TLDR; How to make panels

1. Install everything

   You'll need some things.

2. Configure the environment

   Make Premiere Pro load unsigned panels, and (as needed) generate useful information.

3. Create JavaScript using browser-based developer tools

   Load your panel into your browser, for JavaScript debugging.

4. Write ExtendScript using ExtendScript Toolkit (ESTK)

   Rapidly develop usable ExtendScript, in a live scripting environment.

5. Package and Deploy your panel

   How to provide your panel (and any desired collateral files) to users.

Always feel free to ask questions!

1. Install Everything

Creative Cloud

http://creative.adobe.com

Use the Creative Cloud app to install all Adobe apps for which you'll be developing, as well as Adobe ExtendScript Toolkit and Adobe Extension Manager.

PProPanel sample project:

https://github.com/Adobe-CEP/Samples/tree/master/PProPanel

Adobe Extension Signing Toolkit

You'll need this later, so just grab it now. Note: Panel creation no longer requires Extension Builder, but you still need the `zxpsigncmd` command line tool:

Win: http://download.macromedia.com/pub/labs/extensionbuilder3/ccextensionswin64.exe

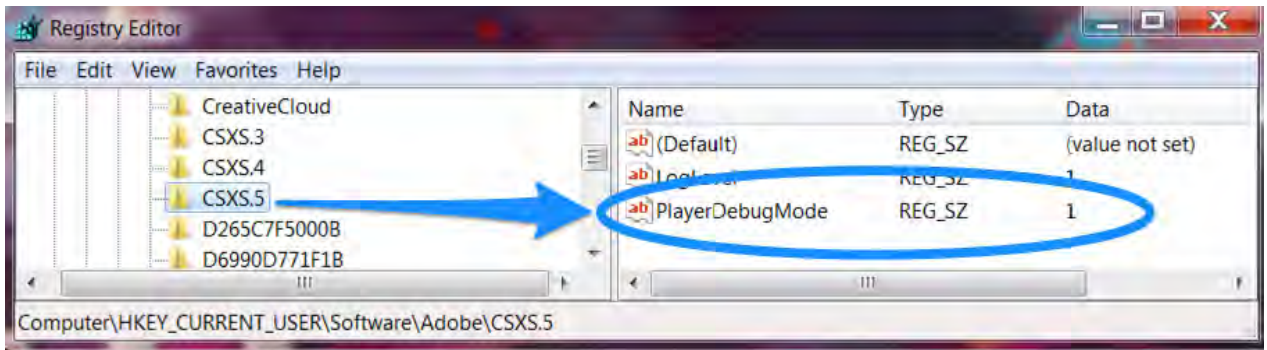Mac: http://download.macromedia.com/pub/labs/extensionbuilder3/ccextensionsmac.zip

2. Configure the environment

Make Premiere Pro load unsigned panels

To change Premiere Pro's preferences, type the following into a Mac OS X Terminal, then relaunch Finder:

```
defaults write /Users/<username>/Library/Preferences/com.adobe.CSXS.
5.plist PlayerDebugMode 1
```

On Windows, make the following entry into the registry:

Put your panel directory here, to have Premiere Pro load it:

```
C:\Program Files (x86)\Common Files\Adobe\CEP\extensions\<panelname>

/Library/Application Support/Adobe/CEP/extensions/<panelname>
```

Optional: Enable Premiere Pro's console and additional log files

Sometimes, log files provide helpful information. They also introduce significant performance penalties; do not leave them on, once diagnostics are complete.

Show Premiere Pro's Console window using <ctrl-F12> (Windows) or <cmd-F12> (Mac). In that window, type the following:

```
debug.set CreateLogFilesThatDoNotExist = true [then press enter]
```

Find those logs here:

```
Win: "~\AppData\Roaming\Adobe\Premiere Pro\9.0\logs\Premiere Pro Log.txt"

Mac: "~/Library/Preferences/Adobe/Premiere Pro/9.0/logs/Premiere Pro
Log.txt"
```

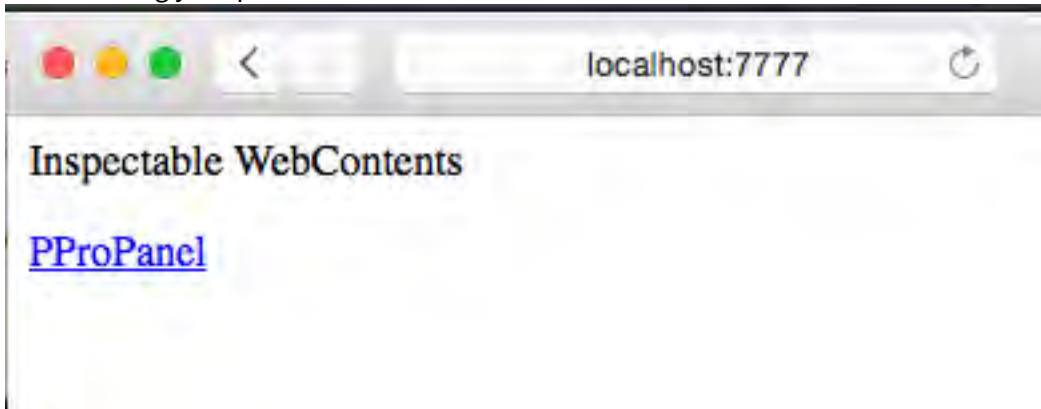# 3. Create JavaScript using browser-based developer tools

Debug in Browser

To enable debugging of panels using Chrome or Safari's integrated debugger, put a file named `.debug` into your extension's folder (peer of the /CSXS folder). The contents of the file should resemble the following:

```
<?xml version="1.0" encoding="UTF-8"?>
    <ExtensionList>
        <Extension Id="com.example.PProPanel">
            <HostList>
                <Host Name="PPRO" Port="7777"/>
```

```
            </HostList>
        </Extension>
    </ExtensionList>
```

When the panel is active, you can debug the panel in your web browser by browsing to `localhost:7777`, and selecting your panel.

Optional: Turn on CEP logging

Find CEP logs (distinct from Premiere Pro's logs) here. Note that mac Library path is the system's library, not the user's.

Win: `~\AppData\Local\Temp\csxs5-PPRO.log`

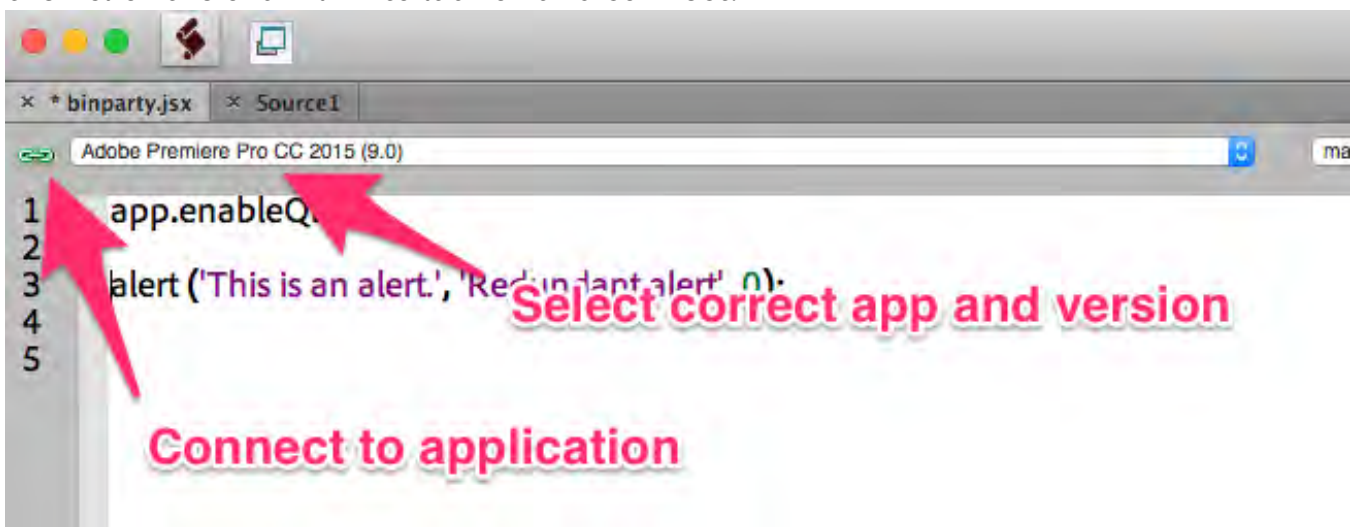Mac: `/Library/Logs/CSXS/csxs5-PPRO.log`

Set logging level in Windows Registry, or MacOS X .plist:
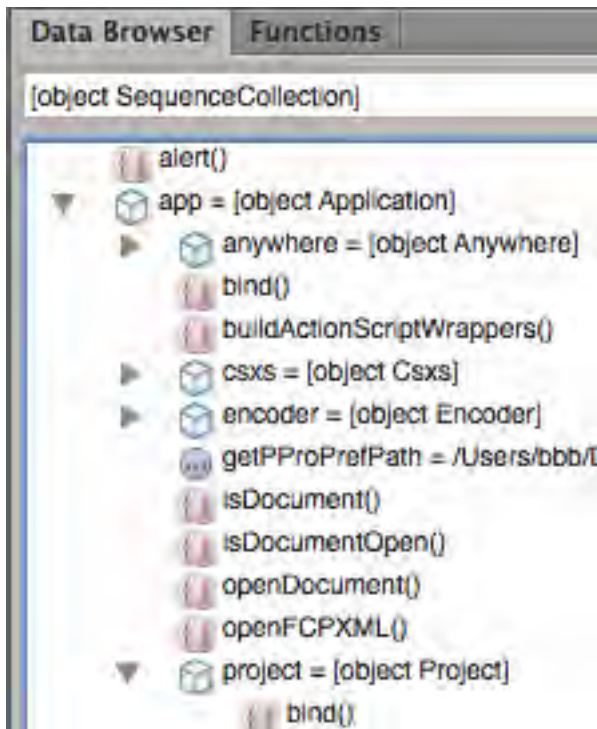
Win: `HKEY_CURRENT_USER/Software/Adobe/CSXS.5`

Mac: `~/Library/Preferences/com.adobe.CSXS.5.plist`

4. Write ExtendScript using ExtendScript Toolkit (ESTK)

Launch ESTK , select 'Adobe Premiere Pro CC 2015' from the target application list, then click the chain link to launch and connect.

Once in the session, use the Data Browser to view the DOM.

5. Package and deploy your panel

Obtain or create a signing certificate

To create: ZXPSignCmd -selfSignedCert <countryCode> <stateOrProvince> <organization> <commonName> <password> <outputPath.p12>

Example:

```
./ZXPSignCmd -selfSignedCert US California Adobe "Bruce Bullis"
password certificate.p12
```

Sign your panel

To sign:

```
ZXPSignCmd -sign <inputDirectory> <outputZxp> <p12> <p12Password>
```

Example: This assumes your panel directory, panelDir, is in the same directory as ZXPSignCmd.

```
./ZXPSignCmd -sign panelDir/ PanelName.zxp certificate.p12
password
```

Distribute the panel

You now have a cross-platform .zxp file which Extension Manager can install on any system with Premiere Pro installed. Send us a copy!