function varargout = testing(varargin)

gui\_Singleton = 1;

gui\_State = struct('gui\_Name', mfilename, ...

'gui\_Singleton', gui\_Singleton, ...

'gui\_OpeningFcn', @testing\_OpeningFcn, ...

'gui\_OutputFcn', @testing\_OutputFcn, ...

'gui\_LayoutFcn', [] , ...

'gui\_Callback', []);

if nargin && ischar(varargin{1})

gui\_State.gui\_Callback = str2func(varargin{1});

end

if nargout

[varargout{1:nargout}] = gui\_mainfcn(gui\_State, varargin{:});

else

gui\_mainfcn(gui\_State, varargin{:});

end

function testing\_OpeningFcn(hObject, eventdata, handles, varargin)

handles.output = hObject;

axes(handles.axes1);

imshow('blank.jpg');

axis off;

guidata(hObject, handles);

function varargout = testing\_OutputFcn(hObject, eventdata, handles)

varargout{1} = handles.output;

function start\_Callback(hObject, eventdata, handles)

handles.vid = videoinput('winvideo' , 1, 'YUY2\_640X480');

guidata(hObject, handles);

function face\_Callback(hObject, eventdata, handles)

triggerconfig(handles.vid ,'manual');

set(handles.vid, 'TriggerRepeat',inf);

set(handles.vid, 'FramesPerTrigger',1);

handles.vid.ReturnedColorspace = 'rgb';

handles.vid.Timeout = 5;

start(handles.vid);

while(1)

facedetector = vision.CascadeObjectDetector;

trigger(handles.vid);

handles.im = getdata(handles.vid, 1);

bbox = step(facedetector, handles.im);

hello = insertObjectAnnotation(handles.im,'rectangle',bbox,'Face');

imshow(hello);

end

guidata(hObject, handles);

% Executes on button press in stop.

function stop\_Callback(hObject, eventdata, handles)

% hObject handle to stop

% eventdata reserved - to be defined in a future version of MATLAB

% handles structure with handles and user data

handles.output = hObject;

stop(handles.vid),clear handles.vid %, ,delete(handles.vid)

guidata(hObject, handles);

function eyes\_Callback(hObject, eventdata, handles)

% hObject handle to eyes

% eventdata reserved to be defined in a future version of MATLAB

% handles structure with handles and user data

triggerconfig(handles.vid ,'manual');

set(handles.vid, 'TriggerRepeat',inf);

set(handles.vid, 'FramesPerTrigger',1);

handles.vid.ReturnedColorspace = 'rgb';

handles.vid.Timeout = 2;

start(handles.vid);

while(1)

bodyDetector = vision.CascadeObjectDetector('EyePairBig');

bodyDetector.MinSize = [11 45];

%bodyDetector.ScaleFactor = 1.05;

trigger(handles.vid);

handles.im = getdata(handles.vid, 1);

bbox = step(bodyDetector, handles.im);

hello = insertObjectAnnotation(handles.im,'rectangle',bbox,'EYE');

imshow(hello);

end

guidata(hObject, handles);

% Executes on button press in upperbody.

function upperbody\_Callback(hObject, eventdata, handles)

% hObject handle to upperbody

% eventdata reserved to be defined in a future version of MATLAB

% handles structure with handles and user data

triggerconfig(handles.vid ,'manual');

set(handles.vid, 'TriggerRepeat',inf);

set(handles.vid, 'FramesPerTrigger',1);

handles.vid.ReturnedColorspace = 'rgb';

handles.vid.Timeout = 5;

start(handles.vid);

while(1)

bodyDetector = vision.CascadeObjectDetector('UpperBody');

bodyDetector.MinSize = [60 60];

bodyDetector.ScaleFactor = 1.05;

trigger(handles.vid);

handles.im = getdata(handles.vid, 1);

bbox = step(bodyDetector, handles.im);

hello = insertObjectAnnotation(handles.im,'rectangle',bbox,'UpperBody');

imshow(hello);

end

guidata(hObject, handles);