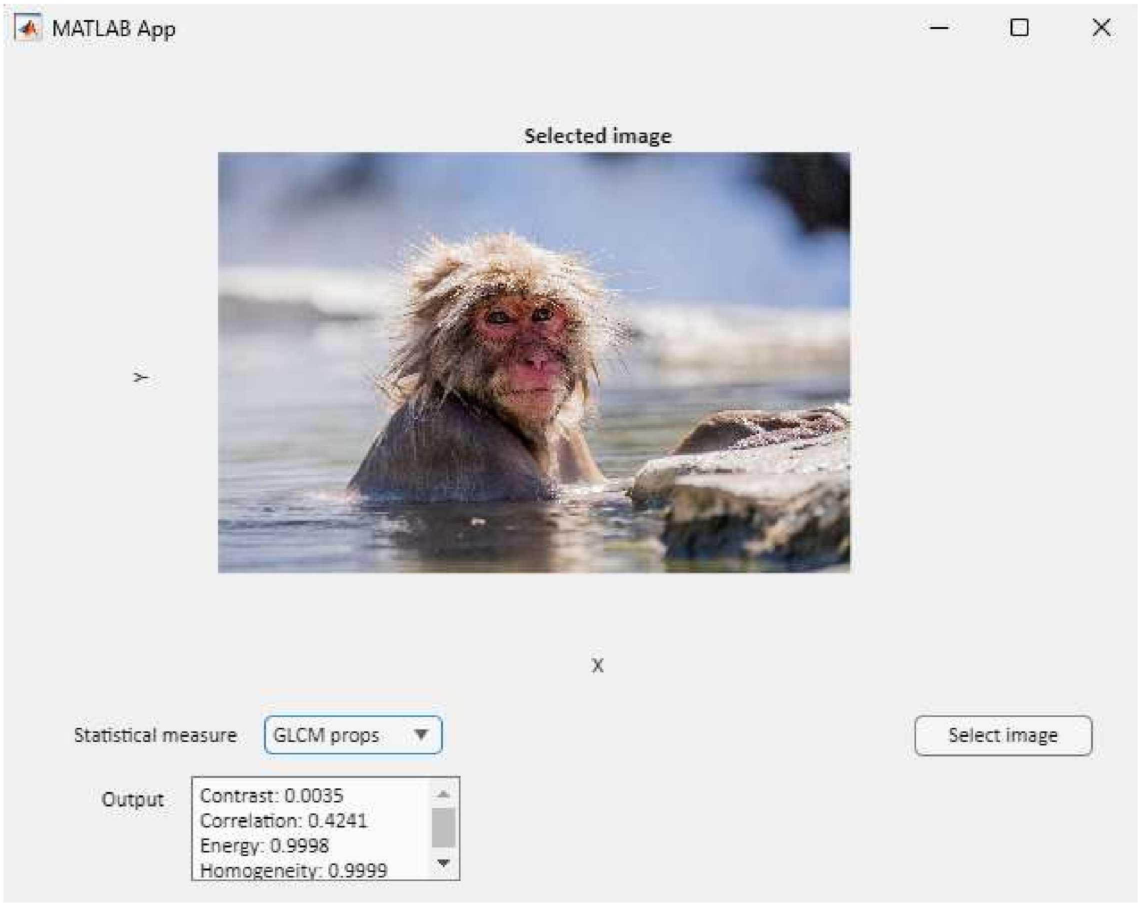
```
properties (Access = private)
    im = []; % Description
end

% Callbacks that handle component events
methods (Access = private)

    % Button pushed function: SelectimageButton
    function SelectimageButtonPushed(app, event)
        [fname, fpath] = uigetfile( ...
            {'*.jpg;*png;*jpeg'}, ...
            "Select image" ...
         );
        app.im = imread([fpath, fname]);
        axis(app.UIAxes, 'off');
        app.UIAxes.Visible = "on";
        app.StatisticalmeasureDropDown.Enable = "on";
        app.StatisticalmeasureDropDownLabel.Enable = "on";
        app.OutputTextArea.Enable = "on";
        app.OutputTextAreaLabel.Enable = "on";
        imshow(app.im, 'Parent', app.UIAxes);
        title(app.UIAxes, 'Selected image');
    end

    % Value changed function: StatisticalmeasureDropDown
    function StatisticalmeasureDropDownValueChanged(app, event)
        value = app.StatisticalmeasureDropDown.Value;
        I = rgb2gray(app.im);
        [r, c] = size(I);
        I = double(I(:));
        switch (value)
            case "Choose"
                app.OutputTextArea.Value = "";
            case "Min"
                app.OutputTextArea.Value = num2str(min(I));
            case "Max"
                app.OutputTextArea.Value = num2str(max(I));
            case "Mean"
                app.OutputTextArea.Value = num2str(mean(I));
            case "Median"
                app.OutputTextArea.Value = num2str(median(I));
            case "Mode"
                app.OutputTextArea.Value = num2str(mode(I));
            case "Std deviation"
                app.OutputTextArea.Value = num2str(std(I));
            case "Variance"
                app.OutputTextArea.Value = num2str(var(I));
            case "GLCM props"
                I = reshape(I, r, c);
                [glcm, ~] = graycomatrix(I);
                stats = graycoprops(glcm);
                fs = fieldnames(stats);
                op = "";
                for i = 1:length(fs)
                    f = string(fs(i));
                    op = op + sprintf("%s: %.4f\n", f, stats.(f));
                end
                app.OutputTextArea.Value = op;
            otherwise
                app.OutputTextArea.Value = "error: unknown option";
        end
    end
end
```

Output



```
Contrast: 0.0035
Correlation: 0.4241
Energy: 0.9998
Homogeneity: 0.9999
```