

THE WORLD'S BEST-SELLING DIGITAL PHOTO MAGAZINE

# Photography

23 - 29 JULY ISSUE 148

## We

GET ULTRA  
NARROW  
DEPTH OF  
FIELD

SIX TOUGH  
COMPACTS  
IN ONE  
TOUGH  
TEST

## THE KIDS ARE ALRIGHT

CAPTURE NATURAL-LOOKING  
PORTRAITS OF CHILDREN



**EMMA**

**MATTHIEU FREYERMUTH**

This beautiful portrait illustrates many of the techniques we describe in this week's main feature. The eye-level vantage point helps the viewer connect with the subject, and as a result the child is fully engaged with the camera. We also love the high-key lighting

**TAKEN WITH:** Canon EOS 5D Mark III with 50mm lens

**EXPOSURE:** 1/100 sec at f/1.4, ISO800

<http://tiny.cc/gvro0x>



# WELCOME

# Photography Week



## JOIN THE CLUB...



Welcome to the world's No.1 weekly digital photography magazine. If you're already a

reader, thanks for your continued support and involvement; if you're new to *Photography Week*, you've come to the right place! In addition to expert advice, brilliant tips and step-by-step tutorials, every issue features interactive galleries of the best new photos, how-to videos on

essential shooting and editing techniques, and in-depth video reviews of the latest cameras.

But that's not the whole story. *Photography Week* is more than a magazine – it's a community of like-minded people who are passionate about photography. To get involved, just follow any of the links below and share your shots and comments – your photo might even appear on our cover!

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<http://tiny.cc/hmgpjx>



FLICKR

<http://tiny.cc/8kqgpjx>

We're more than just a magazine – read on and discover the many ways you can interact with and enjoy *Photography Week*



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# WHAT'S HOT

THE WEEK'S TOP HEADLINES IN PHOTOGRAPHY

## SERIF LAUNCHES PHOTOSHOP RIVAL AT ONE THIRD OF THE PRICE

Affinity Photo is subscription-free and comes with an old-school 'perpetual licence'

**S**erif is best-known for its budget Windows image-editing, illustration, web design and layout tools. Its brand new Affinity range, though, is designed solely for Macs, and is aimed squarely at professional photographers.

Affinity Designer, Serif's brand new professional graphic design and illustration tool, was the first Affinity product to arrive, in October 2014, and scored a Mac App Store 'Best of 2014' in the process. Affinity Photo, announced in February 2015, uses the same core processing engine, and aims to do for



Affinity Photo is a Photoshop alternative that combines the latest software technology with a classic one-off payment model

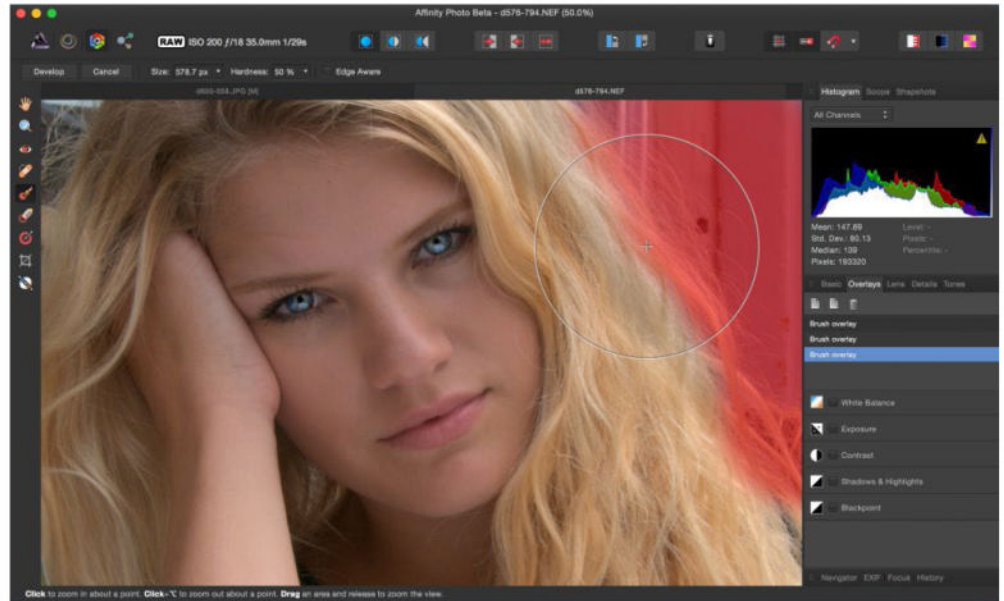
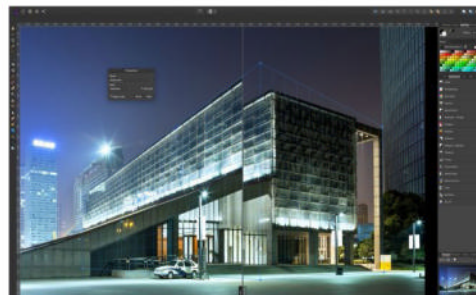


image editing what Affinity Designer has done for illustration and vector art.

Many so-called Photoshop rivals are actually much more basic consumer-orientated editing tools aimed at beginners, but Affinity Photo is the real deal. It offers key tools and technologies essential in a professional environment, including 16-bit editing, RGB, CMYK and LAB color modes, ICC color profiles and raw image development. It can also import and export Photoshop PSD files.

Its layout and operation is similar to Photoshop's, with a clean and simple vertical tools panel on the left of the screen and stacked (detachable) palettes on the right. It takes some



Serif Affinity meets Photoshop head-on. Here you can see its dual perspective tool in action, rearranging the planes in an architectural shot

The Raw Develop module offers localized edits, just like Adobe Camera Raw. Serif's been quick to add support for new cameras

acclimatization after Photoshop, but the basic principles of layers, masks, selections and adjustment tools are the same. The difference lies in Serif's processing engine, which has been designed to exploit the full potential of today's 16-bit hardware with fast, real-time adjustments that show changes 'live' as you work so that you don't have to close a dialog first or wait for the image to redraw.

The low price may pitch Affinity Photo with a whole bunch of other Photoshop wannabes, but it's a very different, much more powerful product that just happens to be cheap!

Affinity Photo is being sold on the Mac App Store for £39.99/\$49.99.

Its price is almost less than one third of the cost of a one-year subscription to Adobe's Photography Plan. The Adobe plan includes both Photoshop and Lightroom, but not every photographer will want to use both, and many still resist the idea of paying subscriptions to 'rent' an application.



# WHAT'S HOT

THE WEEK'S TOP HEADLINES IN PHOTOGRAPHY



## GOPRO UNVEILS HERO4 SESSION, ITS SMALLEST ACTION CAMERA YET

GoPro's new camera is a no brainer to operate

If you've always wanted to buy a GoPro camera, but you were put off by the advanced, pro-level functionality found in GoPro's HERO4 Black, you're in luck – GoPro has announced its most user-friendly camera ever: the HERO4 Session.

Operating the HERO4 Session is easier than it is on any of GoPro's other cameras, with a single button used to perform the majority of its functions. A short press of the shutter button turns the camera on, starting video capture automatically, a longer press powers the camera on and switches it to Time Lapse photo capture mode, and you only have to press the button once more to save your recording or photo and turn it off again.

Just like with previous models, you can further refine your controls and settings by using the GoPro app or Smart Remote.

The HERO4 Session is 50 per cent smaller and 40 per cent lighter (74g) than GoPro's HERO4 Black and Silver,

at roughly a cubic inch in size, and has a Micro SD card slot, a non-removable battery (two hours on a full charge), built-in Wi-Fi and Bluetooth and a Micro USB port, so you can keep it going indefinitely. It's also waterproof to a depth of 10 metres, without the need for an additional case or dive housing, although it does come with standard and low-profile mount brackets, as well as a new Ball Joint Buckle mount. The HERO4 Session is also compatible with all existing GoPro mounts and accessories.

The HERO4 Session retains GoPro's signature high-quality image capture capabilities, recording 1080p video at 60fps, 720p at 100fps and 1440p at 30fps (those after 4K video will have to opt for HERO4 Black), along with eight megapixel photos in its Single, Burst and Time Lapse modes.

The GoPro HERO4 Session hits the streets on July 12 for \$399/£329, the same price as GoPro's HERO4 Silver.



## GOPRO SAYS VIRTUAL REALITY ISN'T A GIMMICK, AND IT'S THE ONE FOR THE JOB

GoPro has lately been dipping its feet in virtual reality, having recently partnered with Google on a 360-degree VR camera rig, but the action cam company isn't looking at VR as a passing fad. Quite the opposite, actually.

"VR is gonna open up all kinds of viewing experiences, and expand the lifespan of content," said GoPro CEO Nick Woodman, who spoke with Mashable. "VR is a whole new experience that can fully transport someone into another experience."

Unlike 3D, VR isn't a gimmick, the CEO said. GoPro is already making spherical cameras, or rather, rigs that use its current line-up of cameras.

"We are positioned more than any other camera company to enable VR," Woodman said, and with the release of the smallest GoPro yet, the company could be looking to make portable rigs for 360-degree VR footage capture. Goodman has previously hinted that GoPro is looking to release its own drones or quadcopters next year. "People are getting into quads not because they like flying little quads around, but because they want the incredible content that a GoPro and a quad enables," he told Mashable.

No details on the GoPro drones or quadcopters have been officially announced, but we should start hearing news starting from the beginning of next year.

[www.gopro.com](http://www.gopro.com)





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# F E A T U R E



## CREATE GREAT CHILD PORTRAITS

Turn your living room into a portrait studio and make stylish image compilations of the kids you'll treasure

**T**oddlers and babies are photographed by parents, relatives and family friends with a frequency usually reserved for A-list celebrities. But if you want your child photos to look more refined than the average snap, a little more care and attention is required. So we'll show you how to transform your living room into a makeshift studio, then present your images in an eye-catching compilation.

Successful compilations are all about balance. For color images, it's a case of

pairing colors that don't clash, whereas in black and white, a balance of light and dark is important.

For example, if a couple of images are dominated by dark tones, placing them opposite one another will balance the overall look. The same balance works for composition. If, for example, a person is looking to the side, then it's best to have them looking inwards, and ideally, you'd use a shot taken from the other side to sit opposite. For a grid of images like this, compositional triangles

can work well. Notice how there's a triangle of darker-toned images (bottom-left, top-middle, bottom-right), and one of lighter images (top-left, bottom-middle, top-right).

We'll show you how to make a compilation with simple layer skills and clipping masks to crop the images. It's a smart way to work, because we're free to tweak the crop of each frame at any time, which is handy when we want to try out different image combinations and fine-tune the overall balance.





# FEATURE

## SHOOT CHILD PORTRAITS

1

### DARK BACKGROUND

Unpatterned blankets and sheets are very useful for portrait shoots. You can either get the child to lie on them, or instead prop them up for a clean, simple background. Textured material can work well – children like the feel of them on their skin, and textures become more important when converting to monochrome.

2

### WHITE UMBRELLA

The larger a light source, the softer it becomes. Flashguns have a small source, so the light is hard and unflattering. A white umbrella transforms the harsh, unflattering light into a bank of beautiful soft, diffused illumination. Attach your flash to a tripod using the thread in its stand, then rig the umbrella in front of it.

3

### WIRELESS TRIGGERING

Cameras with wireless flash and compatible flashguns make wireless triggering a breeze. Open your pop-up flash, set your flash mode to manual flash and choose an output power. Set your flashgun to wireless and the pop-up flash will trigger the flashgun wirelessly and communicate the power through a series of pre-flash bursts.

## TRANSFORM YOUR LIVING ROOM INTO A PORTRAIT STUDIO

All you need for great portraits is a Speedlite, a white umbrella and a simple background



4

### CAMERA SETTINGS

When using flash, the high light levels mean you should always set your ISO to 100 for the best quality. You'll need to be in manual mode with your shutter speed set to about 1/200 sec. Set the aperture to f/11 and take a test shot. If it's too dark, open the aperture or increase the flash power. If it's too bright, do the opposite.

5

### SHOOT OPPOSITES

Symmetry works well in compilations, so plan ahead during the shoot. If you take a shot of the child looking to one side, make sure you get another looking the other way. When presented together, they'll create a pleasing symmetry. For side-lit shots, position the flash to the side and slightly behind the face.

6

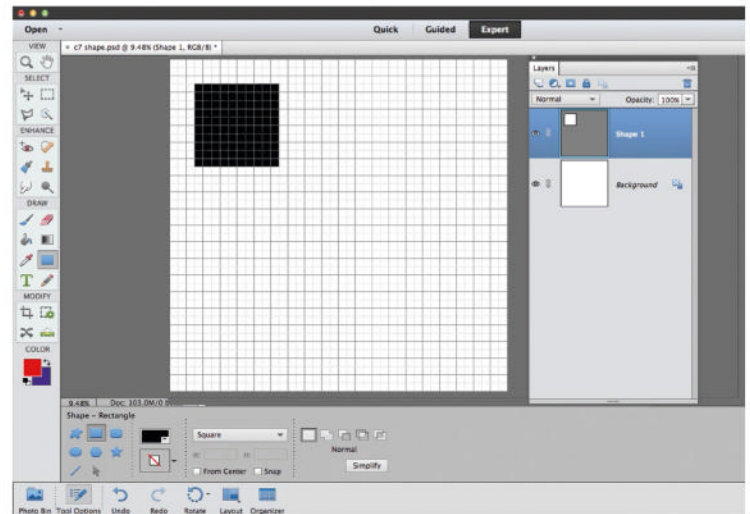
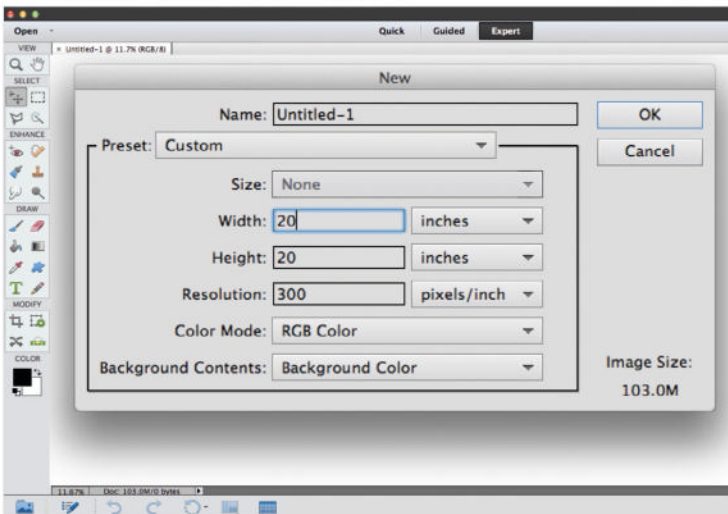
### WIDE APERTURE

The great thing about using flash is that it allows you to control the depth of field. A high flash power combined with a narrow aperture gives you more depth of field – perfect for full body or headshots. A low flash power and a wide aperture gives a shallow depth of field, ideal for isolating details like the lashes here.



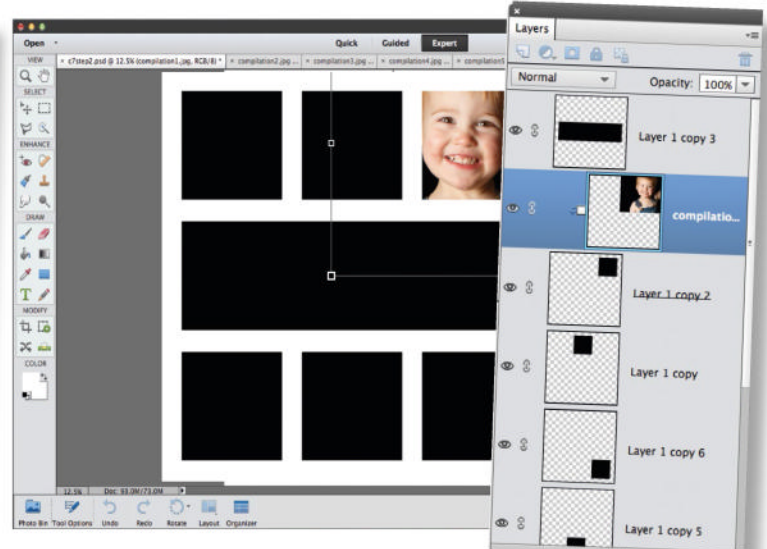
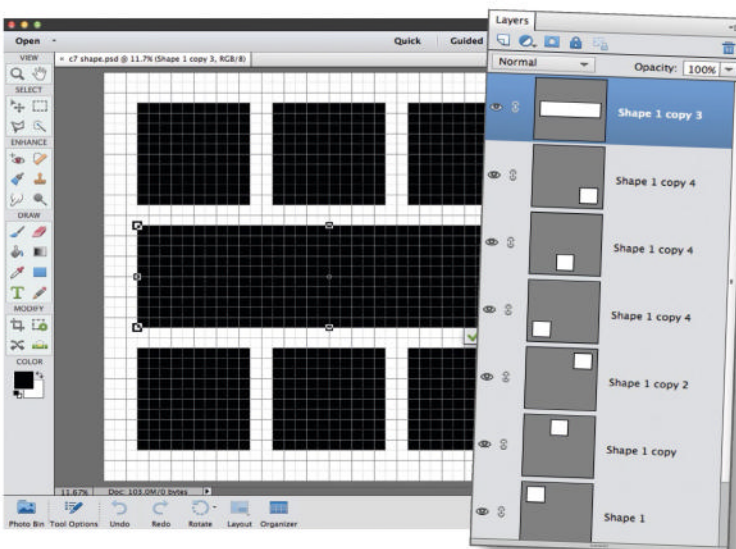
# FEATURE

## STEP BY STEP: EDIT YOUR CHILD PORTRAITS



**1 WORK OUT THE SIZE YOU NEED**  
Begin by working out a size for the compilation. We want a 3x3 grid of five-inch squares (with the middle row as a single panoramic), one inch borders between each image and a 1.5-inch border around the edges. This gives an overall size of 20x20 inches. Open Elements and go to File>New> Blank Document. Set Width and Height to 20 inches and click OK.

**2 ADD A SQUARE**  
Go to Edit>Preferences, select Guides and Grid, then set Gridline every 1 inch with 2 subdivisions. Grab the Custom Shape tool from the Tools panel and choose the Square shape in the tool options. Press D to set the foreground color to black, then drag out a 5x5-inch square in the top corner of the document.



**3 FINISH THE LAYOUT**  
Grab the Move tool from the Tools panel and check Auto Select Layer and Show Bounding Box. Alt-drag the square to make a copy. Position it to the side with one inch between, then continue Alt-dragging to make more squares. For the panoramic frame, drag the bounding box to make it rectangular.

**4 ADD AN IMAGE**  
Hide the grid with View>Grid so that you have a clearer view of the document. Grab the Move tool from the Tools panel. Open all the images you intend to use in Elements. Go to the Photo Bin and choose Show Open Files, then double click the layout. Click the first square you want to fill with an image, then drag an image into the document window from the Photo Bin.



### TOP TIP A QUICK WAY TO COPY LAYERS

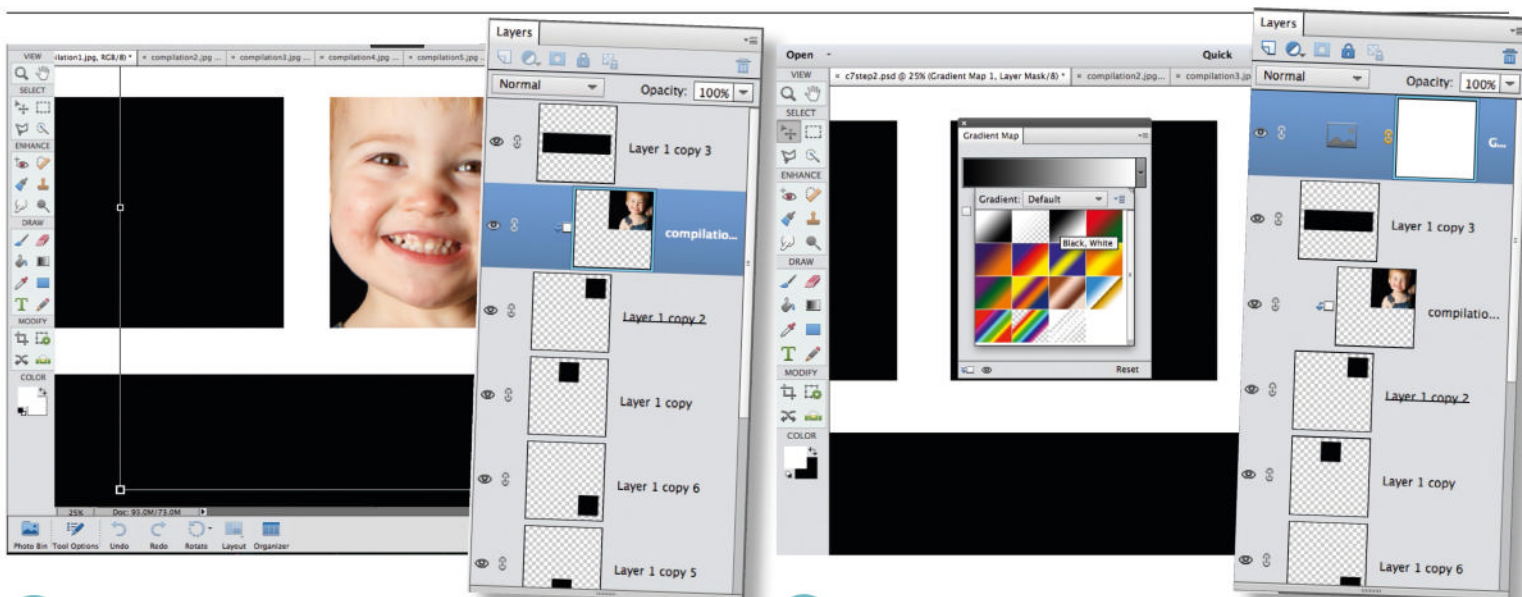
The Alt key is a useful shortcut for copying items in Photoshop. Hold down Alt and drag any layer, Layer Style, shape or layer mask in the Layers panel to quickly make a copy of it. Similarly, when using the Move tool to move layers around a document, hold down Alt to make a copy at the same time – ideal for copying the square boxes in the compilation.





# FEATURE

## STEP BY STEP: EDIT YOUR CHILD PORTRAITS



**5 CLIP TO THE SQUARE**  
Go to the Layers panel. Alt-click the line between the newly added image and the square layer below. This clips the image to the square, which means we can move the image around within the frame to get the crop we want, effectively turning it into a window for the underlying image. Click the bounding box to resize and rotate the layer until you're happy.

**6 CONVERT TO MONOCHROME**  
Highlight the top layer and click the Create adjustment layer icon in the Layers panel. Choose Gradient Map. Set Gradient: Default. Press D, then X to reset the swatch colors to the default black and white. Choose the top-left Foreground to Background preset.



**7 FILL THE REMAINING BOXES**  
Add more images, clipping them to each square. To move them once they are in the document, simply drag them with the Move tool. To add a border around each image, Ctrl-click one of the square layers, then Shift-Ctrl-click the others to load a selection. Make a new layer at the top of the stack, then go to Edit>Stroke (Outline) Selection. Set color black and 8px.

**8 INVERT THE BACKGROUND**  
If you want to prepare each image for printing separately, Ctrl-click the relevant image square, then go to Image>Crop. Save the file separately, then undo (using Cmd/Ctrl+Z) and repeat for the others. Alternatively, to present them together with a black background: highlight the Background layer and press Cmd/Ctrl+I, then repeat on the top outline layer.



### TOP TIP GET EYE-LEVEL

Portraits taken at eye level create a connection between the viewer and the subject, so when taking photos of children, it's important to get down to their level. It might mean you need to get down and crawl around on the floor, but it results in much better portraits than if every shot is taken from above, from an adult viewpoint.



# F E A T U R E



## NEWBORN BABIES

**N**ewborn babies are also ideal subjects for a compilation. Of course, they aren't able to pull many poses, and their array of expressions could be quite limited (especially if they're asleep), so to add variety to the compilation, shoot details like little fingers, toes,

and lashes. Not every image needs to include the face!

If parents don't want to be in the picture, you could still make use of their hands and arms to hold the baby and give your image a sense of scale next to the tiny body. Babies might be a little wary of flash, so you could try using

window light instead. The images here were all taken with the light from a large bay window.

Window light is less strong than flash, so you'll need to use a higher ISO, but the images in a compilation are usually quite small, so you don't need to worry too much about noise.



# Everything the Canon photographer needs!



A comprehensive reference guide  
to your Canon EOS digital SLR



Available on the  
**App Store**

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\*\* Photography Week is compatible with Kindle Fire HDX, Kindle Fire HD, and Kindle Fire (2nd Gen). It is not compatible with Kindle Fire (1st Gen).



G A L L E R Y

# XPOSURE

THE WEEK'S MOST INSPIRING READER PHOTOS

## THE DARK WOODS

**FERGAL GLEESON**

Forests are always difficult to photograph, but Fergal has captured a wonderful, moody exposure

<http://tiny.cc/gxcn0x>





# GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS



## TAKE AWAY

**EDDIE CHEUNG**

Eddie has used a keen eye and clever focusing to create a splendid image that makes the viewer do a double-take!

<http://tiny.cc/8xcn0x>

## INSECT

**JOSE LOPEZ**

Jose's brilliantly close macro image is teeming with colors and fine detail

<http://tiny.cc/vycn0x>





# GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS



## FARM IN THE MIDDLE OF NOWHERE

**ARTUR SZCZESZEK**

Artur waited for the perfect light. The low perspective emphasizes the vastness of the scene  
<http://tiny.cc/4ycn0x>



## TREES

**IAN HOUGHTON**

We've seen sunsets, but not like this one! Ian has framed the sun perfectly behind the trees to capture its stunning, golden light  
<http://tiny.cc/zzcn0x>



# GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS



## PIER END

**DAVID BALL**

David's perfect long exposure has smoothed over the sea and nicely blurred the clouds

<http://tiny.cc/h0cn0x>

## RED ARROWS

**CALVIN TAYLOR LEE**

This might be the most original image we've seen all year. Such a clever idea

<http://tiny.cc/e1cn0x>





# GALLERY

THE WEEK'S MOST INSPIRING READER PHOTOS



**MARINE**

**YANN WILLIAM**

Yann's beautiful black-and-white portrait emphasizes his subject nicely thanks to the perfect background blur

<http://tiny.cc/41cn0x>



FACEBOOK

<http://tiny.cc/blipjx>



FLICKR

<http://tiny.cc/8kgpjx>

## PHOTOGRAPHY WEEK WANTS YOUR PHOTOS!

Taken a portrait you're particularly proud of? Shot a sensational sunset you'd like to show off? Then join the *Photography Week* Facebook community and share your best photos today! You'll get feedback from fellow readers and the *Photography Week* team, plus the chance to appear in *Xposure*, or even on our cover!

INSPIRATION

# IT'S COOL, THAT

THE BEST THING WE'VE SEEN THIS WEEK



## A GRAND DISPLAY OF POWER

How many times have you been driving along and seen a storm brewing, but not known how to do it justice? Take inspiration from photographer Evan Halleck

**E**ven if you live in mundane surroundings, storms and lightning can make dramatic images. But capture them in a jaw-dropping location and you can get a very special image indeed.

Los Angeles-based photographer Evan Halleck got some amazing timelapse pictures of a storm breaking over the Grand Canyon during a recent stop over. "I saw that a storm was forming way in the distance, so I drove towards it," he explains in an article on PetaPixel.com. "I was scared, but my

whole life I have always wanted an epic storm photo."

Halleck has worked on nature photography and timelapse projects for about five years, so he didn't need to waste time working out what gear and settings to use. Once he was at the best spot, he took a picture every five seconds for two hours, then a photo every second for the last 20 minutes. He ended up with 1,200 raw files, from which he created a 54-second timelapse film of the storm breaking. Why not have a go at timelapse shooting the next time you see a storm?



SEE THE VIDEO  
<http://tiny.cc/uekf0X>





S K I L L S

# CRASH COURSE

ESSENTIAL PHOTO SKILLS MADE EASY



## BIG UP BLUR WITH A BOKEH-RAMA EFFECT

Want a really fast lens, but can't afford one? Then have a go at the Brenizer effect, says Chris George

90  
MIN

Do you dream of owning a really wide aperture lens that enables you to shoot pro-quality portraits with beautiful bokeh? The Brenizer effect is an ingenious way of minimizing depth of field. Invented by photographer Ryan Brenizer, it uses a panoramic stitching technique – where you shoot lots of telephoto pictures of different parts of the scene, each with the same limited depth of field. You then join this mosaic together on your computer using photo-editing or specialist stitching software.

Also known as a portrait panorama or bokeh-rama, the Brenizer effect enables you to create a wide-angle scene with an unbelievably narrow depth of field, with beautifully blurred bokeh in the foreground and background. The result is much more convincing than using Photoshop Blur or Tilt/Shift trickery. It's a great technique for shots of couples, making it popular for wedding and engagement portraits.





# S K I L L S

## STEP BY STEP: GET THE BRENIZER EFFECT



1

### GRAB YOUR TELEPHOTO

Choose a mid-telephoto lens setting and use it at its maximum aperture. Pros use an 85mm prime at f/1.8 or f/1.4 for this, but any telephoto zoom will do. The great thing about this trick is that you end up with a wide-angle view with much less depth of field than your existing lenses will allow.

2

### LOCK CONTROLS TO MANUAL

Every shot needs to use the same settings. Use manual exposure with the maximum possible aperture. Set the white balance to a manual preset. Focus on the subject's face. Set the focus switch to manual so that the focus distance is the same for every shot (many frames will appear out of focus).



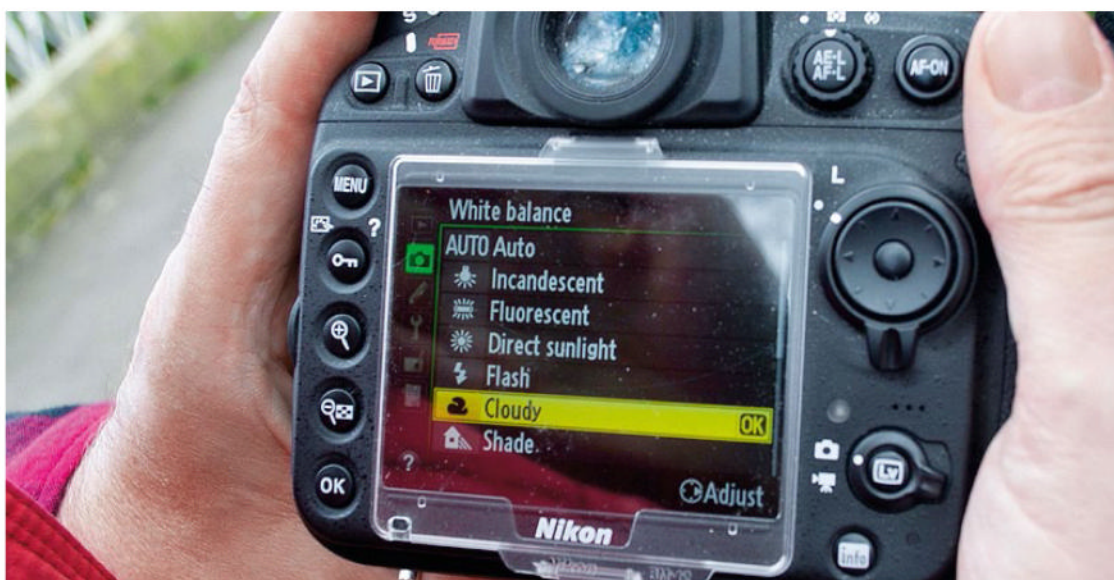
3

### SMALL IS BEAUTIFUL

Each tile in your mosaic is small, so switch File Type to JPEG Basic, and reduce Image size to the smallest available.

This helps to ensure your computer doesn't crash when stitching everything together.

You can also resize images further in Photoshop before you start stitching.





# SKILLS

## STEP BY STEP: GET THE BRENIZER EFFECT



4

### SHOOT YOUR TILES

You can compile a Brenizer portrait with 80 or more pictures, to get a really wide view, but to simplify the shooting and the stitching process, start with 30 shots. Shoot your sequence in rows from top left to bottom right. Make sure each tile and row overlaps the last by around a third.

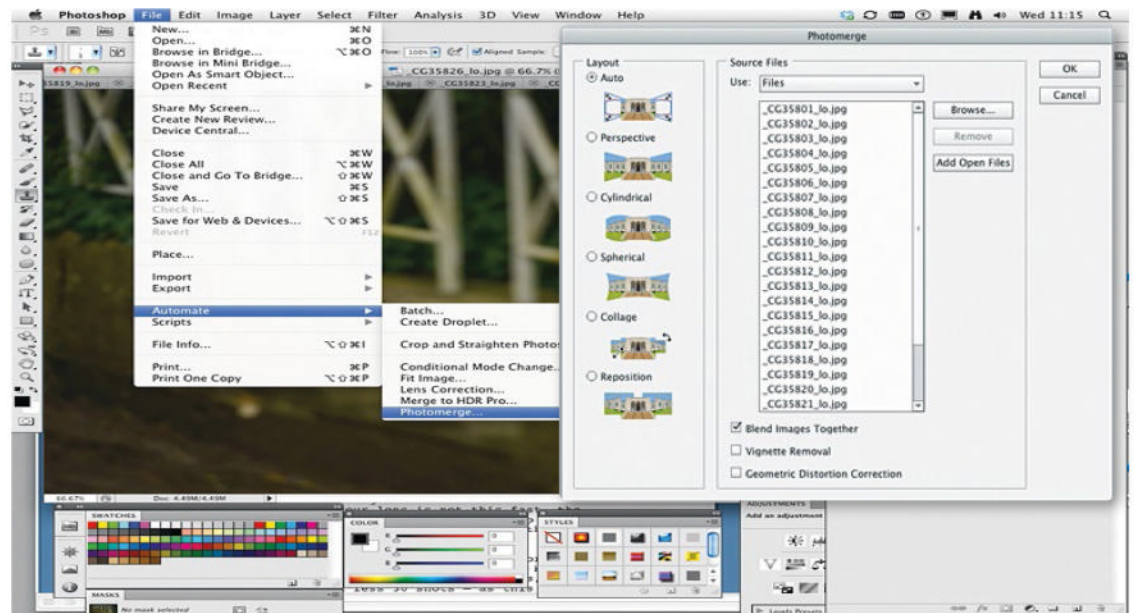
5

### ALL LOOKING SHARP

Open all the low-res shots for your composite in Photoshop.

Then go to File>Automate>Photomerge. Choose Auto from the Layout options, ensure

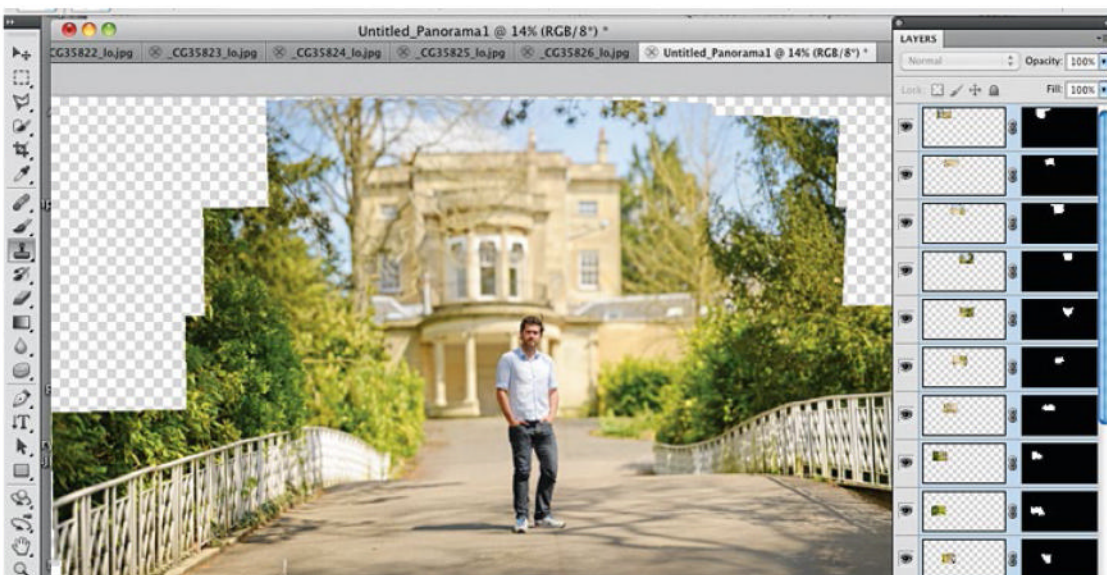
Blend Images Together is selected, and then use the Add Open Files option. Click OK and the stitching starts.



6

### CHOP OUT THE ROUGH EDGES

The stitching process may take a few minutes as the program blends the pictures together. The resulting composite image will need to be cropped to give you your final portrait, but don't cut any more of the blurred foreground and background than you need to.





E D I T I N G

# LIGHTROOM

LEARN ESSENTIAL EDITING SKILLS FAST!

HOW TO...

AFTER

## SHARPEN UP YOUR IMAGES

Give soft-looking photo subjects more impact while keeping sharpening artefacts at bay

It can be a challenge to get your photos looking pin-sharp for a variety of reasons. Many digital cameras have a built-in filter that blurs the photo a little in an attempt to avoid producing moiré patterns. This low-pass (or antialiasing) filter can also soften important details. Or by placing the camera close to a small subject (such as a flower), you risk getting a shallow depth of field. This means only a narrow band of detail will be in focus.

Fortunately, Lightroom's Detail panel is packed with tools designed to tease out fine details. These tools work by increasing contrast around the edges of fine details, giving them more impact.

However, when you digitally sharpen a photo using Lightroom's sliders, you risk exaggerating picture noise in smooth areas such as the clear blue background in our starting image. You can also introduce artefacts such as blown-out highlights, clipped shadows and distracting haloes.

In this tutorial we'll examine ways to sharpen your photos while keeping artefacts at bay, and demonstrate how the sophisticated Detail panel enables you to restrict the sharpening to important areas of your image.



BEFORE

WATCH THE VIDEO  
<http://tiny.cc/g01i0x>

DOWNLOAD THE  
PROJECT FILES  
<http://tiny.cc/6y1j0x>  
ON A PC OR MAC



### WANT TO LEARN HOW TO USE LIGHTROOM FASTER? GET THE WHOLE COURSE NOW!

If you don't want to wait a whole year to learn how to use Lightroom, you can download our whole course from the *Photography Week* app for just \$19.99/£11.99. We'll be including one part of the course every week until the end of the year in the magazine, so the choice is yours: wait and take the course for free, or buy it now and learn faster, with all the videos in one place!

<http://tiny.cc/0bxaqx>





# GEAR

## MINI TEST

We test six tough compact cameras



1

### CANON POWERSHOT D30

PRICE: £200 / \$300  
[www.canon.com](http://www.canon.com)

The PowerShot D30's 25-metre waterproof rating may have recently been overshadowed by the Nikon AW130, but this is still a great diving companion. Its ergonomic design features oversized controls that make the camera easy to operate underwater or while wearing gloves. The three-inch LCD is also one of the brightest of the bunch. However, the rest of the D30's specs are more mundane, and unlike the Olympus TG-3 or Panasonic FT5, there's no crushproof rating or Wi-Fi. Although detail levels are high and there's little evidence of smearing, image noise becomes visible at ISO400.

**We say:** A waterproof wonder, but it won't win any prizes for image quality



2

### FUJIFILM FINEPIX XP80

PRICE: £123 / \$170  
[www.fujifilm.eu/uk](http://www.fujifilm.eu/uk)

Fujifilm's entry is the cheapest here, but it still sports a useful 15m waterproof rating and is shockproof to 1.75m, while also being dustproof and freezeproof. Its 16.4MP sensor copes well in good light, but step indoors and you'll see a drop in detail, and noise quickly becomes apparent. Many tough cameras will also put the XP80's disappointing 210-shot (normal shooting) battery life and 9cm macro mode to shame. Built-in Wi-Fi and a timelapse shooting feature are nice touches at this price, but they do come at the expense of the quality of the camera's LCD.

**We say:** Great value, providing you accept its compromises



3

### NIKON COOLPIX AW130

PRICE: £245 / \$297  
[www.nikon.co.uk](http://www.nikon.co.uk)

Features are the AW130's forte. It boasts a terrific GPS system, an interactive world map and Wi-Fi connectivity, plus an altimeter and a depth gauge. It'll also keep up with the action, thanks to a fast 7fps burst shooting mode and a 370-shot (normal shooting) battery life. A 30m waterproof rating makes it top of the class, and it'll keep shooting at -10° or after a 2.1-metre drop. Downsides? There's no crushproof rating, and the image quality can't match the Panasonic FT5. Detail is smeared throughout the sensitivity scale, while occasional exposure metering and white balance inconsistencies can be frustrating.

**We say:** Almost worthy of top honors – if only images were sharper



# GEAR

## MINI TEST

We test six tough compact cameras



4

### OLYMPUS STYLUS TG-3

PRICE: £314 / \$320  
[www.olympus.co.uk](http://www.olympus.co.uk)

The TG-3's build quality suggests it could survive pretty much anything you could throw at it. It'll take a drop from 2.1 metres, a -10° freeze, 100kg of force and 15-metre-deep excursions. A chunky, ergonomic shape and well-designed controls makes the TG-3 a pleasure to use in any weather. It's also packed with useful features for when you're out in the wild, such as a GPS system, an electronic compass and depth and pressure gauges. But while daytime shots are easy on the eye, low-light images are marred by noise and smearing.

**We say:** An outstanding tough camera that's worth every penny



5

### PANASONIC LUMIX DMC-FT5

PRICE: £200 / \$249  
[www.panasonic.com](http://www.panasonic.com)

The FT5 is getting long in the tooth, but it can still cut it against today's models. Its 16.1MP sensor resolves plenty of detail and maintains impressive clarity as high as ISO1,600. A 4.6x Leica lens provides a 35mm-equivalent focal range of 28–128mm, and is optically stabilized. The FT5's 13m waterproof rating is nothing special, but you can't knock its ability to shrug off a 2m drop, survive -10° freezes or withstand a 100kg crushing. Factor in GPS, Wi-Fi and NFC, and the FT5 shapes up as a great all-rounder.

**We say:** A fine choice if you can't stretch to the Olympus TG-3



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### RICOH WG-30

PRICE: £176 / \$200  
[www.ricoh-imaging.co.uk](http://www.ricoh-imaging.co.uk)

Despite being one of the less expensive choices here, the WG-30 will still let you dive down to 12m, and it will survive a drop from up to 1.5m. Inside is a 16MP sensor capable of ISO6,400 and reasonable image quality, while the 5x optical zoom range is also a match for pricier rivals. Then there's the 1cm macro mode, with six LEDs encircling the lens. However, the cost-cutting shows in the 2.7-inch screen. The widescreen format makes normal 4:3 shots appear small, and the restricted viewing angles ruin colors.

**We say:** Not bad for the money, but the Fujifilm XP80 is better value





# GEAR TIMELINE

THE DIGITAL CAMERA IS 40 YEARS OLD THIS YEAR. TO CELEBRATE WE CREATED THIS TIMELINE OF ITS INNOVATIONS AND MILESTONES

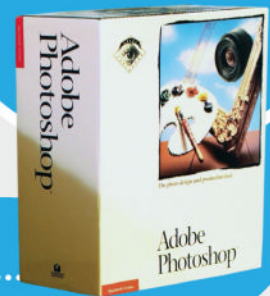
## 1975

Kodak engineer Steven Sasson builds the first digital stills camera. It weighed 6.3kg, took 23 secs to record a black-and-white image to cassette tape, and had a 10,000-pixel sensor.



## 1987

Brothers Thomas and John Knoll create an image-processing application called Display. The program was sold to Adobe in 1990 and renamed Photoshop.



## 1990

The Dycam Model 1 was the first portable, commercially available digital camera. It cost almost \$1,000 and had a resolution of 320 x 240 pixels. It could store up to 32 images.



## 1991

The Kodak DCS-100 was the first digital SLR camera. It consisted of a Nikon F3 film camera connected by cable to a shoulder-mounted digital storage unit. The kit weighed 7kg and cost up to \$25,000. 987 of these 1.3 megapixel cameras were sold.



## 1994

CompactFlash memory cards were introduced by SanDisk – with capacities between 2-24Mb.

The fixed-lens Apple QuickTake 100 offered the ability to record eight-color 640 x 480 pixel images.

## 1995

The Casio QV-10 was the first consumer camera to offer an LCD for previewing and viewing images.

The Ricoh RDC-1 was the first digital stills camera to shoot video.

## 1998

Danish company Phase One introduced the LightPhase digital back, which fitted to standard medium-format film cameras.



## 2000

The J-SH04, made by Sharp and sold in Japan by J-Phone, was the first mobile phone with a built-in camera.



## 2002

Contax starts selling the first D-SLR with a full-frame sensor.

## 2003

The Canon EOS 300D was the first affordable SLR, costing £820 with an 18-55mm lens and a 6.3 megapixel CMOS sensor.

The Ritz Dakota Digital was the first single-use digital camera. It was sold in the USA for \$10.99. Hackers worked out how to make it reusable, and it was withdrawn from sale.



## 2006

The Olympus E-330 introduces Live View.

Adobe Photoshop Lightroom gets a beta release. Version 1.0 went on sale the following year for £199.



## 2007

The Apple iPhone is released.

## 2008

The Panasonic Lumix G1 – the first compact system camera – is released. Its Micro Four Thirds system removed the need for an SLR's pentaprism and mirror box, creating a lighter body.

## 2009

The Fuji Finepix Real 3D W1 was the first digital stereo camera.



## 2014

HD movie making for the masses as consumer cameras offer 4K video capability.



## 2011

Light-field photography was introduced with the Lytro, enabling you to adjust the focus after you've taken the shot.

## 2010

Photo and video-sharing service Instagram launched; bought by Facebook for \$1 billion in 2012.





# A P P S

## MORE GREAT MAGAZINES FROM THE MAKERS OF PHOTOGRAPHY WEEK

### N-PHOTO

N-Photo is a monthly magazine for Nikon photographers, and is packed with technique and Photoshop video lessons every month.



<http://tiny.cc/cllrjx>



<http://tiny.cc/97krjx>



### PHOTOPLUS

PhotoPlus is a monthly magazine for Canon photographers that features expert advice, tips and video tutorials on all things Canon.



<http://tiny.cc/r9krjx>



<http://tiny.cc/halrjx>



### DIGITAL CAMERA WORLD

A monthly magazine that aims to improve your photography with an inspirational mix of amazing images and how-to articles.



<http://tiny.cc/u4krjx>



<http://tiny.cc/r5krjx>



### PRACTICAL PHOTOSHOP

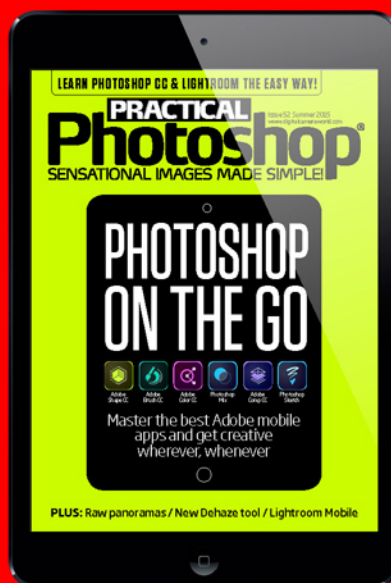
Improve your Photoshop skills with the monthly guide to creating stunning images. Each issue comes with expert video lessons.



<http://tiny.cc/pri0qx>



<http://tiny.cc/gblrjx>



## Check out these other fantastic photography apps for iPad & iPhone



### TEACH YOURSELF PHOTOSHOP

Transform your images with the expert tips and advice in 50 Photoshop video tutorials. Discover the power of layers, blending modes, raw file editing and more with this easy-to-follow course. <http://tiny.cc/vd4hox>



### TEACH YOURSELF LIGHTROOM

Unleash the creative power of the Lightroom digital darkroom with this 50-part video course. Enhance landscapes, master black and white, make gorgeous portraits and more. <http://tiny.cc/553hox>



### TEACH YOURSELF RAW IN PHOTOSHOP

Learn how to use Adobe's professional-level raw file editor to make amazing prints from your photos. Every important tool in Camera Raw explained in detail by our experts. <http://tiny.cc/1e4hox>



### CREATIVE SLR SKILLS

Learn a range of new photography skills with this 30-part video training course designed to stimulate your creativity and boost your photographic confidence. <http://tiny.cc/k3jcqx>

C R E D I T S

# Photography Week

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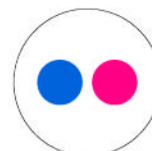
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