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jQuery – Resize image to parent container plugin

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Recently I came across a problem whereby I had to dynamically resize an image to fill it's parent container. The requirements are pretty straight forward – upscale if the image is too small, downscale if it's too large, and always resize based on the smallest dimension in relation to the aspect ratio of the parent container (which means that you'll never see any whitespace, the image will always overflow on either height or width). Strangely enough I couldn't find a jQuery plugin to do quite what I wanted, so I created one.

Check out the demo.

The plugin is as follows:

```
Plugin Name: Resize Image to Parent Container

Author: Christian Varga
Author URI: http://christianvarga.com

/

jQuery.fn.resizeToParent = function(options) {
var defaults = {
 parent: 'div'
}

var options = jQuery.extend(defaults, options);

return this.each(function() {
  var o = options;
  var obj = jQuery(this);

  // bind to load of image
  obj.load(function() {
```

```
    // dimensions of the parent
    var parentWidth = obj.parents(o.parent).width();
    var parentHeight = obj.parents(o.parent).height();

    // dimensions of the image
    var imageWidth = obj.width();
    var imageHeight = obj.height();

    // step 1 - calculate the percentage difference between image width and container width
    var diff = imageWidth / parentWidth;

    // step 2 - if height divided by difference is smaller than container height, resize by height. otherwise resize by width
    if ((imageHeight / diff) < parentHeight) {
     obj.css({'width': 'auto', 'height': parentHeight});

     // set image variables to new dimensions
     imageWidth = imageWidth / (imageHeight / parentHeight);
     imageHeight = parentHeight;
    }
    else {
     obj.css({'height': 'auto', 'width': parentWidth});

     // set image variables to new dimensions
     imageWidth = parentWidth;
     imageHeight = imageHeight / diff;
    }

    // step 3 - center image in container
    var leftOffset = (imageWidth - parentWidth) / -2;
    var topOffset = (imageHeight - parentHeight) / -2;

    obj.css({'left': leftOffset, 'top': topOffset});
   });

   // force ie to run the load function if the image is cached
   if (this.complete) {
    obj.trigger('load');
   }
  });
```

And to use it, simply call resizeToParent on your image, like so:

```
$('#myImage').resizeToParent();
```

The plugin will automatically resize the image as soon as it's finished loading. By default, the image will get resized to the nearest parent div. If you want to target a specific parent, simply pass a selector to the function as the 'parent' parameter, like so:

```
$('#myImage').resizeToParent({parent: '.parentContainer'});
```

Also, don't forget that the parent container must have 'overflow: hidden' so that the image doesn't spill out of the parent, and the image must be positioned relatively or absolutely for it to be centered correctly.

Please feel free to leave any questions, comments, or suggestions in the comments below 😃

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Danilo Casagrande de Almeida

Really Amazing Plugin! Helped me a LOT! After configuring the CSS correctly, everything just went down smoothly! Thank you so much!

2 weeks ago   Like   Reply

Graz

Impressive plugin! - I wonder if this can be used in an responsive example. Say on resize the images reposition themselves according to the parents new width, do you reckon this is possible? Best regards!

4 months ago   Like   Reply

levymetal

It's definitely possible, you'd need to put the resizing code into a separate function, then call that function when the parent (or window) is resized. Give it a go and see if you can get it working :)

3 months ago   in reply to Graz   Like   Reply

llocally

Hi, thanks for this but it isn't working as I would expect. I have a square container, images rescale but a wide image ends up with white space at the bottom and a tall image ends up with with white space to the right. I have overflow:hidden on the parent. No obvious errors. Any pointers? (both in Chrome & Firefox)

5 months ago   Like   Reply

levymetal

Hi Alan,

It's nigh impossible to debug issues without actually seeing them, so if you could provide a demo I'd be able to take a look and try and figure it out. You can head over to http://jsfiddle.net to quickly set up an example.

Christian

5 months ago   in reply to llocally   Like   Reply

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