# Código Main Window

classdef Main\_App < matlab.apps.AppBase

% Properties that correspond to app components

properties (Access = public)

Main\_WindowUIFigure matlab.ui.Figure

GerarreltorioButton matlab.ui.control.Button

ConfiguraesPanel matlab.ui.container.Panel

SKUButton matlab.ui.control.Button

SetupMquinasButton matlab.ui.control.Button

PulmesButton matlab.ui.control.Button

Button matlab.ui.control.Button

Button\_2 matlab.ui.control.Button

OtimizaodelinhasdeenvaseLabel matlab.ui.control.Label

HelpButton matlab.ui.control.Button

end

properties (Access = private)

DialogApp % Options dialog app

end

properties (Access = public)

AreaSku

MTTR

MTBF

GAR

AreaP

pGar

end

methods (Access = public)

function updateVALORESMAQUINA(app,veloGAR,dialogMTBF1,dialogMTBF2,dialogMTBF3,dialogMTBF4,...

dialogMTBF5,dialogMTBF6,dialogMTBF7,dialogMTBF8,dialogMTTR1,dialogMTTR2,dialogMTTR3,dialogMTTR4,...

dialogMTTR5,dialogMTTR6,dialogMTTR7,dialogMTTR8,posGar)

% armazenamento do inputs dos valores de MTBF

mainMTBF1 = dialogMTBF1;

mainMTBF2 = dialogMTBF2;

mainMTBF3 = dialogMTBF3;

mainMTBF4 = dialogMTBF4;

mainMTBF5 = dialogMTBF5;

mainMTBF6 = dialogMTBF6;

mainMTBF7 = dialogMTBF7;

mainMTBF8 = dialogMTBF8;

% armazenamento dos inputs dos valores de MTTR

mainMTTR1 = dialogMTTR1;

mainMTTR2 = dialogMTTR2;

mainMTTR3 = dialogMTTR3;

mainMTTR4 = dialogMTTR4;

mainMTTR5 = dialogMTTR5;

mainMTTR6 = dialogMTTR6;

mainMTTR7 = dialogMTTR7;

mainMTTR8 = dialogMTTR8;

% criação da lista relatorio

app.pGar = posGar;

app.GAR = veloGAR;

app.MTTR = [mainMTTR1 mainMTTR2 mainMTTR3 mainMTTR4 mainMTTR5 mainMTTR6 mainMTTR7 mainMTTR8];

app.MTBF = [mainMTBF1 mainMTBF2 mainMTBF3 mainMTBF4 mainMTBF5 mainMTBF6 mainMTBF7 mainMTBF8];

end

function updateVALORESSKU(app,dialogSKU)

mainASKU = dialogSKU;

% criação da lista relatorio

app.AreaSku = [mainASKU mainASKU mainASKU mainASKU mainASKU mainASKU mainASKU mainASKU];

return

end

function updateVALORESPULMAO(app,L1,L2,L3,L4,L5,L6,L7,L8,c1,c2,c3,c4,c5,c6,c7,c8)

%{

updateVALORESPULMAO(app,areapulmo1EditField,areapulmo2EditField,...

areapulmo3EditField,areapulmo4EditField,areapulmo5EditField,...

areapulmo6EditField,areapulmo7EditField,areapulmo8EditField)

%}

mainAPULMAO1 = L1\*c1;

mainAPULMAO2 = L2\*c2;

mainAPULMAO3 = L3\*c3;

mainAPULMAO4 = L4\*c4;

mainAPULMAO5 = L5\*c5;

mainAPULMAO6 = L6\*c6;

mainAPULMAO7 = L7\*c7;

mainAPULMAO8 = L8\*c8;

app.AreaP = [mainAPULMAO1 mainAPULMAO2 mainAPULMAO3 mainAPULMAO4 mainAPULMAO5 mainAPULMAO6 mainAPULMAO7 mainAPULMAO8];

return

end

end

methods (Access = private)

% Code that executes after component creation

function startupFcnMAIN(app)

end

% Button pushed function: SetupMquinasButton

function SetupMaquinasButtonPushed(app, event)

% Call dialog box with input values

app.DialogApp = DialogBox\_SETUPMAQUINAS(app);

end

% Button pushed function: SKUButton

function SKUButtonPushed(app, event)

% Open the options dialog and pass inputs

app.DialogApp = DialogBox\_SKU(app);

end

% Button pushed function: PulmesButton

function PulmesButtonPushed(app, event)

app.DialogApp = DialogBox\_PULMOES(app);

end

% Button pushed function: GerarreltorioButton

function GerarreltorioButtonPushed(app, event)

%app.AreaP, app.AreaSku, app.MTTR, app.MTBF, app.GAR

%app.GAR = 10;

app.DialogApp = DialogBox\_RELATORIO(app);

end

end

% App initialization and construction

methods (Access = private)

% Create UIFigure and components

function createComponents(app)

% Create Main\_WindowUIFigure

app.Main\_WindowUIFigure = uifigure;

app.Main\_WindowUIFigure.Position = [465 150 280 520];

app.Main\_WindowUIFigure.Name = 'Main\_Window';

% Create GerarreltorioButton

app.GerarreltorioButton = uibutton(app.Main\_WindowUIFigure, 'push');

app.GerarreltorioButton.ButtonPushedFcn = createCallbackFcn(app, @GerarreltorioButtonPushed, true);

app.GerarreltorioButton.Position = [145 40 100 22];

app.GerarreltorioButton.Text = 'Gerar relátorio';

% Create ConfiguraesPanel

app.ConfiguraesPanel = uipanel(app.Main\_WindowUIFigure);

app.ConfiguraesPanel.Title = 'Configurações:';

app.ConfiguraesPanel.Position = [36 99 209 234];

% Create SKUButton

app.SKUButton = uibutton(app.ConfiguraesPanel, 'push');

app.SKUButton.ButtonPushedFcn = createCallbackFcn(app, @SKUButtonPushed, true);

app.SKUButton.Position = [51 89 104 22];

app.SKUButton.Text = 'SKU';

% Create SetupMquinasButton

app.SetupMquinasButton = uibutton(app.ConfiguraesPanel, 'push');

app.SetupMquinasButton.ButtonPushedFcn = createCallbackFcn(app, @SetupMaquinasButtonPushed, true);

app.SetupMquinasButton.Position = [51 153 104 22];

app.SetupMquinasButton.Text = 'Setup Máquinas';

% Create PulmesButton

app.PulmesButton = uibutton(app.ConfiguraesPanel, 'push');

app.PulmesButton.ButtonPushedFcn = createCallbackFcn(app, @PulmesButtonPushed, true);

app.PulmesButton.Position = [51 25 104 22];

app.PulmesButton.Text = 'Pulmões';

% Create Button

app.Button = uibutton(app.Main\_WindowUIFigure, 'push');

app.Button.Icon = 'insper\_logo.png';

app.Button.Position = [22 374 100 57];

app.Button.Text = '';

% Create Button\_2

app.Button\_2 = uibutton(app.Main\_WindowUIFigure, 'push');

app.Button\_2.Icon = 'Coca-Cola\_Femsa\_Logo.png';

app.Button\_2.Position = [157 374 100 57];

app.Button\_2.Text = '';

% Create OtimizaodelinhasdeenvaseLabel

app.OtimizaodelinhasdeenvaseLabel = uilabel(app.Main\_WindowUIFigure);

app.OtimizaodelinhasdeenvaseLabel.FontSize = 16;

app.OtimizaodelinhasdeenvaseLabel.FontWeight = 'bold';

app.OtimizaodelinhasdeenvaseLabel.Position = [18 460 248 20];

app.OtimizaodelinhasdeenvaseLabel.Text = 'Otimização de linhas de envase';

% Create HelpButton

app.HelpButton = uibutton(app.Main\_WindowUIFigure, 'push');

app.HelpButton.Position = [36 40 100 22];

app.HelpButton.Text = 'Help';

end

end

methods (Access = public)

% Construct app

function app = Main\_App

% Create and configure components

createComponents(app)

% Register the app with App Designer

registerApp(app, app.Main\_WindowUIFigure)

% Execute the startup function

runStartupFcn(app, @startupFcnMAIN)

if nargout == 0

clear app

end

end

% Code that executes before app deletion

function delete(app)

% Delete UIFigure when app is deleted

delete(app.Main\_WindowUIFigure)

end

end

end

# Código DialogBox Setup Pulmão

classdef DialogBox\_PULMOES < matlab.apps.AppBase

% Properties that correspond to app components

properties (Access = public)

UIFigure matlab.ui.Figure

TabGroup matlab.ui.container.TabGroup

reapulmoTab matlab.ui.container.Tab

Button\_3 matlab.ui.control.Button

ObsreadopulmoNreferenteaopulmofrentedamquinaNLabel\_2 matlab.ui.control.Label

OKButton\_2 matlab.ui.control.Button

DimensesPanel matlab.ui.container.Panel

pulmo1Label matlab.ui.control.Label

pulmo2Label matlab.ui.control.Label

pulmo3Label matlab.ui.control.Label

pulmo4Label matlab.ui.control.Label

pulmo5Label matlab.ui.control.Label

pulmo6Label matlab.ui.control.Label

pulmo7Label matlab.ui.control.Label

pulmo8Label matlab.ui.control.Label

Panel\_4 matlab.ui.container.Panel

mLabel matlab.ui.control.Label

L1 matlab.ui.control.NumericEditField

L2 matlab.ui.control.NumericEditField

L3 matlab.ui.control.NumericEditField

L4 matlab.ui.control.NumericEditField

L5 matlab.ui.control.NumericEditField

L6 matlab.ui.control.NumericEditField

L7 matlab.ui.control.NumericEditField

L8 matlab.ui.control.NumericEditField

LLabel matlab.ui.control.Label

Panel\_5 matlab.ui.container.Panel

mLabel\_2 matlab.ui.control.Label

CLabel matlab.ui.control.Label

c1 matlab.ui.control.NumericEditField

c2 matlab.ui.control.NumericEditField

c3 matlab.ui.control.NumericEditField

c4 matlab.ui.control.NumericEditField

c5 matlab.ui.control.NumericEditField

c6 matlab.ui.control.NumericEditField

c7 matlab.ui.control.NumericEditField

c8 matlab.ui.control.NumericEditField

end

properties (Access = private)

CallingApp % Main app

end

methods (Access = private)

% Code that executes after component creation

function startupFcn(app, mainapp)

% Store main app in property for CloseRequestFcn to use

app.CallingApp = mainapp;

end

% Callback function

function OKButton\_3Pushed(app, event)

% delete options dialog

delete(app)

end

% Button pushed function: OKButton\_2

function OKButton\_2Pushed(app, event)

%{

updateVALORESPULMAO(app.CallingApp, app.areapulmo1EditField.Value, app.areapulmo2EditField.Value,...

app.areapulmo3EditField.Value,app.areapulmo4EditField.Value,app.areapulmo5EditField.Value,...

app.areapulmo6EditField.Value,app.areapulmo7EditField.Value,app.areapulmo8EditField.Value);

%}

updateVALORESPULMAO(app.CallingApp, app.L1.Value,app.L2.Value,app.L3.Value,app.L4.Value,app.L5.Value,app.L6.Value,...

app.L7.Value,app.L8.Value,app.c1.Value,app.c2.Value,app.c3.Value,app.c4.Value,app.c5.Value,app.c6.Value,...

app.c7.Value,app.c8.Value);

% delete options dialog

delete(app)

end

end

% App initialization and construction

methods (Access = private)

% Create UIFigure and components

function createComponents(app)

% Create UIFigure

app.UIFigure = uifigure;

app.UIFigure.Position = [1100 100 414 610];

app.UIFigure.Name = 'UI Figure';

% Create TabGroup

app.TabGroup = uitabgroup(app.UIFigure);

app.TabGroup.Position = [1 1 414 610];

% Create reapulmoTab

app.reapulmoTab = uitab(app.TabGroup);

app.reapulmoTab.Title = 'Área pulmão';

% Create Button\_3

app.Button\_3 = uibutton(app.reapulmoTab, 'push');

app.Button\_3.Icon = 'foto\_A\_pulmao2.PNG';

app.Button\_3.Position = [18 491 381 77];

app.Button\_3.Text = '';

% Create ObsreadopulmoNreferenteaopulmofrentedamquinaNLabel\_2

app.ObsreadopulmoNreferenteaopulmofrentedamquinaNLabel\_2 = uilabel(app.reapulmoTab);

app.ObsreadopulmoNreferenteaopulmofrentedamquinaNLabel\_2.Position = [43 40 336 63];

app.ObsreadopulmoNreferenteaopulmofrentedamquinaNLabel\_2.Text = {'Obs: área do pulmão N é referente ao pulmão à frente da '; 'máquina N. Caso as informações das dimensões do pulmão '; 'sejam desconhecidas e apenas a Área é conhecida basta '; 'colocar o valor 1 no campo L(m) e a área no campo C(m).'};

% Create OKButton\_2

app.OKButton\_2 = uibutton(app.reapulmoTab, 'push');

app.OKButton\_2.ButtonPushedFcn = createCallbackFcn(app, @OKButton\_2Pushed, true);

app.OKButton\_2.Position = [155 125 100 22];

app.OKButton\_2.Text = 'OK';

% Create DimensesPanel

app.DimensesPanel = uipanel(app.reapulmoTab);

app.DimensesPanel.Title = 'Dimensões';

app.DimensesPanel.Position = [18 165 381 313];

% Create pulmo1Label

app.pulmo1Label = uilabel(app.reapulmoTab);

app.pulmo1Label.HorizontalAlignment = 'right';

app.pulmo1Label.FontSize = 16;

app.pulmo1Label.Position = [36 386 76 20];

app.pulmo1Label.Text = 'pulmão 1:';

% Create pulmo2Label

app.pulmo2Label = uilabel(app.reapulmoTab);

app.pulmo2Label.HorizontalAlignment = 'right';

app.pulmo2Label.FontSize = 16;

app.pulmo2Label.Position = [36 357 76 20];

app.pulmo2Label.Text = 'pulmão 2:';

% Create pulmo3Label

app.pulmo3Label = uilabel(app.reapulmoTab);

app.pulmo3Label.HorizontalAlignment = 'right';

app.pulmo3Label.FontSize = 16;

app.pulmo3Label.Position = [36 328 76 20];

app.pulmo3Label.Text = 'pulmão 3:';

% Create pulmo4Label

app.pulmo4Label = uilabel(app.reapulmoTab);

app.pulmo4Label.HorizontalAlignment = 'right';

app.pulmo4Label.FontSize = 16;

app.pulmo4Label.Position = [36 299 76 20];

app.pulmo4Label.Text = 'pulmão 4:';

% Create pulmo5Label

app.pulmo5Label = uilabel(app.reapulmoTab);

app.pulmo5Label.HorizontalAlignment = 'right';

app.pulmo5Label.FontSize = 16;

app.pulmo5Label.Position = [36 271 76 20];

app.pulmo5Label.Text = 'pulmão 5:';

% Create pulmo6Label

app.pulmo6Label = uilabel(app.reapulmoTab);

app.pulmo6Label.HorizontalAlignment = 'right';

app.pulmo6Label.FontSize = 16;

app.pulmo6Label.Position = [36 243 76 20];

app.pulmo6Label.Text = 'pulmão 6:';

% Create pulmo7Label

app.pulmo7Label = uilabel(app.reapulmoTab);

app.pulmo7Label.HorizontalAlignment = 'right';

app.pulmo7Label.FontSize = 16;

app.pulmo7Label.Position = [36 215 76 20];

app.pulmo7Label.Text = 'pulmão 7:';

% Create pulmo8Label

app.pulmo8Label = uilabel(app.reapulmoTab);

app.pulmo8Label.HorizontalAlignment = 'right';

app.pulmo8Label.FontSize = 16;

app.pulmo8Label.Position = [36 187 76 20];

app.pulmo8Label.Text = 'pulmão 8:';

% Create Panel\_4

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

app.Panel\_4.Position = [130 175 115 272];

% Create mLabel

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

app.mLabel.Position = [57 255 25 15];

app.mLabel.Text = '(m)';

% Create L1

app.L1 = uieditfield(app.Panel\_4, 'numeric');

app.L1.ValueDisplayFormat = '%.0f';

app.L1.FontSize = 16;

app.L1.Position = [8 210 100 22];

% Create L2

app.L2 = uieditfield(app.Panel\_4, 'numeric');

app.L2.ValueDisplayFormat = '%.0f';

app.L2.FontSize = 16;

app.L2.Position = [8 181 100 22];

% Create L3

app.L3 = uieditfield(app.Panel\_4, 'numeric');

app.L3.ValueDisplayFormat = '%.0f';

app.L3.FontSize = 16;

app.L3.Position = [8 152 100 22];

% Create L4

app.L4 = uieditfield(app.Panel\_4, 'numeric');

app.L4.ValueDisplayFormat = '%.0f';

app.L4.FontSize = 16;

app.L4.Position = [8 123 100 22];

% Create L5

app.L5 = uieditfield(app.Panel\_4, 'numeric');

app.L5.ValueDisplayFormat = '%.0f';

app.L5.FontSize = 16;

app.L5.Position = [8 95 100 22];

% Create L6

app.L6 = uieditfield(app.Panel\_4, 'numeric');

app.L6.ValueDisplayFormat = '%.0f';

app.L6.FontSize = 16;

app.L6.Position = [8 67 100 22];

% Create L7

app.L7 = uieditfield(app.Panel\_4, 'numeric');

app.L7.ValueDisplayFormat = '%.0f';

app.L7.FontSize = 16;

app.L7.Position = [8 39 100 22];

% Create L8

app.L8 = uieditfield(app.Panel\_4, 'numeric');

app.L8.ValueDisplayFormat = '%.0f';

app.L8.FontSize = 16;

app.L8.Position = [8 11 100 22];

% Create LLabel

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

app.LLabel.FontSize = 16;

app.LLabel.FontWeight = 'bold';

app.LLabel.Position = [44 251 25 20];

app.LLabel.Text = 'L';

% Create Panel\_5

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

app.Panel\_5.Position = [264 174 115 272];

% Create mLabel\_2

app.mLabel\_2 = uilabel(app.Panel\_5);

app.mLabel\_2.Position = [57 255 25 15];

app.mLabel\_2.Text = '(m)';

% Create CLabel

app.CLabel = uilabel(app.Panel\_5);

app.CLabel.FontSize = 16;

app.CLabel.FontWeight = 'bold';

app.CLabel.Position = [42 251 25 20];

app.CLabel.Text = 'C';

% Create c1

app.c1 = uieditfield(app.Panel\_5, 'numeric');

app.c1.ValueDisplayFormat = '%.0f';

app.c1.FontSize = 16;

app.c1.Position = [8 212 100 22];

% Create c2

app.c2 = uieditfield(app.Panel\_5, 'numeric');

app.c2.ValueDisplayFormat = '%.0f';

app.c2.FontSize = 16;

app.c2.Position = [8 183 100 22];

% Create c3

app.c3 = uieditfield(app.Panel\_5, 'numeric');

app.c3.ValueDisplayFormat = '%.0f';

app.c3.FontSize = 16;

app.c3.Position = [8 154 100 22];

% Create c4

app.c4 = uieditfield(app.Panel\_5, 'numeric');

app.c4.ValueDisplayFormat = '%.0f';

app.c4.FontSize = 16;

app.c4.Position = [8 125 100 22];

% Create c5

app.c5 = uieditfield(app.Panel\_5, 'numeric');

app.c5.ValueDisplayFormat = '%.0f';

app.c5.FontSize = 16;

app.c5.Position = [8 97 100 22];

% Create c6

app.c6 = uieditfield(app.Panel\_5, 'numeric');

app.c6.ValueDisplayFormat = '%.0f';

app.c6.FontSize = 16;

app.c6.Position = [8 69 100 22];

% Create c7

app.c7 = uieditfield(app.Panel\_5, 'numeric');

app.c7.ValueDisplayFormat = '%.0f';

app.c7.FontSize = 16;

app.c7.Position = [8 41 100 22];

% Create c8

app.c8 = uieditfield(app.Panel\_5, 'numeric');

app.c8.ValueDisplayFormat = '%.0f';

app.c8.FontSize = 16;

app.c8.Position = [8 13 100 22];

end

end

methods (Access = public)

% Construct app

function app = DialogBox\_PULMOES(varargin)

% Create and configure components

createComponents(app)

% Register the app with App Designer

registerApp(app, app.UIFigure)

% Execute the startup function

runStartupFcn(app, @(app)startupFcn(app, varargin{:}))

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

# Código DialogBox SKU

classdef DialogBox\_SKU < matlab.apps.AppBase

% Properties that correspond to app components

properties (Access = public)

UIFigure matlab.ui.Figure

Button200ML matlab.ui.control.Button

Button600ML matlab.ui.control.Button

mlLabel matlab.ui.control.Label

mlLabel\_2 matlab.ui.control.Label

OKButton matlab.ui.control.Button

QualSKULabel matlab.ui.control.Label

reaEditFieldLabel matlab.ui.control.Label

dialogSKU matlab.ui.control.NumericEditField

m2Label matlab.ui.control.Label

end

properties (Access = private)

CallingApp % Main app object

end

methods (Access = private)

% Code that executes after component creation

function startupFcnSKU(app, mainapp)

% Store main app in property for CloseRequestFcn to use

app.CallingApp = mainapp;

end

% Button pushed function: OKButton

function OKButtonPushed(app, event)

% Send values back to main window by calling its public function

updateVALORESSKU(app.CallingApp,app.dialogSKU.Value);

% delete options dialog

delete(app);

end

% Button pushed function: Button200ML

function Button200MLPushed(app, event)

% set do valor da Área SKU de 200ml

app.dialogSKU.Value = 0.00031416; % Area sku 200ml em metros^2

end

% Button pushed function: Button600ML

function Button600MLPushed(app, event)

app.dialogSKU.Value = 0.00031416\*2;

end

end

% App initialization and construction

methods (Access = private)

% Create UIFigure and components

function createComponents(app)

% Create UIFigure

app.UIFigure = uifigure;

app.UIFigure.Position = [780 180 278 460];

app.UIFigure.Name = 'UI Figure';

% Create Button200ML

app.Button200ML = uibutton(app.UIFigure, 'push');

app.Button200ML.ButtonPushedFcn = createCallbackFcn(app, @Button200MLPushed, true);

app.Button200ML.Icon = '200ml.png';

app.Button200ML.Position = [30 114 82 200];

app.Button200ML.Text = '';

% Create Button600ML

app.Button600ML = uibutton(app.UIFigure, 'push');

app.Button600ML.ButtonPushedFcn = createCallbackFcn(app, @Button600MLPushed, true);

app.Button600ML.Icon = '600ml.png';

app.Button600ML.Position = [167 114 82 200];

app.Button600ML.Text = '';

% Create mlLabel

app.mlLabel = uilabel(app.UIFigure);

app.mlLabel.FontWeight = 'bold';

app.mlLabel.Position = [51 327 40 15];

app.mlLabel.Text = '200ml';

% Create mlLabel\_2

app.mlLabel\_2 = uilabel(app.UIFigure);

app.mlLabel\_2.FontWeight = 'bold';

app.mlLabel\_2.Position = [188 327 40 15];

app.mlLabel\_2.Text = '600ml';

% Create OKButton

app.OKButton = uibutton(app.UIFigure, 'push');

app.OKButton.ButtonPushedFcn = createCallbackFcn(app, @OKButtonPushed, true);

app.OKButton.Position = [90 30 100 22];

app.OKButton.Text = 'OK';

% Create QualSKULabel

app.QualSKULabel = uilabel(app.UIFigure);

app.QualSKULabel.FontSize = 24;

app.QualSKULabel.Position = [77 373 126 31];

app.QualSKULabel.Text = 'Qual SKU?';

% Create reaEditFieldLabel

app.reaEditFieldLabel = uilabel(app.UIFigure);

app.reaEditFieldLabel.HorizontalAlignment = 'right';

app.reaEditFieldLabel.Position = [44 73 31 15];

app.reaEditFieldLabel.Text = 'Área';

% Create dialogSKU

app.dialogSKU = uieditfield(app.UIFigure, 'numeric');

app.dialogSKU.Position = [90 69 100 22];

% Create m2Label

app.m2Label = uilabel(app.UIFigure);

app.m2Label.Position = [205 73 25 15];

app.m2Label.Text = 'm2';

end

end

methods (Access = public)

% Construct app

function app = DialogBox\_SKU(varargin)

% Create and configure components

createComponents(app)

% Register the app with App Designer

registerApp(app, app.UIFigure)

% Execute the startup function

runStartupFcn(app, @(app)startupFcnSKU(app, varargin{:}))

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

# Código DialogBox Setup Máquinas

classdef DialogBox\_SETUPMAQUINAS < matlab.apps.AppBase

% Properties that correspond to app components

properties (Access = public)

SetupMquinasUIFigure matlab.ui.Figure

TabGroup matlab.ui.container.TabGroup

MTBFeMTTRTab matlab.ui.container.Tab

QualoMTBFeMTTRdasmquinasLabel matlab.ui.control.Label

ObsDeixaroEditFieldemzeroparamquinasquenoexistemnalinhaLabel matlab.ui.control.Label

Panel matlab.ui.container.Panel

dialogMTBF1 matlab.ui.control.NumericEditField

dialogMTBF2 matlab.ui.control.NumericEditField

dialogMTBF3 matlab.ui.control.NumericEditField

dialogMTBF4 matlab.ui.control.NumericEditField

dialogMTBF5 matlab.ui.control.NumericEditField

dialogMTBF6 matlab.ui.control.NumericEditField

dialogMTBF7 matlab.ui.control.NumericEditField

dialogMTBF8 matlab.ui.control.NumericEditField

MTTRLabel matlab.ui.control.Label

MTBFLabel\_2 matlab.ui.control.Label

minLabel matlab.ui.control.Label

minLabel\_2 matlab.ui.control.Label

mquina1EditFieldLabel matlab.ui.control.Label

dialogMTTR1 matlab.ui.control.NumericEditField

mquina2EditFieldLabel matlab.ui.control.Label

dialogMTTR2 matlab.ui.control.NumericEditField

mquina3EditFieldLabel matlab.ui.control.Label

dialogMTTR3 matlab.ui.control.NumericEditField

mquina4EditFieldLabel matlab.ui.control.Label

dialogMTTR4 matlab.ui.control.NumericEditField

mquina5EditFieldLabel matlab.ui.control.Label

dialogMTTR5 matlab.ui.control.NumericEditField

mquina6EditFieldLabel matlab.ui.control.Label

dialogMTTR6 matlab.ui.control.NumericEditField

mquina7EditFieldLabel matlab.ui.control.Label

dialogMTTR7 matlab.ui.control.NumericEditField

mquina8EditFieldLabel matlab.ui.control.Label

dialogMTTR8 matlab.ui.control.NumericEditField

Button matlab.ui.control.Button

GargaloTab matlab.ui.container.Tab

QualaposiodagargaloLabel matlab.ui.control.Label

QualcapacidadedestamquinaLabel matlab.ui.control.Label

velocidadeEditFieldLabel matlab.ui.control.Label

veloGAR matlab.ui.control.NumericEditField

OKButton\_3 matlab.ui.control.Button

SkuhLabel matlab.ui.control.Label

posiomquinaLabel matlab.ui.control.Label

posGar matlab.ui.control.NumericEditField

Button\_4 matlab.ui.control.Button

end

properties (Access = private)

CallingApp % Main app

end

methods (Access = private)

% Code that executes after component creation

function startupFcn(app, mainapp)

% Store main app in property for CloseRequestFcn to use

app.CallingApp = mainapp;

end

% Button pushed function: OKButton\_3

function OKButton\_3Pushed(app, event)

updateVALORESMAQUINA(app.CallingApp,app.veloGAR.Value,app.dialogMTBF1.Value,app.dialogMTBF2.Value,app.dialogMTBF3.Value,app.dialogMTBF4.Value,...

app.dialogMTBF5.Value,app.dialogMTBF6.Value,app.dialogMTBF7.Value,app.dialogMTBF8.Value,app.dialogMTTR1.Value,app.dialogMTTR2.Value,app.dialogMTTR3.Value,app.dialogMTTR4.Value,...

app.dialogMTTR5.Value,app.dialogMTTR6.Value,app.dialogMTTR7.Value,app.dialogMTTR8.Value,app.posGar.Value);

% delete options dialog

%delete(app);

end

% Callback function

function OKButtonNMAQUINA1Pushed(app, event)

updateVALORESMAQUINA(app.CallingApp,app.veloGAR.Value,app.dialogMTBF1.Value,app.dialogMTBF2.Value,app.dialogMTBF3.Value,app.dialogMTBF4.Value,...

app.dialogMTBF5.Value,app.dialogMTBF6.Value,app.dialogMTBF7.Value,app.dialogMTBF8.Value,app.dialogMTTR1.Value,app.dialogMTTR2.Value,app.dialogMTTR3.Value,app.dialogMTTR4.Value,...

app.dialogMTTR5.Value,app.dialogMTTR6.Value,app.dialogMTTR7.Value,app.dialogMTTR8.Value);

end

end

% App initialization and construction

methods (Access = private)

% Create UIFigure and components

function createComponents(app)

% Create SetupMquinasUIFigure

app.SetupMquinasUIFigure = uifigure;

app.SetupMquinasUIFigure.Position = [10 100 450 625];

app.SetupMquinasUIFigure.Name = 'Setup Máquinas';

app.SetupMquinasUIFigure.Resize = 'off';

% Create TabGroup

app.TabGroup = uitabgroup(app.SetupMquinasUIFigure);

app.TabGroup.Position = [1 1 450 625];

% Create MTBFeMTTRTab

app.MTBFeMTTRTab = uitab(app.TabGroup);

app.MTBFeMTTRTab.Title = 'MTBF e MTTR';

% Create QualoMTBFeMTTRdasmquinasLabel

app.QualoMTBFeMTTRdasmquinasLabel = uilabel(app.MTBFeMTTRTab);

app.QualoMTBFeMTTRdasmquinasLabel.FontSize = 24;

app.QualoMTBFeMTTRdasmquinasLabel.Position = [19 366 418 31];

app.QualoMTBFeMTTRdasmquinasLabel.Text = 'Qual o MTBF e MTTR das máquinas?';

% Create ObsDeixaroEditFieldemzeroparamquinasquenoexistemnalinhaLabel

app.ObsDeixaroEditFieldemzeroparamquinasquenoexistemnalinhaLabel = uilabel(app.MTBFeMTTRTab);

app.ObsDeixaroEditFieldemzeroparamquinasquenoexistemnalinhaLabel.Position = [22 29 412 15];

app.ObsDeixaroEditFieldemzeroparamquinasquenoexistemnalinhaLabel.Text = 'Obs: Deixar o Edit Field em zero para máquinas que não existem na linha';

% Create Panel

app.Panel = uipanel(app.MTBFeMTTRTab);

app.Panel.Position = [35 80 377 275];

% Create dialogMTBF1

app.dialogMTBF1 = uieditfield(app.Panel, 'numeric');

app.dialogMTBF1.ValueDisplayFormat = '%.0f';

app.dialogMTBF1.FontSize = 16;

app.dialogMTBF1.Position = [243 206 100 22];

% Create dialogMTBF2

app.dialogMTBF2 = uieditfield(app.Panel, 'numeric');

app.dialogMTBF2.ValueDisplayFormat = '%.0f';

app.dialogMTBF2.FontSize = 16;

app.dialogMTBF2.Position = [243 177 100 22];

% Create dialogMTBF3

app.dialogMTBF3 = uieditfield(app.Panel, 'numeric');

app.dialogMTBF3.ValueDisplayFormat = '%.0f';

app.dialogMTBF3.FontSize = 16;

app.dialogMTBF3.Position = [243 148 100 22];

% Create dialogMTBF4

app.dialogMTBF4 = uieditfield(app.Panel, 'numeric');

app.dialogMTBF4.ValueDisplayFormat = '%.0f';

app.dialogMTBF4.FontSize = 16;

app.dialogMTBF4.Position = [243 119 100 22];

% Create dialogMTBF5

app.dialogMTBF5 = uieditfield(app.Panel, 'numeric');

app.dialogMTBF5.ValueDisplayFormat = '%.0f';

app.dialogMTBF5.FontSize = 16;

app.dialogMTBF5.Position = [243 91 100 22];

% Create dialogMTBF6

app.dialogMTBF6 = uieditfield(app.Panel, 'numeric');

app.dialogMTBF6.ValueDisplayFormat = '%.0f';

app.dialogMTBF6.FontSize = 16;

app.dialogMTBF6.Position = [243 63 100 22];

% Create dialogMTBF7

app.dialogMTBF7 = uieditfield(app.Panel, 'numeric');

app.dialogMTBF7.ValueDisplayFormat = '%.0f';

app.dialogMTBF7.FontSize = 16;

app.dialogMTBF7.Position = [243 35 100 22];

% Create dialogMTBF8

app.dialogMTBF8 = uieditfield(app.Panel, 'numeric');

app.dialogMTBF8.ValueDisplayFormat = '%.0f';

app.dialogMTBF8.FontSize = 16;

app.dialogMTBF8.Position = [243 7 100 22];

% Create MTTRLabel

app.MTTRLabel = uilabel(app.Panel);

app.MTTRLabel.FontSize = 16;

app.MTTRLabel.FontWeight = 'bold';

app.MTTRLabel.Position = [162 250 50 20];

app.MTTRLabel.Text = 'MTTR';

% Create MTBFLabel\_2

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

app.MTBFLabel\_2.FontSize = 16;

app.MTBFLabel\_2.FontWeight = 'bold';

app.MTBFLabel\_2.Position = [272 250 50 20];

app.MTBFLabel\_2.Text = 'MTBF';

% Create minLabel

app.minLabel = uilabel(app.Panel);

app.minLabel.Position = [174 235 25 15];

app.minLabel.Text = 'min';

% Create minLabel\_2

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

app.minLabel\_2.Position = [284 235 25 15];

app.minLabel\_2.Text = 'min';

% Create mquina1EditFieldLabel

app.mquina1EditFieldLabel = uilabel(app.Panel);

app.mquina1EditFieldLabel.HorizontalAlignment = 'right';

app.mquina1EditFieldLabel.FontSize = 16;

app.mquina1EditFieldLabel.Position = [31 205 85 20];

app.mquina1EditFieldLabel.Text = 'máquina 1:';

% Create dialogMTTR1

app.dialogMTTR1 = uieditfield(app.Panel, 'numeric');

app.dialogMTTR1.ValueDisplayFormat = '%.0f';

app.dialogMTTR1.FontSize = 16;

app.dialogMTTR1.Position = [131 206 100 22];

% Create mquina2EditFieldLabel

app.mquina2EditFieldLabel = uilabel(app.Panel);

app.mquina2EditFieldLabel.HorizontalAlignment = 'right';

app.mquina2EditFieldLabel.FontSize = 16;

app.mquina2EditFieldLabel.Position = [31 176 85 20];

app.mquina2EditFieldLabel.Text = 'máquina 2:';

% Create dialogMTTR2

app.dialogMTTR2 = uieditfield(app.Panel, 'numeric');

app.dialogMTTR2.ValueDisplayFormat = '%.0f';

app.dialogMTTR2.FontSize = 16;

app.dialogMTTR2.Position = [131 177 100 22];

% Create mquina3EditFieldLabel

app.mquina3EditFieldLabel = uilabel(app.Panel);

app.mquina3EditFieldLabel.HorizontalAlignment = 'right';

app.mquina3EditFieldLabel.FontSize = 16;

app.mquina3EditFieldLabel.Position = [31 147 85 20];

app.mquina3EditFieldLabel.Text = 'máquina 3:';

% Create dialogMTTR3

app.dialogMTTR3 = uieditfield(app.Panel, 'numeric');

app.dialogMTTR3.ValueDisplayFormat = '%.0f';

app.dialogMTTR3.FontSize = 16;

app.dialogMTTR3.Position = [131 148 100 22];

% Create mquina4EditFieldLabel

app.mquina4EditFieldLabel = uilabel(app.Panel);

app.mquina4EditFieldLabel.HorizontalAlignment = 'right';

app.mquina4EditFieldLabel.FontSize = 16;

app.mquina4EditFieldLabel.Position = [31 118 85 20];

app.mquina4EditFieldLabel.Text = 'máquina 4:';

% Create dialogMTTR4

app.dialogMTTR4 = uieditfield(app.Panel, 'numeric');

app.dialogMTTR4.ValueDisplayFormat = '%.0f';

app.dialogMTTR4.FontSize = 16;

app.dialogMTTR4.Position = [131 119 100 22];

% Create mquina5EditFieldLabel

app.mquina5EditFieldLabel = uilabel(app.Panel);

app.mquina5EditFieldLabel.HorizontalAlignment = 'right';

app.mquina5EditFieldLabel.FontSize = 16;

app.mquina5EditFieldLabel.Position = [31 90 85 20];

app.mquina5EditFieldLabel.Text = 'máquina 5:';

% Create dialogMTTR5

app.dialogMTTR5 = uieditfield(app.Panel, 'numeric');

app.dialogMTTR5.ValueDisplayFormat = '%.0f';

app.dialogMTTR5.FontSize = 16;

app.dialogMTTR5.Position = [131 91 100 22];

% Create mquina6EditFieldLabel

app.mquina6EditFieldLabel = uilabel(app.Panel);

app.mquina6EditFieldLabel.HorizontalAlignment = 'right';

app.mquina6EditFieldLabel.FontSize = 16;

app.mquina6EditFieldLabel.Position = [31 62 85 20];

app.mquina6EditFieldLabel.Text = 'máquina 6:';

% Create dialogMTTR6

app.dialogMTTR6 = uieditfield(app.Panel, 'numeric');

app.dialogMTTR6.ValueDisplayFormat = '%.0f';

app.dialogMTTR6.FontSize = 16;

app.dialogMTTR6.Position = [131 63 100 22];

% Create mquina7EditFieldLabel

app.mquina7EditFieldLabel = uilabel(app.Panel);

app.mquina7EditFieldLabel.HorizontalAlignment = 'right';

app.mquina7EditFieldLabel.FontSize = 16;

app.mquina7EditFieldLabel.Position = [31 34 85 20];

app.mquina7EditFieldLabel.Text = 'máquina 7:';

% Create dialogMTTR7

app.dialogMTTR7 = uieditfield(app.Panel, 'numeric');

app.dialogMTTR7.ValueDisplayFormat = '%.0f';

app.dialogMTTR7.FontSize = 16;

app.dialogMTTR7.Position = [131 35 100 22];

% Create mquina8EditFieldLabel

app.mquina8EditFieldLabel = uilabel(app.Panel);

app.mquina8EditFieldLabel.HorizontalAlignment = 'right';

app.mquina8EditFieldLabel.FontSize = 16;

app.mquina8EditFieldLabel.Position = [31 6 85 20];

app.mquina8EditFieldLabel.Text = 'máquina 8:';

% Create dialogMTTR8

app.dialogMTTR8 = uieditfield(app.Panel, 'numeric');

app.dialogMTTR8.ValueDisplayFormat = '%.0f';

app.dialogMTTR8.FontSize = 16;

app.dialogMTTR8.Position = [131 7 100 22];

% Create Button

app.Button = uibutton(app.MTBFeMTTRTab, 'push');

app.Button.Icon = 'foto\_planta.PNG';

app.Button.Position = [92 421 265 155];

app.Button.Text = '';

% Create GargaloTab

app.GargaloTab = uitab(app.TabGroup);

app.GargaloTab.Title = 'Gargalo';

% Create QualaposiodagargaloLabel

app.QualaposiodagargaloLabel = uilabel(app.GargaloTab);

app.QualaposiodagargaloLabel.FontSize = 24;

app.QualaposiodagargaloLabel.Position = [80 317 303 31];

app.QualaposiodagargaloLabel.Text = 'Qual a posição da gargalo?';

% Create QualcapacidadedestamquinaLabel

app.QualcapacidadedestamquinaLabel = uilabel(app.GargaloTab);

app.QualcapacidadedestamquinaLabel.FontSize = 24;

app.QualcapacidadedestamquinaLabel.Position = [45 189 369 31];

app.QualcapacidadedestamquinaLabel.Text = 'Qual capacidade desta máquina?';

% Create velocidadeEditFieldLabel

app.velocidadeEditFieldLabel = uilabel(app.GargaloTab);

app.velocidadeEditFieldLabel.HorizontalAlignment = 'right';

app.velocidadeEditFieldLabel.Position = [124 131 68 15];

app.velocidadeEditFieldLabel.Text = 'velocidade:';

% Create veloGAR

app.veloGAR = uieditfield(app.GargaloTab, 'numeric');

app.veloGAR.ValueDisplayFormat = '%.0f';

app.veloGAR.Position = [207 127 100 22];

% Create OKButton\_3

app.OKButton\_3 = uibutton(app.GargaloTab, 'push');

app.OKButton\_3.ButtonPushedFcn = createCallbackFcn(app, @OKButton\_3Pushed, true);

app.OKButton\_3.Position = [180 66 100 22];

app.OKButton\_3.Text = 'OK';

% Create SkuhLabel

app.SkuhLabel = uilabel(app.GargaloTab);

app.SkuhLabel.Position = [318 131 36 15];

app.SkuhLabel.Text = 'Sku/h';

% Create posiomquinaLabel

app.posiomquinaLabel = uilabel(app.GargaloTab);

app.posiomquinaLabel.HorizontalAlignment = 'right';

app.posiomquinaLabel.Position = [92 265 99 15];

app.posiomquinaLabel.Text = 'posição máquina';

% Create posGar

app.posGar = uieditfield(app.GargaloTab, 'numeric');

app.posGar.Position = [206 261 100 22];

% Create Button\_4

app.Button\_4 = uibutton(app.GargaloTab, 'push');

app.Button\_4.Icon = 'foto\_planta.PNG';

app.Button\_4.Position = [92 421 265 155];

app.Button\_4.Text = '';

end

end

methods (Access = public)

% Construct app

function app = DialogBox\_SETUPMAQUINAS(varargin)

% Create and configure components

createComponents(app)

% Register the app with App Designer

registerApp(app, app.SetupMquinasUIFigure)

% Execute the startup function

runStartupFcn(app, @(app)startupFcn(app, varargin{:}))

if nargout == 0

clear app

end

end

% Code that executes before app deletion

function delete(app)

% Delete UIFigure when app is deleted

delete(app.SetupMquinasUIFigure)

end

end

end

# Código DialogBox Relatório

classdef DialogBox\_RELATORIO < matlab.apps.AppBase

% Properties that correspond to app components

properties (Access = public)

UIFigure matlab.ui.Figure

OkButton matlab.ui.control.Button

VelocidadesPanel matlab.ui.container.Panel

mquina1EditFieldLabel matlab.ui.control.Label

m1 matlab.ui.control.NumericEditField

mquina2EditFieldLabel matlab.ui.control.Label

m2 matlab.ui.control.NumericEditField

mquina3EditFieldLabel matlab.ui.control.Label

m3 matlab.ui.control.NumericEditField

mquina4Label matlab.ui.control.Label

m4 matlab.ui.control.NumericEditField

mquina5EditFieldLabel matlab.ui.control.Label

m5 matlab.ui.control.NumericEditField

mquina6Label matlab.ui.control.Label

m6 matlab.ui.control.NumericEditField

mquina7EditFieldLabel matlab.ui.control.Label

m7 matlab.ui.control.NumericEditField

mquina8EditFieldLabel matlab.ui.control.Label

m8 matlab.ui.control.NumericEditField

EficinciadalinhaLabel matlab.ui.control.Label

eficencialinha matlab.ui.control.NumericEditField

Button matlab.ui.control.Button

Button\_2 matlab.ui.control.Button

DisponibilidadePanel matlab.ui.container.Panel

mquina1EditField\_2Label matlab.ui.control.Label

disp1 matlab.ui.control.NumericEditField

mquina2EditField\_2Label matlab.ui.control.Label

disp2 matlab.ui.control.NumericEditField

mquina3EditField\_2Label matlab.ui.control.Label

disp3 matlab.ui.control.NumericEditField

mquina4EditField\_2Label matlab.ui.control.Label

disp4 matlab.ui.control.NumericEditField

mquina5EditField\_2Label matlab.ui.control.Label

disp5 matlab.ui.control.NumericEditField

mquina6EditField\_2Label matlab.ui.control.Label

disp6 matlab.ui.control.NumericEditField

mquina7EditField\_2Label matlab.ui.control.Label

disp7 matlab.ui.control.NumericEditField

mquina8EditField\_2Label matlab.ui.control.Label

disp8 matlab.ui.control.NumericEditField

UIAxes matlab.ui.control.UIAxes

end

properties (Access = private)

CallingApp % Main app

end

methods (Access = private)

% Code that executes after component creation

function startupFcnRELATORIO(app, mainapp)

% ------------------------------------- Calculo das velocidades ---------------------------------------

% criação das listas

posGar = mainapp.pGar;

AreaP = mainapp.AreaP;

AreaSku = mainapp.AreaSku;

MTTR = mainapp.MTTR;

MTBF = mainapp.MTBF;

Gar = mainapp.GAR;

% filtro do valores da lista

TF\_MTTR = find(MTTR==0);

MTTR(TF\_MTTR) = [];

TF\_MTBF = find(MTBF==0);

MTBF(TF\_MTBF) = [];

TF\_AreaP = find(AreaP==0);

AreaP(TF\_AreaP) = [];

AreaSku = AreaSku(1:length(MTTR));

Produtos = AreaP./(AreaSku/1000);

PercentParada = MTTR./(MTTR+MTBF);

MTPH = 60\*PercentParada; % media de tempo de parada por hora

VRL = Gar-(Gar\*PercentParada(posGar)); % valor real da linha

% calculo da eficiencia

app.eficencialinha.Value = MTBF(posGar)/(MTBF(posGar)+MTTR(posGar));

SVs = VRL+Gar\*PercentParada;% sobre velocidade

GarPos = find(SVs==min(SVs));

if (length(GarPos)==1)

SVsaux1 = SVs(1:GarPos-1);

SVsaux2 = SVs(GarPos+1:end);

for i = 1:length(SVsaux1)

Over = 1+(((length(SVsaux1)+1)-i)\*(0.03));

SVsaux1(i) = SVsaux1(i)\*Over;

end

for i= 1:length(SVsaux2)

Over = 1+(0.03\*i);

SVsaux2(i) = SVsaux2(i)\*Over;

end

SVs = cat(2,SVsaux1,SVs(GarPos),SVsaux2);

end

SVpercent = SVs./sum(Gar);

TEP = (Produtos./SVs)\*60;

X = [1 2 3 4 5 6 7 8];

X = X(1:length(MTTR));

% Plot do V-Graph

plot(app.UIAxes,X,SVpercent,'b-o');

% Plot das velocidades máquinas

try

app.m1.Value = SVs(1);

catch

app.m1.Value = 0;

end

try

app.m2.Value = SVs(2);

catch

app.m2.Value = 0;

end

try

app.m3.Value = SVs(3);

catch

app.m3.Value = 0;

end

try

app.m4.Value = SVs(4);

catch

app.m4.Value = 0;

end

try

app.m5.Value = SVs(5);

catch

app.m5.Value = 0;

end

try

app.m6.Value = SVs(6);

catch

app.m6.Value = 0;

end

try

app.m7.Value = SVs(7);

catch

app.m7.Value = 0;

end

try

app.m8.Value = SVs(8);

catch

app.m8.Value = 0;

end

% Plot das disponibilidades

try

app.disp1.Value = MTBF(1)/(MTBF(1)+MTTR(1));

catch

app.disp1.Value = 0;

end

try

app.disp2.Value = MTBF(2)/(MTBF(2)+MTTR(2));

catch

app.disp2.Value = 0;

end

try

app.disp3.Value = MTBF(3)/(MTBF(3)+MTTR(3));

catch

app.disp3.Value = 0;

end

try

app.disp4.Value = MTBF(4)/(MTBF(4)+MTTR(4));

catch

app.disp4.Value = 0;

end

try

app.disp5.Value = MTBF(5)/(MTBF(5)+MTTR(5));

catch

app.disp5.Value = 0;

end

try

app.disp6.Value = MTBF(6)/(MTBF(6)+MTTR(6));

catch

app.disp6.Value = 0;

end

try

app.disp7.Value = MTBF(7)/(MTBF(7)+MTTR(7));

catch

app.disp7.Value = 0;

end

try

app.disp8.Value = MTBF(8)/(MTBF(8)+MTTR(8));

catch

app.disp8.Value= 0;

end

end

% Button pushed function: OkButton

function OkButtonPushed(app, event)

% delete options dialog

delete(app)

end

end

% App initialization and construction

methods (Access = private)

% Create UIFigure and components

function createComponents(app)

% Create UIFigure

app.UIFigure = uifigure;

app.UIFigure.Position = [755 100 872 600];

app.UIFigure.Name = 'UI Figure';

% Create OkButton

app.OkButton = uibutton(app.UIFigure, 'push');

app.OkButton.ButtonPushedFcn = createCallbackFcn(app, @OkButtonPushed, true);

app.OkButton.Position = [399 15 100 22];

app.OkButton.Text = 'Ok';

% Create VelocidadesPanel

app.VelocidadesPanel = uipanel(app.UIFigure);

app.VelocidadesPanel.Title = 'Velocidades';

app.VelocidadesPanel.FontWeight = 'bold';

app.VelocidadesPanel.FontSize = 16;

app.VelocidadesPanel.Position = [17 53 214 471];

% Create mquina1EditFieldLabel

app.mquina1EditFieldLabel = uilabel(app.VelocidadesPanel);

app.mquina1EditFieldLabel.HorizontalAlignment = 'right';

app.mquina1EditFieldLabel.FontSize = 14;

app.mquina1EditFieldLabel.Position = [12 412 76 18];

app.mquina1EditFieldLabel.Text = 'máquina 1:';

% Create m1

app.m1 = uieditfield(app.VelocidadesPanel, 'numeric');

app.m1.ValueDisplayFormat = '%.0f';

app.m1.Editable = 'off';

app.m1.FontSize = 14;

app.m1.Position = [100 411 100 22];

% Create mquina2EditFieldLabel

app.mquina2EditFieldLabel = uilabel(app.VelocidadesPanel);

app.mquina2EditFieldLabel.HorizontalAlignment = 'right';

app.mquina2EditFieldLabel.FontSize = 14;

app.mquina2EditFieldLabel.Position = [12 360 76 18];

app.mquina2EditFieldLabel.Text = 'máquina 2:';

% Create m2

app.m2 = uieditfield(app.VelocidadesPanel, 'numeric');

app.m2.ValueDisplayFormat = '%.0f';

app.m2.FontSize = 14;

app.m2.Position = [100 359 100 22];

% Create mquina3EditFieldLabel

app.mquina3EditFieldLabel = uilabel(app.VelocidadesPanel);

app.mquina3EditFieldLabel.HorizontalAlignment = 'right';

app.mquina3EditFieldLabel.FontSize = 14;

app.mquina3EditFieldLabel.Position = [12 305 76 18];

app.mquina3EditFieldLabel.Text = 'máquina 3:';

% Create m3

app.m3 = uieditfield(app.VelocidadesPanel, 'numeric');

app.m3.ValueDisplayFormat = '%.0f';

app.m3.FontSize = 14;

app.m3.Position = [100 304 100 22];

% Create mquina4Label

app.mquina4Label = uilabel(app.VelocidadesPanel);

app.mquina4Label.HorizontalAlignment = 'right';

app.mquina4Label.FontSize = 14;

app.mquina4Label.Position = [12 250 76 18];

app.mquina4Label.Text = 'máquina 4:';

% Create m4

app.m4 = uieditfield(app.VelocidadesPanel, 'numeric');

app.m4.ValueDisplayFormat = '%.0f';

app.m4.FontSize = 14;

app.m4.Position = [100 249 100 22];

% Create mquina5EditFieldLabel

app.mquina5EditFieldLabel = uilabel(app.VelocidadesPanel);

app.mquina5EditFieldLabel.HorizontalAlignment = 'right';

app.mquina5EditFieldLabel.FontSize = 14;

app.mquina5EditFieldLabel.Position = [12 195 76 18];

app.mquina5EditFieldLabel.Text = 'máquina 5:';

% Create m5

app.m5 = uieditfield(app.VelocidadesPanel, 'numeric');

app.m5.FontSize = 14;

app.m5.Position = [100 194 100 22];

% Create mquina6Label

app.mquina6Label = uilabel(app.VelocidadesPanel);

app.mquina6Label.HorizontalAlignment = 'right';

app.mquina6Label.FontSize = 14;

app.mquina6Label.Position = [12 140 76 18];

app.mquina6Label.Text = 'máquina 6:';

% Create m6

app.m6 = uieditfield(app.VelocidadesPanel, 'numeric');

app.m6.FontSize = 14;

app.m6.Position = [100 139 100 22];

% Create mquina7EditFieldLabel

app.mquina7EditFieldLabel = uilabel(app.VelocidadesPanel);

app.mquina7EditFieldLabel.HorizontalAlignment = 'right';

app.mquina7EditFieldLabel.FontSize = 14;

app.mquina7EditFieldLabel.Position = [12 85 76 18];

app.mquina7EditFieldLabel.Text = 'máquina 7:';

% Create m7

app.m7 = uieditfield(app.VelocidadesPanel, 'numeric');

app.m7.FontSize = 14;

app.m7.Position = [100 84 100 22];

% Create mquina8EditFieldLabel

app.mquina8EditFieldLabel = uilabel(app.VelocidadesPanel);

app.mquina8EditFieldLabel.HorizontalAlignment = 'right';

app.mquina8EditFieldLabel.FontSize = 14;

app.mquina8EditFieldLabel.Position = [12 30 76 18];

app.mquina8EditFieldLabel.Text = 'máquina 8:';

% Create m8

app.m8 = uieditfield(app.VelocidadesPanel, 'numeric');

app.m8.FontSize = 14;

app.m8.Position = [100 29 100 22];

% Create EficinciadalinhaLabel

app.EficinciadalinhaLabel = uilabel(app.UIFigure);

app.EficinciadalinhaLabel.HorizontalAlignment = 'right';

app.EficinciadalinhaLabel.FontSize = 16;

app.EficinciadalinhaLabel.FontWeight = 'bold';

app.EficinciadalinhaLabel.Position = [486 501 150 20];

app.EficinciadalinhaLabel.Text = 'Eficiência da linha:';

% Create eficencialinha

app.eficencialinha = uieditfield(app.UIFigure, 'numeric');

app.eficencialinha.ValueDisplayFormat = '%.2f';

app.eficencialinha.FontSize = 16;

app.eficencialinha.FontWeight = 'bold';

app.eficencialinha.Position = [645 502 197 22];

% Create Button

app.Button = uibutton(app.UIFigure, 'push');

app.Button.Icon = 'insper\_logo.png';

app.Button.Position = [316 535 100 57];

app.Button.Text = '';

% Create Button\_2

app.Button\_2 = uibutton(app.UIFigure, 'push');

app.Button\_2.Icon = 'Coca-Cola\_Femsa\_Logo.png';

app.Button\_2.Position = [451 535 100 57];

app.Button\_2.Text = '';

% Create DisponibilidadePanel

app.DisponibilidadePanel = uipanel(app.UIFigure);

app.DisponibilidadePanel.Title = 'Disponibilidade';

app.DisponibilidadePanel.FontWeight = 'bold';

app.DisponibilidadePanel.FontSize = 16;

app.DisponibilidadePanel.Position = [241 53 214 471];

% Create mquina1EditField\_2Label

app.mquina1EditField\_2Label = uilabel(app.DisponibilidadePanel);

app.mquina1EditField\_2Label.HorizontalAlignment = 'right';

app.mquina1EditField\_2Label.FontSize = 14;

app.mquina1EditField\_2Label.Position = [12 412 76 18];

app.mquina1EditField\_2Label.Text = 'máquina 1:';

% Create disp1

app.disp1 = uieditfield(app.DisponibilidadePanel, 'numeric');

app.disp1.ValueDisplayFormat = '%.2f';

app.disp1.Editable = 'off';

app.disp1.FontSize = 14;

app.disp1.Position = [100 411 100 22];

% Create mquina2EditField\_2Label

app.mquina2EditField\_2Label = uilabel(app.DisponibilidadePanel);

app.mquina2EditField\_2Label.HorizontalAlignment = 'right';

app.mquina2EditField\_2Label.FontSize = 14;

app.mquina2EditField\_2Label.Position = [12 360 76 18];

app.mquina2EditField\_2Label.Text = 'máquina 2:';

% Create disp2

app.disp2 = uieditfield(app.DisponibilidadePanel, 'numeric');

app.disp2.ValueDisplayFormat = '%.2f';

app.disp2.FontSize = 14;

app.disp2.Position = [100 359 100 22];

% Create mquina3EditField\_2Label

app.mquina3EditField\_2Label = uilabel(app.DisponibilidadePanel);

app.mquina3EditField\_2Label.HorizontalAlignment = 'right';

app.mquina3EditField\_2Label.FontSize = 14;

app.mquina3EditField\_2Label.Position = [12 305 76 18];

app.mquina3EditField\_2Label.Text = 'máquina 3:';

% Create disp3

app.disp3 = uieditfield(app.DisponibilidadePanel, 'numeric');

app.disp3.ValueDisplayFormat = '%.2f';

app.disp3.FontSize = 14;

app.disp3.Position = [100 304 100 22];

% Create mquina4EditField\_2Label

app.mquina4EditField\_2Label = uilabel(app.DisponibilidadePanel);

app.mquina4EditField\_2Label.HorizontalAlignment = 'right';

app.mquina4EditField\_2Label.FontSize = 14;

app.mquina4EditField\_2Label.Position = [12 250 76 18];

app.mquina4EditField\_2Label.Text = 'máquina 4:';

% Create disp4

app.disp4 = uieditfield(app.DisponibilidadePanel, 'numeric');

app.disp4.ValueDisplayFormat = '%.2f';

app.disp4.FontSize = 14;

app.disp4.Position = [100 249 100 22];

% Create mquina5EditField\_2Label

app.mquina5EditField\_2Label = uilabel(app.DisponibilidadePanel);

app.mquina5EditField\_2Label.HorizontalAlignment = 'right';

app.mquina5EditField\_2Label.FontSize = 14;

app.mquina5EditField\_2Label.Position = [12 195 76 18];

app.mquina5EditField\_2Label.Text = 'máquina 5:';

% Create disp5

app.disp5 = uieditfield(app.DisponibilidadePanel, 'numeric');

app.disp5.ValueDisplayFormat = '%.2f';

app.disp5.FontSize = 14;

app.disp5.Position = [100 194 100 22];

% Create mquina6EditField\_2Label

app.mquina6EditField\_2Label = uilabel(app.DisponibilidadePanel);

app.mquina6EditField\_2Label.HorizontalAlignment = 'right';

app.mquina6EditField\_2Label.FontSize = 14;

app.mquina6EditField\_2Label.Position = [12 140 76 18];

app.mquina6EditField\_2Label.Text = 'máquina 6:';

% Create disp6

app.disp6 = uieditfield(app.DisponibilidadePanel, 'numeric');

app.disp6.ValueDisplayFormat = '%.2f';

app.disp6.FontSize = 14;

app.disp6.Position = [100 139 100 22];

% Create mquina7EditField\_2Label

app.mquina7EditField\_2Label = uilabel(app.DisponibilidadePanel);

app.mquina7EditField\_2Label.HorizontalAlignment = 'right';

app.mquina7EditField\_2Label.FontSize = 14;

app.mquina7EditField\_2Label.Position = [12 85 76 18];

app.mquina7EditField\_2Label.Text = 'máquina 7:';

% Create disp7

app.disp7 = uieditfield(app.DisponibilidadePanel, 'numeric');

app.disp7.ValueDisplayFormat = '%.2f';

app.disp7.FontSize = 14;

app.disp7.Position = [100 84 100 22];

% Create mquina8EditField\_2Label

app.mquina8EditField\_2Label = uilabel(app.DisponibilidadePanel);

app.mquina8EditField\_2Label.HorizontalAlignment = 'right';

app.mquina8EditField\_2Label.FontSize = 14;

app.mquina8EditField\_2Label.Position = [12 30 76 18];

app.mquina8EditField\_2Label.Text = 'máquina 8:';

% Create disp8

app.disp8 = uieditfield(app.DisponibilidadePanel, 'numeric');

app.disp8.ValueDisplayFormat = '%.2f';

app.disp8.FontSize = 14;

app.disp8.Position = [100 29 100 22];

% Create UIAxes

app.UIAxes = uiaxes(app.UIFigure);

title(app.UIAxes, 'Gráfico V')

xlabel(app.UIAxes, 'N máquinas')

ylabel(app.UIAxes, 'Sobrevelovidades')

app.UIAxes.Box = 'on';

app.UIAxes.XGrid = 'on';

app.UIAxes.YGrid = 'on';

app.UIAxes.Position = [476 53 380 435];

end

end

methods (Access = public)

% Construct app

function app = DialogBox\_RELATORIO(varargin)

% Create and configure components

createComponents(app)

% Register the app with App Designer

registerApp(app, app.UIFigure)

% Execute the startup function

runStartupFcn(app, @(app)startupFcnRELATORIO(app, varargin{:}))

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