

Desktop QuickStart



Welcome to Xojo, the easiest tool for creating your own apps. Xojo is made up of a rich set of graphical user interface objects, a modern object-oriented language, an integrated debugger, and a multi-platform compiler. Together they make up the Xojo Integrated Development Environment or IDE.

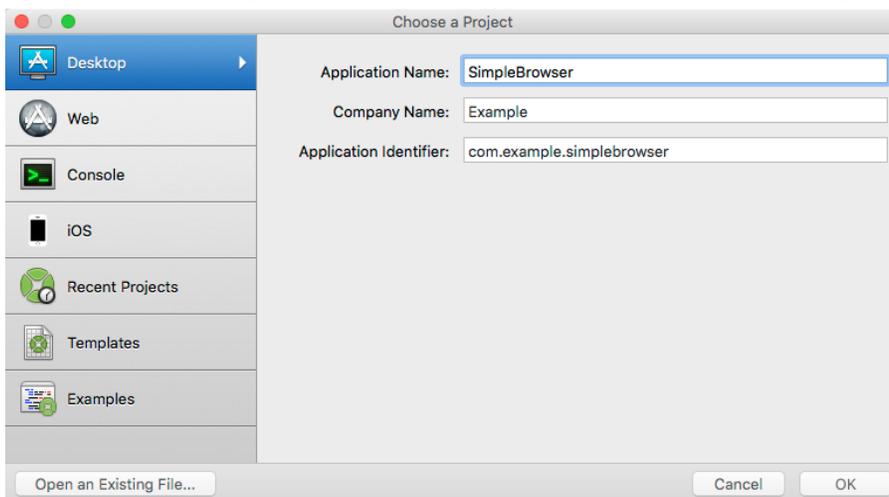
With the IDE, you can build your app's interface simply by dragging and dropping interface objects onto the app's windows and dialogs. In this QuickStart, you will see how easy it is. Xojo provides you with all the tools you need to build virtually any app you can imagine.

This QuickStart is for people who are new to programming or new to Xojo. It will give you a gentle introduction to the Xojo development environment and lead you through the development of a working desktop app (a simple web browser). It may take you up to 15 minutes to complete this QuickStart.

Getting Started

If you haven't done so already, now is the time to start Xojo.

1. Double-click the Xojo app icon to start Xojo. After it finishes loading, the Project Chooser window appears.



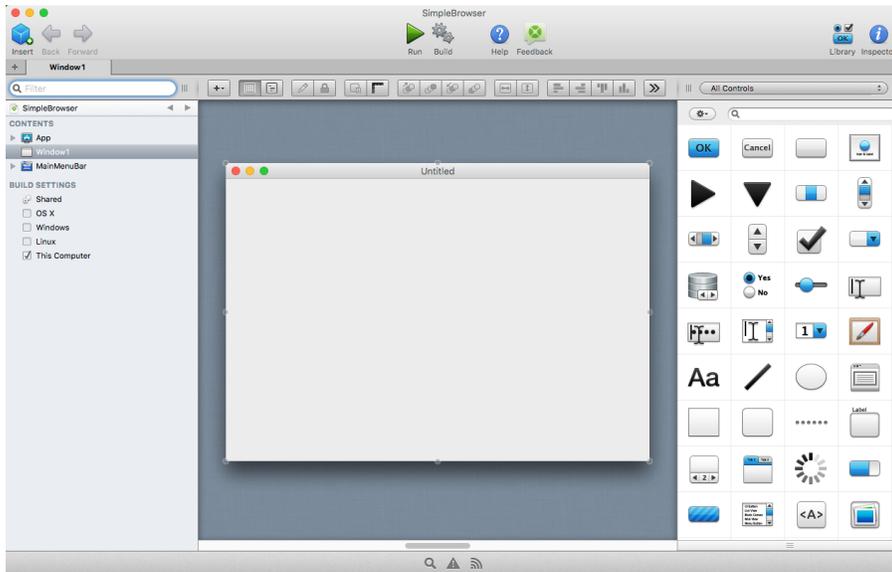
2. Xojo lets you build several different types of apps (Desktop, Web, Console and iOS). For this QuickStart, you are building a Desktop app, so click on Desktop.
3. You should now see three fields that need values: Application Name, Company Name and Application Identifier.
 - **Application Name** is the name of your app. This will be the filename of the actual app file that gets created.
 - **Company Name** is the name of your company. You may choose to leave this blank.
 - **Application Identifier** is a unique identifier for this app. It will automatically populate using what you enter

for the Application and Company Names, but you can also change it to whatever you want.

4. Enter "SimpleBrowser" as the Application Name. You can leave Company Name as it is or change it.
5. Click OK to open the main Xojo window (called the Workspace), where you will begin designing your app.

Workspace

Xojo opens the Workspace with the default window for your app selected in the Navigator and displayed in the Layout Editor.



Navigator: The area on the top left shows you all the items in your project. By default you can see Window1 (which is selected), the App object and the MainMenuBar object. You use the Navigator to navigate within your project.

Layout Editor: The center area is the Layout Editor. You use the Layout Editor to design the user interface for the windows in your app. It shows the window and previews how it looks when the app runs. In this illustration, the window is blank because you haven't yet added any user interface controls from the Library.

Library: The area on the right is the Library and shows the controls and interface elements that you can add to a window or to the project. You design the window by dragging controls from the Library to the window. You can also add a control to the window by double-clicking it. You can change how the controls display in the Library by clicking the small gear icon and choosing a different setting.

i If the Library is not visible, click the Library button on the toolbar to show it.

Inspector: Not shown in the above illustration is the Inspector, which allows you to see and change the properties for the selected control. This area of the Main window is shared with the Library. You can show the Inspector by clicking the Inspector button on the toolbar. The Inspector shows information about the selected item in the Navigator or Editor. The contents of the Inspector changes as you click on different items. You change an Inspector value by entering a new value in the field to the right of the field label.

Making the Simple Browser App

The best way to quickly learn how to use Xojo is to create an app. For this QuickStart, you will create a simple web browser.



A Xojo app consists of a collection of objects, called classes. Nearly everything in Xojo is a class, including your windows and its controls. In the SimpleBrowser project, you use the default Window class to create your window and you add controls (user interface classes) to the window to create the design.

The app uses these controls:

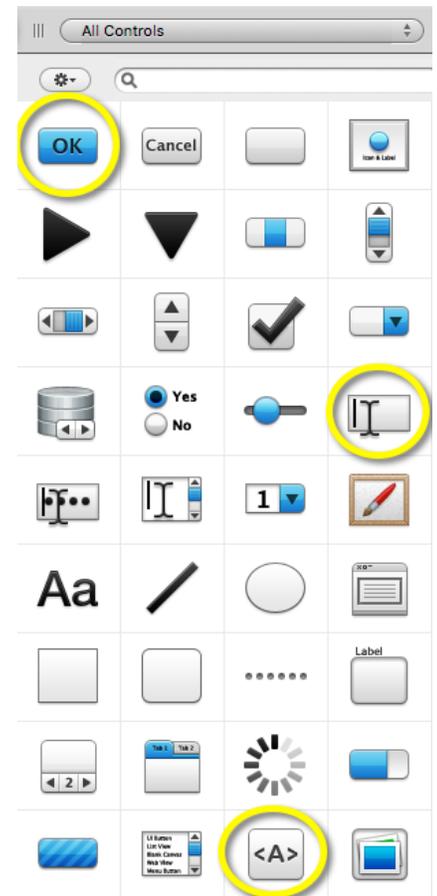
- **Text Field:** A Text Field control is used to enter text. In this project, the URL to display is typed into a Text Field at the top of the window.
- **Button:** A Button is used to trigger an action. The user clicks the button to load the web page at the URL into the HTML Viewer.
- **HTML Viewer:** An HTML Viewer is used to display HTML (a web page). In this project, it is what displays the web site at the URL.

The next sections walk you through creating the user interface and adding the necessary code to make the app work.

Building the User Interface

You should have Xojo running and Window1 open in the Layout Editor. Now you are ready to start adding controls to

the window.



1. Starting with Text Field:

In the Library, click on the Text Field icon and drag it to the top-left corner of the window in the Layout Editor. As you get close to the edges of the window, you will see alignment indicators that help you position the control.

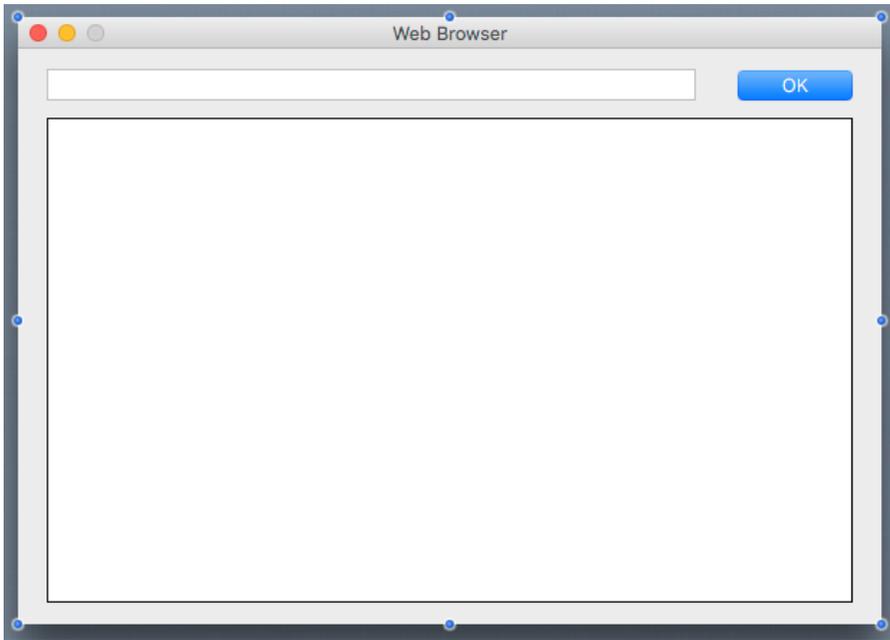
2. Next is the Button:

In the Library, click on the Default Button icon and drag it to the top-right corner of the window.

3. The final control is the HTML Viewer: Drag the HTML Viewer icon to the remaining empty area on the page (you may have to scroll down through the controls to see it). Resize this control (using the selection handles so that it fills most of the window below the Text Field and Button).

4. The final step is to resize the Text Field so that it is larger. Click on it to show the selection handles. Click the center-right handle and drag it to the right until the alignment guides tell you it is close enough to the Button.

Your finished window layout should look like this:



Setting the Properties

What is a Property?

A property is a value of a class. Changing property values allows you to change the behavior of the class. For this project, you want to change various properties for the view and the controls you added. Some of the things you need to do are:

- Rename all controls (and the window) so that they describe their behavior and are easy to refer to in code.
- Add a Caption to the Button.
- Set Locking properties so that the controls resize properly when the window is resized.

Inspector

The Inspector is used to change view and control properties. It shares the same area on the right of the Workspace as the Library. In order to show the Inspector, click the Inspector button on the toolbar or press ⌘-I (Ctrl+I on Windows and Linux).

Setting the Properties for the Window

If you haven't already, display the Inspector by clicking the Inspector button on the toolbar.

You need to change the **Name** and **Title** properties:

1. First, in the Layout Editor, click on the title bar of the window to select it. The Inspector now shows the properties for the window.
2. In the Name field (located in the ID group), change the name from "Window1" to "BrowserWindow". Press *Return* to see the name change in the Navigator. Changing the Name makes it easier to identify project items in the Navigator and is a good practice to start doing.

3. In the Title field (located in the Frame group), change the name from “Untitled” to “Web Browser”. Press *Return* and you will see the name change in the title bar of the window.

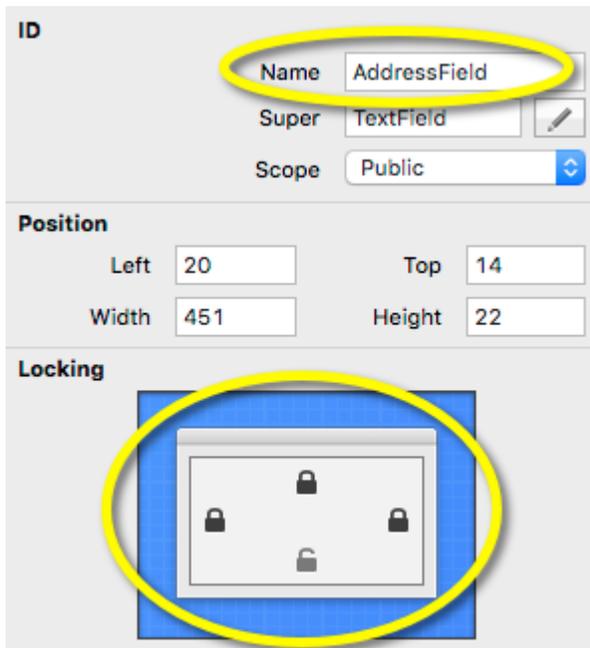
The screenshot shows the Inspector window with the following properties:

- ID**
 - Name: BrowserWindow
 - Super: Window
 - Interfaces: Choose...
- Size**
 - Width: 600, Height: 400
 - Min Width: 64, Min Height: 64
 - Max Width: 32000, Max Height: 32000
- Frame**
 - Type: Document
 - Title: Web Browser
 - Close Button: ON
 - Resizable: ON
 - Maximize Button: OFF
 - Minimize Button: ON
 - Full-screen Button: OFF

Setting the Properties for the Text Field

The Text Field is where your user enters the URL they want to see in the browser. You want to change the following properties: **Name** and **Locking**

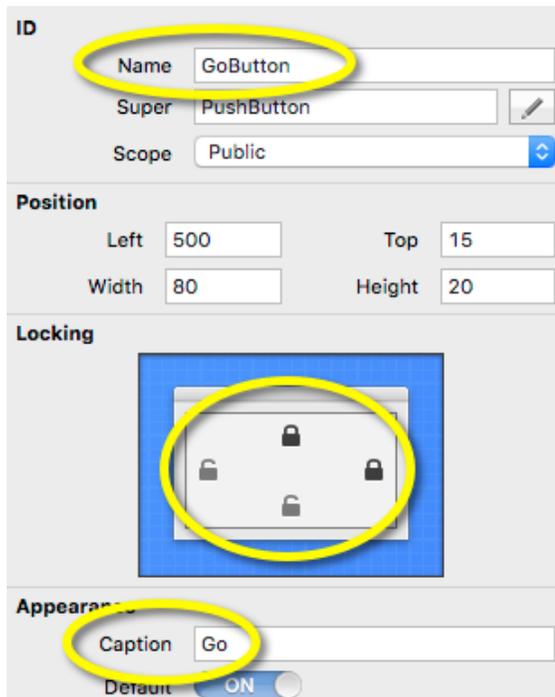
1. On the window, select the TextField1 control. The Inspector changes to show the Text Field properties.
2. In the Name field, change the name from “TextField1” to “AddressField”. Press *Return* to see the name change in the Navigator. Changing the Name makes it easier to identify controls in the Navigator and when you are writing code. It is a good practice to start doing.
3. Now you need to make changes to the locking so that the Text Field gets larger or smaller as the window resizes. In the Locking group look at the image that shows the window with small locked icons for the top and left and small unlocked icons for bottom and right. Click the locks so that top, left and right are locked and bottom is unlocked.



Setting the Properties for the Button

Your users click the button to display the web page. You need to change these properties: **Name**, **Locking** and **Caption**.

1. On the window, select the PushButton1 control. The Inspector changes to show the Button properties.
2. In the Name field, change the name from "PushButton1" to "GoButton". Press *Return* to see the name change in the Navigator. Changing the Name makes it easier to identify controls in the Navigator and when you are writing code. It is a good practice to start doing.
3. Now you need to make changes to the locking so that the Button stays attached to the right side of the window when it is resized. In the Locking group look at the image that shows the window with small locked icons for the top and left and small unlocked icons for bottom and right. Click the locks so that top and right are locked and left and bottom are unlocked.
4. Lastly, you want to give your button a caption. In the Caption field (located in the Behavior group), change the caption from "OK" to "Go".

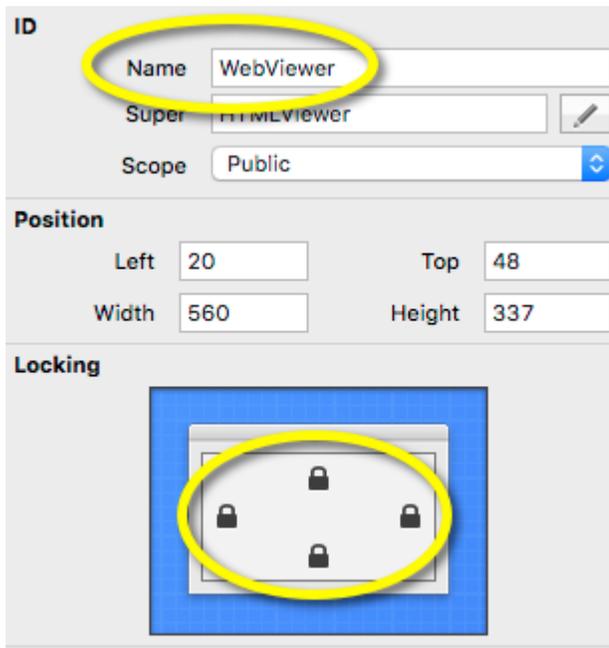


Setting the Properties for the HTML Viewer

The last user interface change you need to make is for the HTML Viewer. Here you need to change these properties:

Name and **Locking**

1. On the window, select the HTMLViewer1 control. The Inspector changes to show the HTML Viewer properties.
2. In the Name field, change the name from "HTMLViewer1" to "WebView". Press *Return* to see the name change in the Navigator. Changing the Name makes it easier to identify controls in the Navigator and when you are writing code. It is a good practice to start doing.
3. Finally, you need to make changes to the locking so that the HTML Viewer continues to fill the the window when it is resized. In the Locking group look at the image that shows the window with small locked icons for the top and left and small unlocked icons for bottom and right. Click the locks so that top, bottom, left and right are locked.



Adding Code

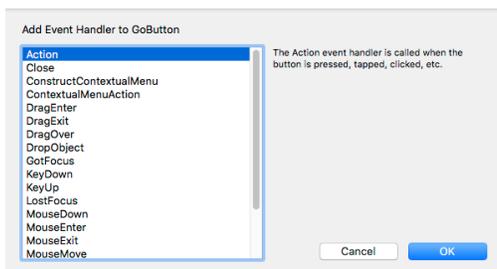
Your app is almost complete. Now it is time to add the code that will tell the HTML Viewer which web page to display. Xojo uses an object-oriented programming language which is quite easy to learn. You need only one line of code to finish your project!

The steps you need to do are:

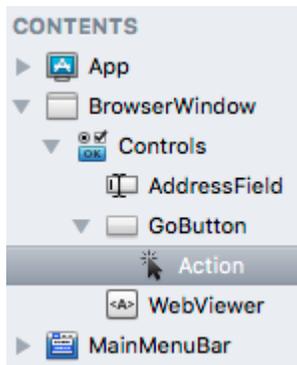
1. Figure out when your user clicks the GoButton, called "Go" on the window.
2. Get the URL that your user entered in AddressField.
3. Have WebView display the location.

Follow these steps to add the code:

1. On the window, double-click the **GoButton** control, labelled "Go". The Add Event Handler window appears. When a user clicks on a Button, your app runs any code in its Action event handler. This means you want to add your code to the **Action** event handler, so select Action from the Event Handler list and click OK.



Notice the Navigator updates to show the Action event underneath the GoButton control and the Code Editor displays.



This step solves your first problem of when to know when the user clicks on the GoButton.

2. Now you need to get the URL that the user typed. The value that a user types into a Text Field is stored in the Text property of the Text Field. You access the Text property like this:

```
AddressField.Text</code>
```

3. The last step is to have WebViewer display the web page. This is done by calling the **LoadURL** method of the control and sending it the URL that the user typed. Your code now looks like this:

```
WebViewer.LoadURL(AddressField.Text)</code>
```

4. Go ahead and add this code to the Code Editor. Start by clicking in the white space below the Action() event name and then type this code (for practice, be sure to type it rather than copy and pasting it):

```
WebViewer.LoadURL(AddressField.Text)</code>
```

That's it! Your first app is complete.

Running the App

You should save your work periodically and always before running your project. To do so:

1. Save the project by choosing File → Save.
2. Name the project "SimpleBrowser" and click Save.

Now you can test your finished app:

1. Click the Run button in the toolbar to run your project. The app opens in its own window.
2. Type a URL of your choice, such as <http://www.wikipedia.org>, and click the "Go" button.
3. You will see the web page.
4. When you are finished experimenting with the Simple Browser app, you can close the window to return to

Xojo. On OS X, choose SimpleBrowser.debug → Quit to Quit the app.



What's Next

The QuickStart has introduced you to Xojo. You've learned how to make your first app by designing a window, adding controls and writing code. You should next work through the [Desktop Tutorial](#) and then explore the [User Guide](#) and [Reference Guide](#) to continue learning how to create great apps using Xojo.