

# Creating a Chrome Extension

A Page Action Extension

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**pluralsight**   
hardcore developer training

# What We Are Building

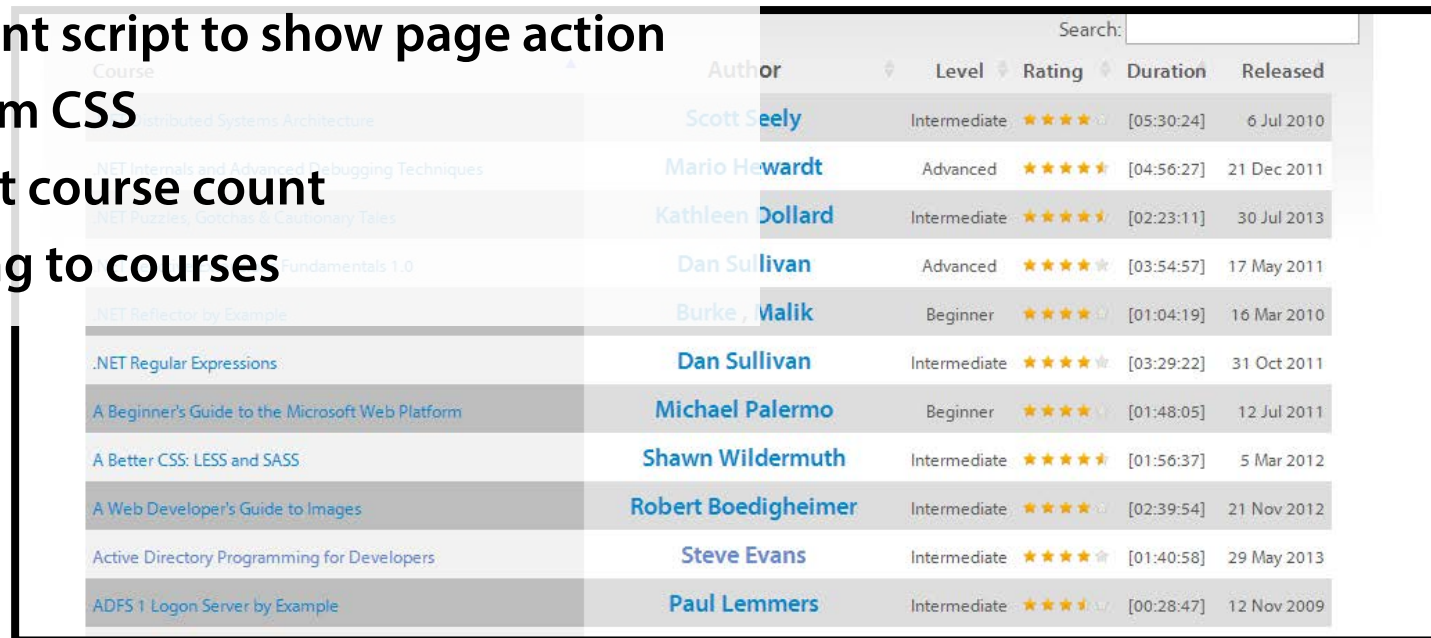
The screenshot shows the Pluralsight website's 'New Releases' page. The page lists courses in order of release date. A helper extension popup is active, showing options to 'Add course counts' and 'Make sortable'. The table below lists the courses and their details.

Course	Author	Level	Rating	Duration	Released
Math For Programmers	Simon Robinson - 1	Intermediate	☆☆☆ ☆☆	[05:16:27]	26 Aug 2013
MySQL Indexing for Performance	Pinal Dave - 9	Intermediate	☆☆☆ ☆☆	[01:39:36]	26 Aug 2013
Load Testing with Visual Studio 2012	Benjamin Day - 3	Intermediate	☆☆☆ ☆☆	[04:03:46]	26 Aug 2013
Practical IoC With ASP.NET MVC 4	John Sonmez - 46	Intermediate	☆☆☆ ☆☆	[02:15:13]	26 Aug 2013
Spring Fundamentals	Bryan Hansen - 4	Beginner	☆☆☆ ☆☆	[02:45:31]	22 Aug 2013
Taking The Leap from Flash to HTML5 Video	Lisa Larson-Kelley - 1	Intermediate	☆☆☆ ☆☆	[02:48:24]	22 Aug 2013
C++ Language Changes in the VS 2013 Preview	Kate Gregory - 13	Intermediate	☆☆☆ ☆☆	[02:11:56]	22 Aug 2013
SQL Server 2012: Transact-SQL Error Handling	Joe Sack - 8	Intermediate	☆☆☆	[01:21:12]	21 Aug

*A Pluralsight helper extension*

# Breaking It Down

1. Create extension and manifest
2. Create the page action
3. Show the page action with an event page
4. Add content script to show page action
5. Add custom CSS
6. Implement course count
7. Add sorting to courses

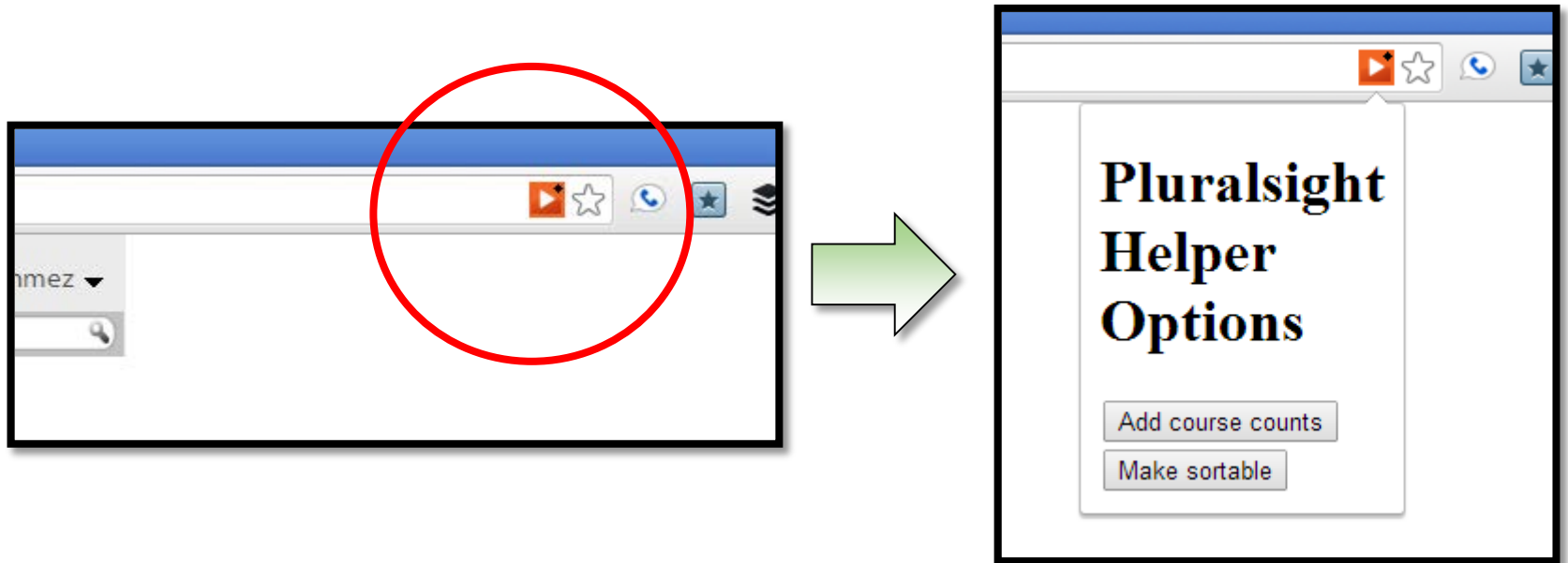


The screenshot shows a web application interface with a search bar at the top right. Below it is a table of courses. The table has columns for Course, Author, Level, Rating, Duration, and Released. The courses listed are:

Course	Author	Level	Rating	Duration	Released
Distributed Systems Architecture	Scott Seely	Intermediate	★★★★☆	[05:30:24]	6 Jul 2010
.NET Internals and Advanced Debugging Techniques	Mario Howardt	Advanced	★★★★★	[04:56:27]	21 Dec 2011
.NET Puzzles, Gotchas & Cautionary Tales	Kathleen Dollard	Intermediate	★★★★★	[02:23:11]	30 Jul 2013
.NET Fundamentals 1.0	Dan Sullivan	Advanced	★★★★★	[03:54:57]	17 May 2011
.NET Reflector by Example	Burke, Malik	Beginner	★★★★☆	[01:04:19]	16 Mar 2010
.NET Regular Expressions	Dan Sullivan	Intermediate	★★★★★	[03:29:22]	31 Oct 2011
A Beginner's Guide to the Microsoft Web Platform	Michael Palermo	Beginner	★★★★☆	[01:48:05]	12 Jul 2011
A Better CSS: LESS and SASS	Shawn Wildermuth	Intermediate	★★★★★	[01:56:37]	5 Mar 2012
A Web Developer's Guide to Images	Robert Boedigheimer	Intermediate	★★★★☆	[02:39:54]	21 Nov 2012
Active Directory Programming for Developers	Steve Evans	Intermediate	★★★★★	[01:40:58]	29 May 2013
ADFS 1 Logon Server by Example	Paul Lemmers	Intermediate	★★★★☆	[00:28:47]	12 Nov 2009

*We'll be adding capabilities to Pluralsight web pages with our extension*

# Page Actions



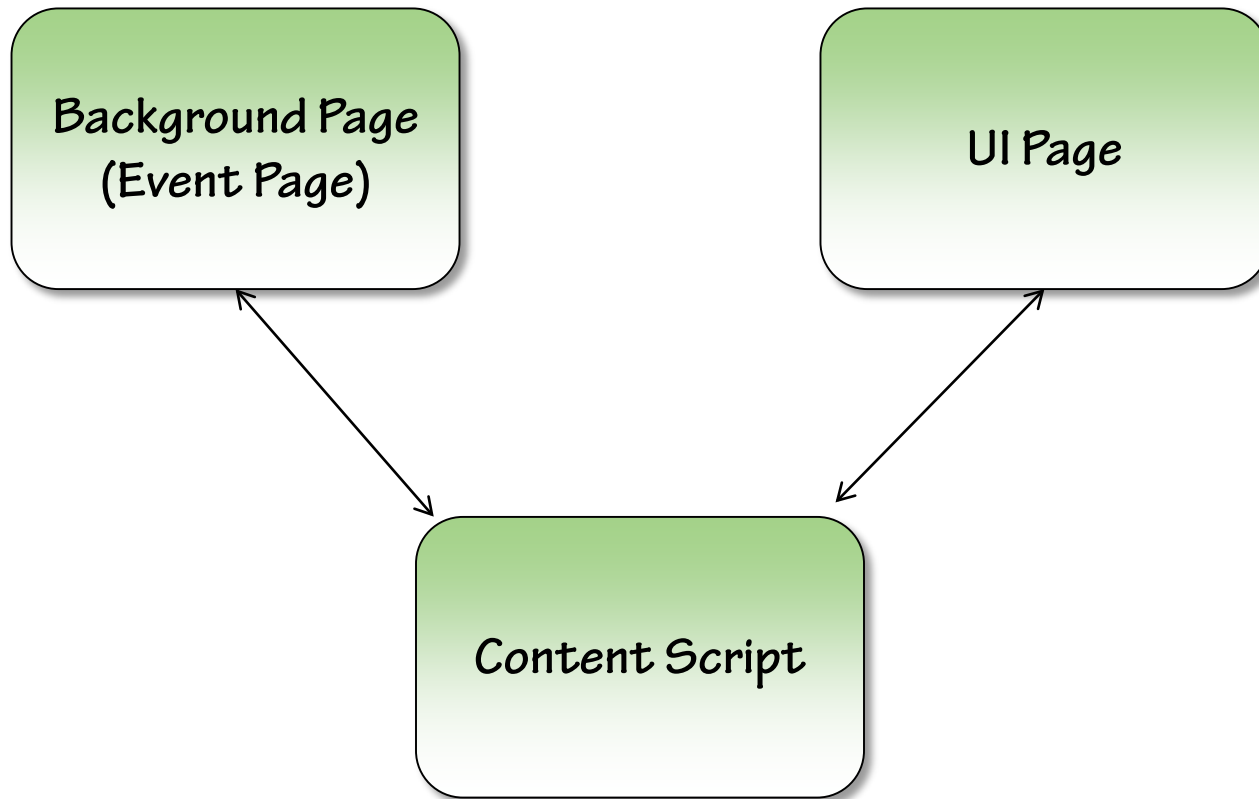
*Page actions must be explicitly made visible with “show”*

# Content Scripts

```
manifest.json | pluralsight_cs.js | eventPage.js | popup.html | popup.js | pluralsight_cs.css
1 chrome.runtime.onMessage.addListener(function(request, sender, sendResponse) {
2   if(request.action == "courseCounts") {
3     var authors = $('.author a');
4     authors = $.makeArray(authors);
5     var hist = {};
6     authors.map(function(a) {
7       if (a.title in hist)
8         hist[a.title]++;
9       else
10        hist[a.title] = 1;
11    });
12
13    for(var a in hist) {
14      var aName = "" + a + "";
15      var links = $('.author a[title=' + aName + ']');
16      $.each(links, function(i, v) {
17        v.innerText = a + ' - ' + hist[a]
18      });
19    }
20  }
21  if(request.action == "makeSortable") {
22    $('.course').dataTable({"bPaginate": false});
23  }
24 });
25 chrome.runtime.sendMessage({action:"show"}, function() {});
```

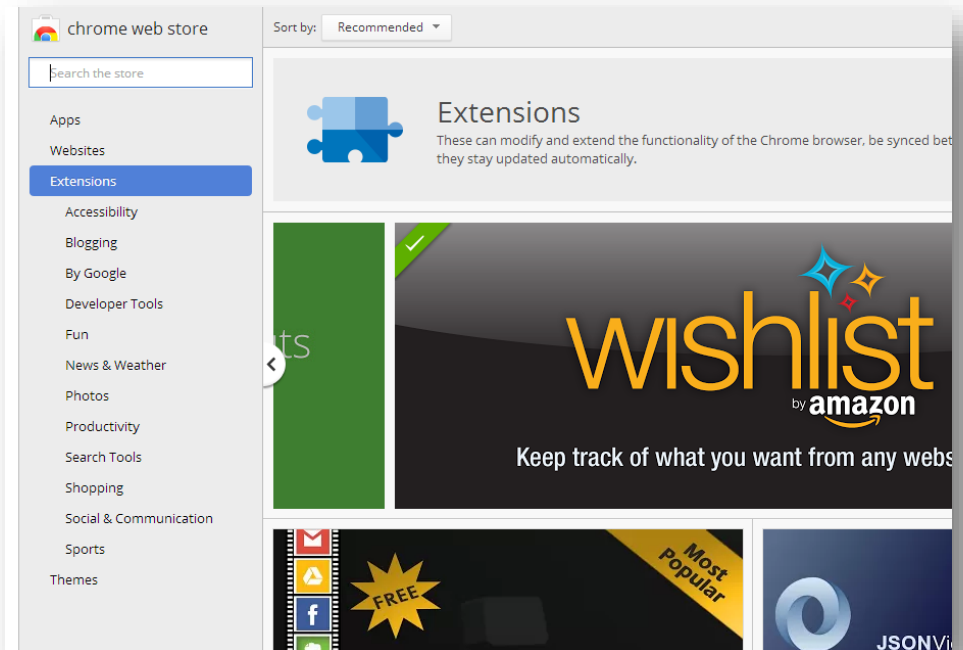
*Content scripts are basically additional script or CSS we add to a page*

# Messages



*Messages are required to communicate with content scripts*

# Up Next



*We'll be discussing debugging and deployment*