classdef Static\_fitting\_software\_exported < matlab.apps.AppBase

% Properties that correspond to app components

properties (Access = public)

UIFigure matlab.ui.Figure

GridLayout matlab.ui.container.GridLayout

LeftPanel matlab.ui.container.Panel

Panel matlab.ui.container.Panel

Label\_7 matlab.ui.control.Label

filepath matlab.ui.control.EditField

Label matlab.ui.control.Label

test\_number matlab.ui.control.EditField

XLabel matlab.ui.control.Label

X\_name matlab.ui.control.EditField

YLabel matlab.ui.control.Label

Y\_name matlab.ui.control.EditField

Label\_4 matlab.ui.control.Label

bias matlab.ui.control.NumericEditField

Panel\_3 matlab.ui.container.Panel

Label\_3 matlab.ui.control.Label

coeff\_polyfit matlab.ui.control.NumericEditField

Label\_2 matlab.ui.control.Label

k\_polyfit matlab.ui.control.NumericEditField

Panel\_2 matlab.ui.container.Panel

X1EditFieldLabel matlab.ui.control.Label

X1EditField matlab.ui.control.NumericEditField

X2EditFieldLabel matlab.ui.control.Label

X2EditField matlab.ui.control.NumericEditField

Y1EditFieldLabel matlab.ui.control.Label

Y1EditField matlab.ui.control.NumericEditField

Y2EditFieldLabel matlab.ui.control.Label

Y2EditField matlab.ui.control.NumericEditField

Panel\_4 matlab.ui.container.Panel

XEditField\_2Label matlab.ui.control.Label

x\_cross\_point matlab.ui.control.NumericEditField

YEditField\_2Label matlab.ui.control.Label

y\_cross\_point matlab.ui.control.NumericEditField

Panel\_5 matlab.ui.container.Panel

XEditField\_3Label matlab.ui.control.Label

X\_MAX matlab.ui.control.NumericEditField

YEditField\_3Label matlab.ui.control.Label

Y\_MAX matlab.ui.control.NumericEditField

Panel\_6 matlab.ui.container.Panel

getfile matlab.ui.control.Button

Renew matlab.ui.control.Button

Button matlab.ui.control.Button

saveimage matlab.ui.control.Button

close matlab.ui.control.Button

RightPanel matlab.ui.container.Panel

XEditFieldLabel matlab.ui.control.Label

X matlab.ui.control.NumericEditField

YEditFieldLabel matlab.ui.control.Label

Y matlab.ui.control.NumericEditField

Label\_10 matlab.ui.control.Label

UIAxes matlab.ui.control.UIAxes

end

% Properties that correspond to apps with auto-reflow

properties (Access = private)

onePanelWidth = 576;

end

properties (Access = private)

end

% Callbacks that handle component events

methods (Access = private)

% Button pushed function: Renew

function RenewButtonPushed(app, event)

function [r2 rmse] = rsquare(y,f,varargin)

if isempty(varargin); c = true;

elseif length(varargin)>1; error 'Too many input arguments';

elseif ~islogical(varargin{1}); error 'C must be logical (TRUE||FALSE)'

else c = varargin{1};

end

% Compare inputs

if ~all(size(y)==size(f));

error 'Y and F must be the same size';

end

% Check for NaN

tmp = ~or(isnan(y),isnan(f));

y = y(tmp);

f = f(tmp);

if c; r2 = max(0,1 - sum((y(:)-f(:)).^2)/sum((y(:)-mean(y(:))).^2));

else r2 = 1 - sum((y(:)-f(:)).^2)/sum((y(:)).^2);

if r2<0

warning('Consider adding a constant term to your model')

r2 = 0;

end

end

rmse = sqrt(mean((y(:) - f(:)).^2));

end

%读取表格x y轴数据

function [x,y] = selectDatapoints(ax)

% Remove any pre-existing rectanlges (if any)

delete(findall(ax, 'Type', 'images.roi.Rectangle'))

% Get coordinates of all data points in the axes

xyobj = findall(ax.Children, '-Property','xData');

xydata = get(xyobj, {'XData','YData'});

xydataMat = cell2mat(xydata'); % change title of axes to instructions, in red

originalTitle = get(ax.Title, {'String', 'Color'});

set(ax.Title, 'String', 'Draw rectangle around desired datapoints', 'Color', 'r')

% allow user to draw rectangle; see more options:

% https://www.mathworks.com/help/images/ref/drawrectangle.html

pan(ax, 'off') %turn off panning so the interaction doesn't drag the data.

roi = drawrectangle(ax);

% quit if figure is closed

if ~isvalid(roi)

x = [];

y = [];

return

end

% Return original title

set(ax.Title, 'String', originalTitle{1}, 'Color', originalTitle{2})

% determine which coordinates are within the ROI

isIn = xydataMat(1,:) >= roi.Position(1) & xydataMat(1,:) <= sum(roi.Position([1,3])) ...

& xydataMat(2,:) >= roi.Position(2) & xydataMat(2,:) <= sum(roi.Position([2,4]));

% Delete ROI

delete(roi)

% Return outputs

x = xydataMat(1,isIn);

y = xydataMat(2,isIn);

end

function [x, y] = selectDataPoints(~, ax)

roi = drawpoint(ax);

x = double(roi.Position(1));

y = double(roi.Position(2));

end

file=app.filepath.Value;

f=readmatrix(file,'Range','A:B');

a=f(:,[2]);

b=f(:,[1]);

[m1,n1]=size(a);

[m2,n2]=size(b);

%拟合计算离散数据

plot(app.UIAxes,a,b,'.',"LineWidth",2);

hold(app.UIAxes,'on');

%在原坐标系中保持原图不动

%[xx, yy] = selectDatapoints(app.UIAxes);

[x1, y1] = selectDataPoints(app,app.UIAxes);

app.X1EditField.Value=x1;

app.Y1EditField.Value=y1;

[x2, y2] = selectDataPoints(app,app.UIAxes);

app.X2EditField.Value=x2;

app.Y2EditField.Value=y2;

xget=[];

yget=[];

for i=1:m1

if a(i)>=x1&b(i)>=y1&a(i)<=x2&b(i)<y2

xget=[xget,a(i)];

yget=[yget,b(i)];

end

end

%x=[x1,x2];

%y=[y1,y2];

p=polyfit(xget,yget,1);

f=polyval(p,xget);

k=p(1);%拟合曲线斜率

d=p(2);%拟合曲线斜率

%[xxx,yyy]=selectDatapoints(app.UIAxes);

%p3=polyfit(xxx,yyy,1);

%f3=polyval(p3,x);

%A=k\*xx+d;

%r2=corrcoef(A,yy);

%rr2=mean(mean(r2));

[r2 rmse] = rsquare(yget,f);

app.coeff\_polyfit.Value=r2;

x=min(a):1:max(a);

Q1=k\*x+d;

Q1plot=k\*(x+1)+d;

app.k\_polyfit.Value=k;

plot(app.UIAxes,Q1plot,'r');

Q2plot=k\*(x-app.bias.Value+1)+d;

ax.XTick=0:0.01:0.8\*max(a);

ax.YTick=0:0.01:0.8\*max(b);

plot(app.UIAxes,Q2plot,'b');

hold (app.UIAxes,'on');

legend(app.UIAxes,app.test\_number.Value,'拟合曲线','偏置线','Location','northwest')

%求原图拟合图像与偏置直线的交点

x\_=linspace(min(a),max(a),10000000);

q2=k\*(x\_-app.bias.Value)+d;

p2=polyfit(a,b,25);

f2=polyval(p2,x\_);

%显示x y坐标轴名称

%[xx, yy] = selectDataPoints(app, app.UIAxes);

dd =q2./f2+eps;

%求二者的比值

ix=find(dd<=1.000001&dd>=0.999998,1,'last');

xx=x\_(ix);

%得到横坐标矩阵

yy=k\*(xx-app.bias.Value)+d;

app.x\_cross\_point.Value=xx;

app.y\_cross\_point.Value=yy;

plot(app.UIAxes,xx,yy,'\*b','MarkerSize',10,'LineWidth',1.5);

e1=app.X\_name.Value;

e2=app.Y\_name.Value;

xlabel(app.UIAxes,e1);

ylabel(app.UIAxes,e2);

%找原始曲线最大值点

[M,i\_max]=max(b);

x\_max=a(i\_max);

y\_max=b(i\_max);

app.X\_MAX.Value=x\_max;

app.Y\_MAX.Value=y\_max;

plot(app.UIAxes,x\_max,y\_max,'\*r','MarkerSize',10,'LineWidth',1.5);

legend(app.UIAxes,app.test\_number.Value,'拟合曲线','偏置线','交点','最大值点','Location','northwest')

end

% Button down function: UIAxes

function UIAxesButtonDown(app, event)

end

% Callback function

function inload\_excelButtonPushed(app, event)

end

% Button pushed function: getfile

function getfileButtonPushed(app, event)

[file,path]=uigetfile('\*.xlsx');

app.filepath.Value=[path,file];

hold;

warndlg('数据生成成功.', '提示');%内容，标题

end

% Button pushed function: Button

function ButtonPushed(app, event)

%清除文档路径值

app.filepath.Value='';

%清除样品编号框

app.test\_number.Value='';

%清除x轴名称

app.X\_name.Value='';

%清除Y轴名称

app.Y\_name.Value='';

%清除偏置值

app.bias.Value=0;

%选取第一个点

%清除第一个点的X值

app.X1EditField.Value=0;

%清除第一个点的Y值

app.X2EditField.Value=0;

%选取第二个点

%清除第二个点的X值

app.Y1EditField.Value=0;

%清除第二个点的Y值

app.Y2EditField.Value=0;

%清除相关系数

app.coeff\_polyfit.Value=0;

%清除拟合斜率

app.k\_polyfit.Value=0;

%得到交点

%清除交点的X值

app.x\_cross\_point.Value=0;

%清除交点的Y值

app.y\_cross\_point.Value=0;

%得到最大值点

%清除最大值点的X

app.X\_MAX.Value=0;

%清除最大值点的Y

app.Y\_MAX.Value=0;

%清除右侧绘图区域

cla(app.UIAxes);

end

% Window button motion function: UIFigure

function UIFigureWindowButtonMotion(app, event)

currPt = app.UIAxes.CurrentPoint;

xp = currPt(1,1);

yp = currPt(1,2);

if xp < app.UIAxes.XLim(1,1)||...

xp > app.UIAxes.XLim(1,2)||...

yp < app.UIAxes.YLim(1,1)||...

yp > app.UIAxes.YLim(1,2)

app.X.Value = 0;

app.Y.Value = 0;

return

end

% 当鼠标离开坐标区时，X,Y编辑框显示为0

app.X.Value = xp;

app.Y.Value = yp;

end

% Button pushed function: saveimage

function saveimageButtonPushed(app, event)

[filename, pathname] = uiputfile({ '\*.emf','Enhanced Meta File (\*.emf)';...

'\*.bmp','Bitmap (\*.bmp)'; '\*.fig','Figure (\*.fig)'}, ...

'Save picture as','default');

%if user cancels save command, nothing happens

if isequal(filename,0) || isequal(pathname,0)

return

end

%create a new figure

newFig = figure;

%get the units and position of the axes object

axes\_units = get(app.UIAxes,'Units');

axes\_pos = get(app.UIAxes,'Position');

%copies axesObject onto new figure

axesObject2 = copyobj(app.UIAxes,newFig);

%realign the axes object on the new figure

set(app.UIAxes,'Units',axes\_units);

set(app.UIAxes,'Position',[15 5 axes\_pos(3) axes\_pos(4)]);

%if a legendObject was passed to this function . . .

if(exist('legendObject'))

%get the units and position of the legend object

legend\_units = get(app.UIAxes.Legend,'Units');

legend\_pos = get(app.UIAxes.Legend,'Position');

%copies the legend onto the the new figure

legendObject2 = copyobj(app.UIAxes.Legend,newFig);

%realign the legend object on the new figure

set(legendObject2,'Units',legend\_units);

set(legendObject2,'Position',[15-axes\_pos(1)+legend\_pos(1) 5-axes\_pos(2)+legend\_pos(2) legend\_pos(3) legend\_pos(4)] );

end

%adjusts the new figure accordingly

set(newFig,'Units',axes\_units);

set(newFig,'Position',[15 5 axes\_pos(3)+30 axes\_pos(4)+10]);

%saves the plot

saveas(newFig,fullfile(pathname, filename))

%closes the figure

close(newFig);

end

% Button pushed function: close

function closeButtonPushed(app, event)

button=questdlg('你确定退出吗？','退出软件','是','否','是');

%内容，标题，选项，默认选项

if strcmp(button,'是')

delete(gcbf);

end

end

% Changes arrangement of the app based on UIFigure width

function updateAppLayout(app, event)

currentFigureWidth = app.UIFigure.Position(3);

if(currentFigureWidth <= app.onePanelWidth)

% Change to a 2x1 grid

app.GridLayout.RowHeight = {726, 726};

app.GridLayout.ColumnWidth = {'1x'};

app.RightPanel.Layout.Row = 2;

app.RightPanel.Layout.Column = 1;

else

% Change to a 1x2 grid

app.GridLayout.RowHeight = {'1x'};

app.GridLayout.ColumnWidth = {414, '1x'};

app.RightPanel.Layout.Row = 1;

app.RightPanel.Layout.Column = 2;

end

end

end

% Component initialization

methods (Access = private)

% Create UIFigure and components

function createComponents(app)

% Create UIFigure and hide until all components are created

app.UIFigure = uifigure('Visible', 'off');

app.UIFigure.AutoResizeChildren = 'off';

app.UIFigure.Position = [100 100 1009 726];

app.UIFigure.Name = 'MATLAB App';

app.UIFigure.SizeChangedFcn = createCallbackFcn(app, @updateAppLayout, true);

app.UIFigure.WindowButtonMotionFcn = createCallbackFcn(app, @UIFigureWindowButtonMotion, true);

% Create GridLayout

app.GridLayout = uigridlayout(app.UIFigure);

app.GridLayout.ColumnWidth = {414, '1x'};

app.GridLayout.RowHeight = {'1x'};

app.GridLayout.ColumnSpacing = 0;

app.GridLayout.RowSpacing = 0;

app.GridLayout.Padding = [0 0 0 0];

app.GridLayout.Scrollable = 'on';

% Create LeftPanel

app.LeftPanel = uipanel(app.GridLayout);

app.LeftPanel.Layout.Row = 1;

app.LeftPanel.Layout.Column = 1;

% Create Panel

app.Panel = uipanel(app.LeftPanel);

app.Panel.Title = '输入';

app.Panel.Position = [35 386 359 205];

% Create Label\_7

app.Label\_7 = uilabel(app.Panel);

app.Label\_7.FontSize = 16;

app.Label\_7.Position = [17 146 147 33];

app.Label\_7.Text = '文档路径';

% Create filepath

app.filepath = uieditfield(app.Panel, 'text');

app.filepath.FontSize = 18;

app.filepath.Position = [103 149 127 26];

% Create Label

app.Label = uilabel(app.Panel);

app.Label.HorizontalAlignment = 'right';

app.Label.FontSize = 16;

app.Label.Position = [12 117 101 22];

app.Label.Text = '输入样品编号';

% Create test\_number

app.test\_number = uieditfield(app.Panel, 'text');

app.test\_number.FontSize = 16;

app.test\_number.Position = [136 113 100 26];

% Create XLabel

app.XLabel = uilabel(app.Panel);

app.XLabel.HorizontalAlignment = 'right';

app.XLabel.FontSize = 16;

app.XLabel.Position = [12 82 112 22];

app.XLabel.Text = 'X轴名称与单位';

% Create X\_name

app.X\_name = uieditfield(app.Panel, 'text');

app.X\_name.FontSize = 16;

app.X\_name.Position = [147 78 100 26];

% Create YLabel

app.YLabel = uilabel(app.Panel);

app.YLabel.HorizontalAlignment = 'right';

app.YLabel.FontSize = 16;

app.YLabel.Position = [12 47 112 22];

app.YLabel.Text = 'Y轴名称与单位';

% Create Y\_name

app.Y\_name = uieditfield(app.Panel, 'text');

app.Y\_name.FontSize = 16;

app.Y\_name.Position = [147 43 100 26];

% Create Label\_4

app.Label\_4 = uilabel(app.Panel);

app.Label\_4.HorizontalAlignment = 'right';

app.Label\_4.FontSize = 16;

app.Label\_4.Position = [12 11 85 22];

app.Label\_4.Text = '设置偏置值';

% Create bias

app.bias = uieditfield(app.Panel, 'numeric');

app.bias.ValueDisplayFormat = '%.6f';

app.bias.FontSize = 18;

app.bias.Position = [120 10 100 23];

% Create Panel\_3

app.Panel\_3 = uipanel(app.LeftPanel);

app.Panel\_3.Title = '拟合结果';

app.Panel\_3.Position = [35 167 361 96];

% Create Label\_3

app.Label\_3 = uilabel(app.Panel\_3);

app.Label\_3.HorizontalAlignment = 'right';

app.Label\_3.FontSize = 16;

app.Label\_3.Position = [12 44 85 22];

app.Label\_3.Text = '相关性系数';

% Create coeff\_polyfit

app.coeff\_polyfit = uieditfield(app.Panel\_3, 'numeric');

app.coeff\_polyfit.ValueDisplayFormat = '%.6f';

app.coeff\_polyfit.FontSize = 16;

app.coeff\_polyfit.Position = [112 43 100 23];

% Create Label\_2

app.Label\_2 = uilabel(app.Panel\_3);

app.Label\_2.HorizontalAlignment = 'right';

app.Label\_2.FontSize = 16;

app.Label\_2.Position = [12 13 69 22];

app.Label\_2.Text = '拟合斜率';

% Create k\_polyfit

app.k\_polyfit = uieditfield(app.Panel\_3, 'numeric');

app.k\_polyfit.ValueDisplayFormat = '%.6f';

app.k\_polyfit.FontSize = 16;

app.k\_polyfit.Position = [96 12 100 23];

% Create Panel\_2

app.Panel\_2 = uipanel(app.LeftPanel);

app.Panel\_2.Title = '选取拟合点';

app.Panel\_2.Position = [35 277 359 97];

% Create X1EditFieldLabel

app.X1EditFieldLabel = uilabel(app.Panel\_2);

app.X1EditFieldLabel.HorizontalAlignment = 'right';

app.X1EditFieldLabel.FontSize = 16;

app.X1EditFieldLabel.Position = [12 42 25 22];

app.X1EditFieldLabel.Text = 'X1';

% Create X1EditField

app.X1EditField = uieditfield(app.Panel\_2, 'numeric');

app.X1EditField.ValueDisplayFormat = '%.6f';

app.X1EditField.HorizontalAlignment = 'left';

app.X1EditField.FontSize = 16;

app.X1EditField.Position = [52 41 86 23];

% Create X2EditFieldLabel

app.X2EditFieldLabel = uilabel(app.Panel\_2);

app.X2EditFieldLabel.HorizontalAlignment = 'right';

app.X2EditFieldLabel.FontSize = 16;

app.X2EditFieldLabel.Position = [175 43 25 22];

app.X2EditFieldLabel.Text = 'X2';

% Create X2EditField

app.X2EditField = uieditfield(app.Panel\_2, 'numeric');

app.X2EditField.ValueDisplayFormat = '%.6f';

app.X2EditField.HorizontalAlignment = 'left';

app.X2EditField.FontSize = 16;

app.X2EditField.Position = [215 42 84 23];

% Create Y1EditFieldLabel

app.Y1EditFieldLabel = uilabel(app.Panel\_2);

app.Y1EditFieldLabel.HorizontalAlignment = 'right';

app.Y1EditFieldLabel.FontSize = 16;

app.Y1EditFieldLabel.Position = [12 8 25 22];

app.Y1EditFieldLabel.Text = 'Y1';

% Create Y1EditField

app.Y1EditField = uieditfield(app.Panel\_2, 'numeric');

app.Y1EditField.ValueDisplayFormat = '%.6f';

app.Y1EditField.HorizontalAlignment = 'left';

app.Y1EditField.FontSize = 16;

app.Y1EditField.Position = [52 7 86 23];

% Create Y2EditFieldLabel

app.Y2EditFieldLabel = uilabel(app.Panel\_2);

app.Y2EditFieldLabel.HorizontalAlignment = 'right';

app.Y2EditFieldLabel.FontSize = 16;

app.Y2EditFieldLabel.Position = [178 8 21 22];

app.Y2EditFieldLabel.Text = 'Y2';

% Create Y2EditField

app.Y2EditField = uieditfield(app.Panel\_2, 'numeric');

app.Y2EditField.ValueDisplayFormat = '%.6f';

app.Y2EditField.HorizontalAlignment = 'left';

app.Y2EditField.FontSize = 16;

app.Y2EditField.Position = [215 8 84 23];

% Create Panel\_4

app.Panel\_4 = uipanel(app.LeftPanel);

app.Panel\_4.Title = '偏置直线与原始曲线交点';

app.Panel\_4.Position = [35 94 361 61];

% Create XEditField\_2Label

app.XEditField\_2Label = uilabel(app.Panel\_4);

app.XEditField\_2Label.HorizontalAlignment = 'right';

app.XEditField\_2Label.FontSize = 16;

app.XEditField\_2Label.Position = [12 13 26 22];

app.XEditField\_2Label.Text = 'X=';

% Create x\_cross\_point

app.x\_cross\_point = uieditfield(app.Panel\_4, 'numeric');

app.x\_cross\_point.ValueDisplayFormat = '%.6f';

app.x\_cross\_point.FontSize = 16;

app.x\_cross\_point.Position = [60 12 100 23];

% Create YEditField\_2Label

app.YEditField\_2Label = uilabel(app.Panel\_4);

app.YEditField\_2Label.HorizontalAlignment = 'right';

app.YEditField\_2Label.FontSize = 16;

app.YEditField\_2Label.Position = [179 12 26 22];

app.YEditField\_2Label.Text = 'Y=';

% Create y\_cross\_point

app.y\_cross\_point = uieditfield(app.Panel\_4, 'numeric');

app.y\_cross\_point.ValueDisplayFormat = '%.6f';

app.y\_cross\_point.FontSize = 16;

app.y\_cross\_point.Position = [227 11 100 23];

% Create Panel\_5

app.Panel\_5 = uipanel(app.LeftPanel);

app.Panel\_5.Title = '原始曲线最大值点';

app.Panel\_5.Position = [35 10 361 70];

% Create XEditField\_3Label

app.XEditField\_3Label = uilabel(app.Panel\_5);

app.XEditField\_3Label.HorizontalAlignment = 'right';

app.XEditField\_3Label.FontSize = 16;

app.XEditField\_3Label.Position = [12 19 26 22];

app.XEditField\_3Label.Text = 'X=';

% Create X\_MAX

app.X\_MAX = uieditfield(app.Panel\_5, 'numeric');

app.X\_MAX.ValueDisplayFormat = '%.6f';

app.X\_MAX.FontSize = 16;

app.X\_MAX.Position = [53 18 100 23];

% Create YEditField\_3Label

app.YEditField\_3Label = uilabel(app.Panel\_5);

app.YEditField\_3Label.HorizontalAlignment = 'right';

app.YEditField\_3Label.FontSize = 16;

app.YEditField\_3Label.Position = [179 18 26 22];

app.YEditField\_3Label.Text = 'Y=';

% Create Y\_MAX

app.Y\_MAX = uieditfield(app.Panel\_5, 'numeric');

app.Y\_MAX.ValueDisplayFormat = '%.6f';

app.Y\_MAX.FontSize = 16;

app.Y\_MAX.Position = [227 17 100 23];

% Create Panel\_6

app.Panel\_6 = uipanel(app.LeftPanel);

app.Panel\_6.Title = '操作';

app.Panel\_6.BackgroundColor = [0.902 0.902 0.902];

app.Panel\_6.Position = [36 598 358 108];

% Create getfile

app.getfile = uibutton(app.Panel\_6, 'push');

app.getfile.ButtonPushedFcn = createCallbackFcn(app, @getfileButtonPushed, true);

app.getfile.FontSize = 16;

app.getfile.Position = [15 47 103 34];

app.getfile.Text = '选择文件';

% Create Renew

app.Renew = uibutton(app.Panel\_6, 'push');

app.Renew.ButtonPushedFcn = createCallbackFcn(app, @RenewButtonPushed, true);

app.Renew.FontSize = 16;

app.Renew.Position = [125 47 103 34];

app.Renew.Text = '新建计算';

% Create Button

app.Button = uibutton(app.Panel\_6, 'push');

app.Button.ButtonPushedFcn = createCallbackFcn(app, @ButtonPushed, true);

app.Button.FontSize = 16;

app.Button.Position = [125 3 102 34];

app.Button.Text = '清空数据';

% Create saveimage

app.saveimage = uibutton(app.Panel\_6, 'push');

app.saveimage.ButtonPushedFcn = createCallbackFcn(app, @saveimageButtonPushed, true);

app.saveimage.FontSize = 16;

app.saveimage.Position = [15 3 102 34];

app.saveimage.Text = '保存图像';

% Create close

app.close = uibutton(app.Panel\_6, 'push');

app.close.ButtonPushedFcn = createCallbackFcn(app, @closeButtonPushed, true);

app.close.FontSize = 16;

app.close.Position = [234 47 103 34];

app.close.Text = '退出软件';

% Create RightPanel

app.RightPanel = uipanel(app.GridLayout);

app.RightPanel.Layout.Row = 1;

app.RightPanel.Layout.Column = 2;

% Create XEditFieldLabel

app.XEditFieldLabel = uilabel(app.RightPanel);

app.XEditFieldLabel.HorizontalAlignment = 'right';

app.XEditFieldLabel.Position = [105 687 16 22];

app.XEditFieldLabel.Text = 'X';

% Create X

app.X = uieditfield(app.RightPanel, 'numeric');

app.X.Position = [135 687 44 22];

% Create YEditFieldLabel

app.YEditFieldLabel = uilabel(app.RightPanel);

app.YEditFieldLabel.HorizontalAlignment = 'right';

app.YEditFieldLabel.Position = [206 688 17 22];

app.YEditFieldLabel.Text = 'Y';

% Create Y

app.Y = uieditfield(app.RightPanel, 'numeric');

app.Y.Position = [230 688 40 22];

% Create Label\_10

app.Label\_10 = uilabel(app.RightPanel);

app.Label\_10.Position = [19 688 77 22];

app.Label\_10.Text = '坐标实时位置';

% Create UIAxes

app.UIAxes = uiaxes(app.RightPanel);

title(app.UIAxes, '静态力学测试数据拟合与处理')

xlabel(app.UIAxes, 'X（待输入）')

ylabel(app.UIAxes, 'Y')

zlabel(app.UIAxes, 'Z')

app.UIAxes.FontSize = 18;

app.UIAxes.ButtonDownFcn = createCallbackFcn(app, @UIAxesButtonDown, true);

app.UIAxes.Position = [7 54 636 601];

% Show the figure after all components are created

app.UIFigure.Visible = 'on';

end

end

% App creation and deletion

methods (Access = public)

% Construct app

function app = Static\_fitting\_software\_exported

% Create UIFigure and components

createComponents(app)

% Register the app with App Designer

registerApp(app, app.UIFigure)

if nargout == 0

clear app

end

end

% Code that executes before app deletion

function delete(app)

% Delete UIFigure when app is deleted

delete(app.UIFigure)

end

end

end