dgCarousel

Documentation and User-guide
V1.00

Dominik Gorecki

9/10/2012

This document explains how to implement and customize the dgCarousel as well as technical software information.

Table of Contents

License

dgCarousel is licensed under the MIT open source license:
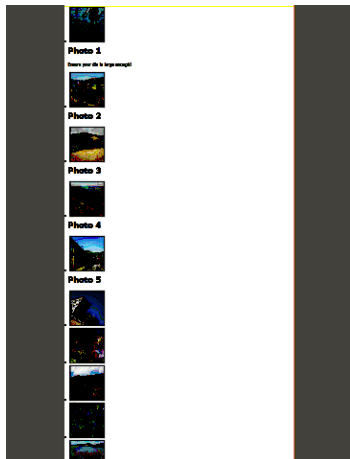Copyright 2012 © Dominik Gorecki

http://www.juarezgorecki.com

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, ublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, NCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

What is dgCarousel?

dgCarousel is a jQuery plug-in that converts a set of list elements into a functional, animated carousel. The carousel is fully customizable.

Before

dgCarousel takes an ordinary set of list items such as this and converts.

After

After running the dgCarousel script on the div that held all of the <li> elements from the previous screenshot.

Implementing

1. Load the necessary javascript and css files: jQuery.js and dgCarousel.1.xx.js and dgCarousel-base.css

Although dgCarousel was developed and tested with version 1.8.1 of jQuery, it should work with older versions as well. However, it is safer to utilize version 1.8.1 or newer.

Preload them in the head tag. For example, put the following in the <head> tag:

```
<head>
...
<link href="css/dgCarousel-base.css" rel="stylesheet" type="text/css" />
<script src="js/jquery-1.8.1.min.js" type="text/javascript"></script>
<script src="js/dgCarousel.1.00.js" type="text/javascript"></script>
...
</head>
```

2. Create a <div> element filled with <li> items that will represent the elements in your carousel.

The next step is to create your list of items that make up your carousel. The important thing to keep in mind here is that each <li> element will have an identical width and height. Therefore, you have to ensure that the content you put into each list item will be able to fit into that fixed size. Anything that surpasses the size of the list item will be cut off.

If you keep that point in mind, you can put almost anything inside each list item: text, links, images, forms, and html5 or flash objects including video. Example taken from demo01:

```
<div id="carousel-demo01">
    <li>
        <img src="images/demo01/01.jpg" alt="Image 01" />
          <h1>Photo 1</h1>
          <p>Ensure your div is large enough!</p>
      </li>
      <li><img src="images/demo01/02.jpg" alt="Image 02" />
       <h1>Photo 2</h1>
          <p>Any text that surpasses the size of the element will be cut off!</p>
      </li>
    ...
</div>
```

3. Run the dgCarousel code on the div that houses all the <li> elements. Pass in the custom parameters.

For now, in version 1.00 you can specify the following parameters that will customize the look and feel of your carousel:

Parameter [Expected type]	Default	Description
width [integer]	800	This is the total width (in pixels) of the entire carousel—the width of carousel container.
height [integer]	150	This is the total height (in pixels) of the entire carousel—the height of carousel container.
liWidth [integer]	150	This is the fixed width of each element container—the width of each item in the carousel.
liHeight [integer]	150	This is the fixed height of each element container—the height of each item in the carousel.
stackDistance [integer]	3	This is the minimum distance (in pixls) between overlapping elements to illustrate that there are more elements below. Note: keep this distance small because otherwise the stacking effect will not display. That is, if the distance between each stacked element is greater than the distance available, it simply will not display.

Parameter [Expected type]	Default	Description
zIndex `[integer]`	999	This is the z-index that the very top (center) element will use. Every other element will use a z-index lower than that. Ensure that you use a z-index high enough to accommodate for elements below the main element. That is, if you need the carousel to display at zIndex of at least 1000 and you have 20 elements in the carousel, specify a zIndex of at least 1010. But to be safe (in case you add more elements in the future) specify a zIndex of 1100 or higher.

Anytime that you do not specify a parameter, the default will be used as specified in the table above.

Code example:

```
$("#carousel-demo01").dgCarousel({
    'height':250,
    'liHeight':215,
    'width':960,
    'zIndex': 1100
});
```

It's important to remember that the above code needs to be run **after** all the elements in the carousel div are loaded. For example, you can run it in the body onLoad, or using a document.ready handler.

4. Customize the style of you Carousel by either editing the dgCarousel-base.css, or creating your own classes for the carousel and <li> elements.

Although it's bad practice to edit the base css, there are items that you can change within it since the base has some default styles: rounded corners, white background for carousel elements, a white mask color, and more. All of these things can be changed in the actual dgCarousel-base.css. The stylesheet is well commented and the items that are safe to edit are identified. Any item that has the "!important" declaration should **not be changed**.

Anything within the <li> elements can be styled. For example, demo01 has a custom heading and p style. Note the small margins and text size on each. This is done to ensure that the content fits within the each element:

```
.dgCarousel li h1                    .dgCarousel li p
    {                                    {
        font-size: 13px;                     padding: 2px;
        font-weight:bold;                    margin: 0 0 1px 0;
        padding: 1px;                        font-size: 12px;
        margin: 0 0 1px 0;               }
        text-align:center;

    }
```

And you're done! Simple as 1-2-3... and 4.

If you found this plug-in useful in your website or blog, and you would like to give a friendly shout out, please link to my blog at www.juarezgorecki.com where I write about the exciting world of web development (and some other cool stuff too!).

Future Versions

Ain't no rest for the wicked; I have plans for more features and a better UX. Here are the details.

Next version (v1.01)

- Fix known bugs
- New Option: give the user the ability to adjust the speed of the animations (slow or fast)
- New Option: give the user the ability to adjust the fade streangth of the mask that covers inactive elements.

Later Versions (v1.02+)

- New Option: Elements change in vertical position to give a bowed out effect
- New Option: Have the elements adjust in size (back elements are smaller than closer elements)
- New Option: Mask is stronger for items in the back (?? not sure if required? Let me know if you would like this feature)
- New Option: Give the ability to customize the animation easing

Known Issues

This alpha version has NOT been thoroughly tested. If you want to implement this, I suggest that you do a thorough QA of the finished product in any relevant browsers before publishing.

Minor (non-critical) - Clicking Item During Animation

When clicking a different item during the animation (the transition to a new active element), the new item becomes the active element (as expected) but the old active element does not get a mask.

If you find any bugs or issues, please report them at Github:
https://github.com/DominikGorecki/dgCarousel

Etc.

About me: I'm a web developer for Transcontinental, a large Canadian media company. My focus is on user interface design and implementation, as well as overall user experience. I love what I do, and I always look for opportunities to hone my skill.

Read my blog: www.juarezgorecki.com

My Github page: https://github.com/DominikGorecki

Contact me: dgraphics519@gmail.com