

Software specification for *iMedia Unit 1 Digital Graphics* = **Serif PhotoPlus**

2 Use the tools and features of a digital image manipulation program to edit an image

2a Use the functions of the software application to manipulate and edit the image to obtain source graphics



edit and manipulate an image



Fact file 1 - Seeing is not believing

There was a time when a photograph was readily accepted as proof that something had really happened, even though photographs have been faked since the camera was first invented. In a digital age doctoring photos has become commonplace and harder to spot.

Victorian fakes

Early photographers loved experimenting with the medium and they would routinely improve on nature in the darkroom by combining a perfectly exposed sky from one negative with a perfectly exposed landscape from another. This was accepted practice at a time when the technology was too primitive to cope with extremes of light and dark in one exposure. More sinister were the faked photos of the spirits of dead relatives hovering behind their loved ones, which seemed to prove the existence of the supernatural. These too were made by combining negatives. They were a profitable business for unscrupulous photographers.

The Cottingley Fairies

One of the most famous photographic deceptions of the last century was the work of two young cousins, Elsie Wright and Frances Griffiths. Their photos of fairies dancing and playing with them in Cottingley Glen near Bradford, taken in 1917, caused a sensation when they were published in 1920. At the time the photos were accepted by many people, including the creator of Sherlock Holmes, Sir Arthur Conan Doyle, as evidence that fairies really did exist. Can you guess how the fake pictures were made in the days long before digitization and image

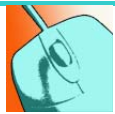
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manipulation software? It was not until 1981 that the cousins, then elderly ladies, admitted the hoax: they had cut out fairy illustrations from a children's book and fixed them to the riverbank with long hatpins. You can read more about the case of the Cottingley Fairies at: http://en.wikipedia.org/wiki/Cottingley_Fairies

Twenty-first century ethics of image manipulation

With the widespread use of computer imaging programs such as Photoshop and PhotoPlus digital photo-manipulation is accessible to everyone and has given rise to new creative artforms and graphic techniques. But concern is raised when photo-editing is used in photojournalism because it is essential that the media are guided by a code of ethics and do not deliberately try to deceive the public by manipulating the truth, whether in words or pictures. Should we believe everything we see in our newspapers and on our TV screens, or nothing? Does it matter if the A-List celeb' on the magazine cover has been given a digital face-lift? Is it any more deceptive than using flattering lighting? Haven't picture editors always manipulated the facts to fit the story in some way, either by choosing one particular shot over another, or by cropping a photo down, or by supplying a caption that guides the reader to interpret the picture in a particular way? From the very moment the photographer frames the shot the truth is undergoing a process of editing. While the technology becomes more sophisticated, its greater accessibility, on the other hand, means that the public are also more sophisticated readers and viewers of images, more tuned in to spotting fakes and to questioning what they see and hear. Following this course and taking the iMedia qualification will equip you with greater skills to understand how images can be doctored and how to better discriminate between fact and fiction. The USA National Press Photographers' Digital Manipulation Code of Ethics covers these issues and more at: http://nppa.org/professional_development/business_practices/digitaletics.html



Activity 1 - Reading press photos

- (a) Find a recent news photo with a caption and scan it. Use PhotoPlus to remove the moiré effect as you learned in the unit on scanning. Make a note of the caption, but crop the scan down to the edges of the photo itself. Save the scan to your sources folder with the date and name of the publication e.g. *finsbury_gazette030406XXX* (replace XXX with your own initials). Don't forget to add it to your sources log too.
- (b) Use PhotoPlus again to crop the photo down to a particular detail and save this to your sources folder as *crop_finsbury_gazette030406XXX*
- (c) Print out your crop and, working in pairs or small groups, ask your partner(s) to suggest some suitable captions for the cropped photo. Make a note of their suggestions.
- (d) Show your original photo without its caption and ask your partner(s) to write down a new caption for it. Share their ideas. Are they similar, or are there significant differences in what they saw? Do they differ from the crop captions in any way?
- (e) Paste your original photo in the centre of a page and draw out from the edges of the frame what might have been outside the scene pictured. Your art skills aren't being tested here, but your ability to think and see outside the box. For a start where is the photographer? S/he is usually invisible. Are there other photographers at the scene? Press or amateur? How did they know about the incident? Were they invited? Is there a crowd of onlookers? Is the action being played out for the cameras?
- (f) Finally, make a note of your thoughts and ideas on the page. Has the editing process changed the message of the picture in any way? Did the caption make a difference to how you interpreted the photo? The class could share the most interesting examples on an interactive whiteboard.

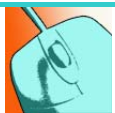


How to do it - Make a selection with the Polygon Selection tool

Making a selection is a key image manipulation skill that allows you to apply changes and effects to just one part of the picture leaving the rest untouched, or to take objects and people from one photo and place them in a completely different context.

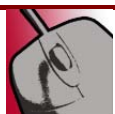


Defining areas for selection is easy in Serif PhotoPlus because there is a wide range of different options. Open PhotoPlus and look at the Help menu, or press F1. From the contents index, choose *How to manipulate all or part of an image*, and then the sub-topic *Making a selection* for a full list of available selection tools. For this tutorial you will use the *Polygon Selection Tool*. You can find a step-by-step guide with screenshots in the *Extras* section.



Activity 2 - Alone in a crowd

Open a photo of a crowd or group of people. Use the *Polygon Selection Tool* to select one person in the crowd as accurately as you can. Save your selection so that you can activate it again without having to re-select it. Save this source image in its SPP editable file format, as you will need to open and close it several times for this activity. Invert the selection and apply three different changes to the background e.g. *Greyscale*, *Gaussian Blur*, or *Halftone*, as in the tutorial. Save each version with an identifiable file name e.g. *crowd_greyXXX*, *crowd_blurXXX*, *crowd_halftoneXXX* (replace XXX with your own initials). Export the manipulations as JPEGs.

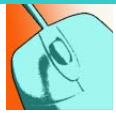


How to do it - Use selection tools, layers and masks

In this tutorial you will learn how to take objects and people from one photo and place them in a completely different context using different selection tools, including the Polygon Selection tool you used in the last activity. You will increase your selection skills by experimenting with the Colour selection tool, the Extract command and Layer Masks. Masks enable you to place the extracted figures and objects more convincingly in a new background by getting them to overlap. Layers are like a stack of transparent sheets that give you total flexibility in manipulating the different graphic elements of your composition.



You can find a step-by-step guide with screenshots in the *Extras* section.



Activity 3 - Faking it!

Take a digital photo of yourself or a friend and one of a toy superhero, alien creature, monster or supernatural being. Plan the poses carefully so that the fake picture is as convincing as possible. You might storyboard or sketch out the final design before taking the photos to make this easier. If you don't have models available, use a scan of an illustration, your own drawing or an image from the Internet. You could also find an image of a suitable background scene. Remember to add these to your sources log. Use a selection tool to cut out the alien figure and the human one and combine them with the new background as realistically as possible. Save your work as *fake1XXX* (replace XXX with your own initials). Don't forget to save the work in the SPP editable file format, as well as exporting it as a JPEG for general use.



How to do it - Add text

The *Text* tool in Serif PhotoPlus automatically adds type on a new layer for greater flexibility. You can choose a font to suit the audience and purpose of your graphic product, resize, colour and add many different effects. The poster uses an outer glow effect on the movie title and drop shadows on the other text.

You can find a step-by-step guide with screenshots to adding text in the Extras section.



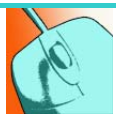
Activity 4

Think of a press caption or headline to announce the news that aliens really do exist and add it to your *Faking it!* montage. Choose a suitable font and colour for the text. Save your work as *fake2XXX* (replace XXX with your own initials). Don't forget to save the work in the SPP editable file format, as well as exporting it as a JPEG for general use.



How to do it - Drawing tools

Serif PhotoPlus has pixel-based paintbrush tools for freehand drawing and a range of vector tools for drawing lines and shapes. These are particularly useful for drawing maps or diagrams and for labelling screenshots when preparing storyboards of your creative process – to show your assessor the stages of how you developed your graphic from first idea to final design. They also enable you to combine bitmap images with vector symbols to produce a popular contemporary a style of illustration that mixes media and graphic styles. You will find a step-by-step guide with screenshots to making a process storyboard in the Extras section. You can also download the example storyboard shown below.



Activity 5

Prepare a storyboard to show how you developed your *Faking it!* picture, using the drawing tools in PhotoPlus to label screenshots of key stages in your design process. Insert the diagrammatic illustrations into a document and add some further information about your aims and how you achieved them to complete the storyboard. Save your work as *fake_storyXXX* (replace XXX with your own initials)

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STORYBOARD FOR BINARY MONTAGE

1. I started with this cropped grayscale image of an eye.
2. Then I used selection tools to cut out this photo of a mouse and pasted it in as a new layer. I rotated and scaled the mouse to fit over the boy's baseball cap.
3. Next I added in three different layers of binary codes in different colours or of different scale, orientation and transparency.
4. I used the Extract command to delete the background from this figure and pasted him on another layer. Then I added a layer mask to make it seem like he was jumping through the big hole.
5. I also added a layer mask to the mouse layer so that the small binary codes seemed to go under the mouse and over the face.
6. Then I used drawing tools to add an arrow with an orange colour fill, which I edited with the Node Edit tool and resized it. I changed the transparency of the layer to 90% and also used a mask to make the big '1' seem to overlap it.
7. These are the layers of my montage in the final stacking order. I should have named them to make it easy to identify one from another quickly.
8. This is my finished montage.

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How to do it - Compositing using a range of tools

Compositing is the technical term for composing graphics by combining or collaging images and parts of images from different sources digitally.

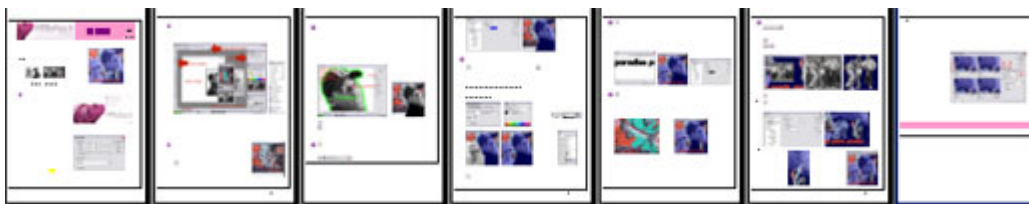
Design a CD cover

You and some friends are in a band. You plan to send a CD of some of your best tracks to several record producers in the hope of a contract, but it needs a professional-looking cover design that will grab their attention, or it might just end up in the bin. You've been given the brief to design the cover.

You'll need at least two primary sources (i.e. two of your own pictures) to combine: a shot of the band members and a suitable background, such as an image of graffiti. Follow the step-by-step instructions for the PhotoPlus tutorial that you will find in the Extras section using your own images. You'll practise these skills:



- ☆ Colour mode: CMYK or RGB
- ☆ Layers
- ☆ Rename layers
- ☆ Change layer stacking order
- ☆ Move, Deform (scale & rotate)
- ☆ Colour to Grayscale
- ☆ Gaussian Blur
- ☆ Compositing using the Extract command
- ☆ Compositing using Masks
- ☆ Compositing using Selection Tools or Erasers
- ☆ Text tool
- ☆ Text Selection tool
- ☆ Layer Effects e.g. Drop Shadow, OuterGlow, Colour Fill
- ☆ Rulers and Guides for layout
- ☆ Export for print and screen
- ☆ Export Optimiser – check the graphic quality at different resolutions and in different file formats



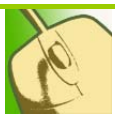
Save your design to your sources folder in its native format as an .SPP file, so that you can edit it in future. Export the finished design to your digital sketchbook in a universal graphics format – for photographic images, what is the preferred file format? Name the file *CDcoverXXX* (replace XXX with your own initials).



Mini brief

Your demo CD has been sent out and you've got a live gig coming up. There's a chance that one of the producers might drop in to see the band perform. To promote the gig and ensure you get a good audience you need to design a double-sided publicity flyer. The design should combine several different images and include at least one vector shape.

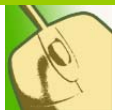
Use some of the techniques you learned when making your *Faking it!* montage and your CD cover to produce the flyer. Be sure to include the name of the band, the venue, date and time of the gig as well as any other information you think is crucial – for example ticket cost if any, or how to get to the venue.



Review

Show your flyer, your CD cover design and your *Faking it!* montage to friends and to your teacher and ask them for feedback. What do they think is good about it and what could be improved? Make a note of how you might make changes to the designs in response to their comments.

Download a blank feedback and review form to use and save it to your digital sketchbook or project folder as 2AreviewX XX (replace XXX with your own initials or naming convention agreed by your ICT teacher).

















Self-review

Complete **Part 2a** of the skills and evidence checklist you can find in the Extras section below. How much have you learned about manipulating and combining images? Is there anything you are still unsure of? Save the document for your digital sketchbook or portfolio as 2skills_evidenceXXX (replace XXX with your own initials as before).



Extras for this section

- 
[How to do it: Use the polygon selection tool – Alone in a crowd](#) 
- 
[How to do it: Use selection tools, layers and masks in Serif PhotoPlus - Faking it!](#) 
- 
[How to do it: Compositing in Serif PhotoPlus - CD cover](#) 
- 
[How to do it: Drawing tools](#) 
- 
[Storyboard your process](#) 
- 
[Feedback and review form](#)  
- 
[Self-review: skills and evidence checklist](#) 