

```

1  classdef DialogAppExample < handle
2
3      % Properties that correspond to app components
4      properties (Access = public)
5          UIFigure                matlab.ui.Figure
6          SampleSizeEditFieldLabel matlab.ui.control.Label
7          EditField                matlab.ui.control.
8          NumericEditField
9          ColormapDropDownLabel    matlab.ui.control.Label
10         DropDown                 matlab.ui.control.
11         DropDown
12         Button                   matlab.ui.control.Button
13
14     end
15
16     properties (Access = private)
17         CallingApp % Main app object
18     end
19
20     % Callbacks that handle component events
21     methods (Access = private)
22
23         % Code that executes after component creation
24         function StartupFcn(app, mainapp, sz, c)
25             % Store main app in property for
26             % CloseRequestFcn to use
27             app.CallingApp = mainapp;
28
29             % Update UI with input values
30             app.EditField.Value = sz;
31             app.DropDown.Value = c;
32         end
33
34         % Button pushed function: Button
35         function ButtonPushed(app, event)
36             % Call main app's public function
37             updateplot(app.CallingApp, app.EditField.Value
38             , app.DropDown.Value);
39
40             % Delete the dialog box
41             delete(app)
42         end
43     end
44 end

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40
41     % Close request function: UIFigure
42     function DialogAppCloseRequest(app, event)
43         % Enable the Plot Options button in main app
44         app.CallingApp.OptionsButton.Enable = 'on';
45
46         % Delete the dialog box
47         delete(app)
48
49     end
50 end
51
52 % Component initialization
53 methods (Access = private)
54
55     % Create UIFigure and components
56     function createComponents(app)
57
58         % Create UIFigure and hide until all
59         % components are created
60         app.UIFigure = uifigure('Visible', 'off');
61         app.UIFigure.Position = [600 100 392 248];
62         app.UIFigure.Name = 'Options';
63         app.UIFigure.CloseRequestFcn =
64         createCallbackFcn(app, @DialogAppCloseRequest,
65             true);
66
67         % Create SampleSizeEditFieldLabel
68         app.SampleSizeEditFieldLabel = uilabel(app.
69         UIFigure);
70         app.SampleSizeEditFieldLabel.
71         HorizontalAlignment = 'right';
72         app.SampleSizeEditFieldLabel.VerticalAlignment
73         = 'top';
74         app.SampleSizeEditFieldLabel.Position = [102
75         160 74 15];
76         app.SampleSizeEditFieldLabel.Text = 'Sample
77         Size';
78
79         % Create EditField
80         app.EditField = uieditfield(app.UIFigure,
81         'numeric');
82         app.EditField.Limits = [2 1000];

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74         app.EditField.Position = [191 156 100 22];
75         app.EditField.Value = 35;
76
77         % Create ColormapDropDownLabel
78         app.ColormapDropDownLabel = uilabel(app.
79         UIFigure);
80         app.ColormapDropDownLabel.HorizontalAlignment =
81         'right';
82         app.ColormapDropDownLabel.VerticalAlignment =
83         'top';
84         app.ColormapDropDownLabel.Position = [117 106
85         59 15];
86         app.ColormapDropDownLabel.Text = 'Colormap';
87
88         % Create DropDown
89         app.DropDown = uidropdown(app.UIFigure);
90         app.DropDown.Items = {'Parula', 'Jet',
91         'Winter', 'Cool'};
92         app.DropDown.Position = [191 102 100 22];
93         app.DropDown.Value = 'Parula';
94
95         % Create Button
96         app.Button = uibutton(app.UIFigure, 'push');
97         app.Button.ButtonPushedFcn = createCallbackFcn
98         (app, @ButtonPushed, true);
99         app.Button.Position = [116 43 174 22];
100        app.Button.Text = 'OK';
101
102        % Show the figure after all components are
103        created
104        app.UIFigure.Visible = 'on';
105    end
106end
107
108% App creation and deletion
109methods (Access = public)
110
111    % Construct app
112    function app = DialogAppExample(varargin)
113
114        % Create UIFigure and components
115        createComponents(app)
116    end
117end

```

```
110         % Register the app with App Designer
111         registerApp(app, app.UIFigure)
112
113         % Execute the startup function
114         runStartupFcn(app, @(app)StartupFcn(app,
            varargin{:}))
115
116         if nargin == 0
117             clear app
118         end
119     end
120
121     % Code that executes before app deletion
122     function delete(app)
123
124         % Delete UIFigure when app is deleted
125         delete(app.UIFigure)
126     end
127 end
128 end
```