



NUA
Summer
Schools
Series

A taste of user interface

(UI) design - creating a sci-fi button

Workshop developed by
Aiden Le Santo

Objectives

- To understand the role of a UI designer
- To design a prototype button that could be used for a sci-fi game
- To see related areas of employment

Materials required

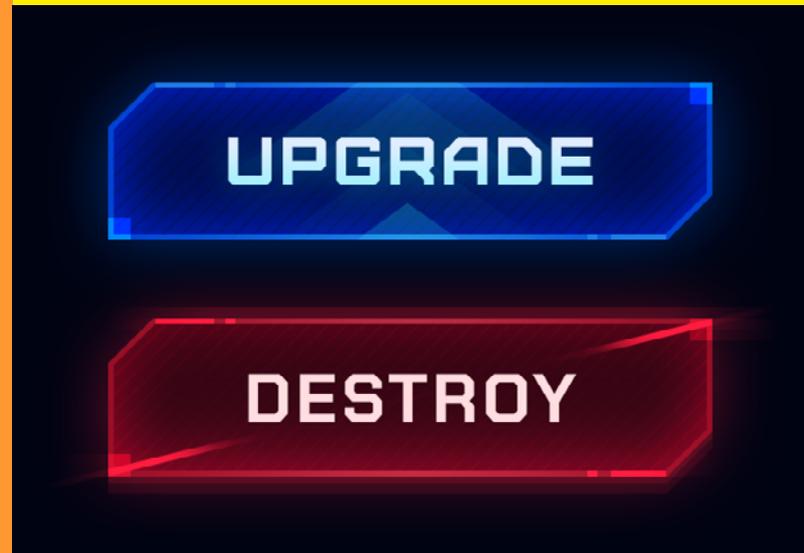
Adobe Photoshop and Illustrator. A free trial, if required, can be downloaded [here](#)

Introduction

UX/UI is the design of user interfaces (or menu systems) for machines and software, such as computers, home appliances, mobile devices, and other electronic devices, with the focus on making user friendly and contextually appropriate products.

Sprung Studios are one of the world's leading UI design studios who specialise in Video Games and Aiden has worked on projects such as Injustice 2, Call of Duty (War Zone and Modern Warfare), Fast and Furious Take Down and Trials Rising.

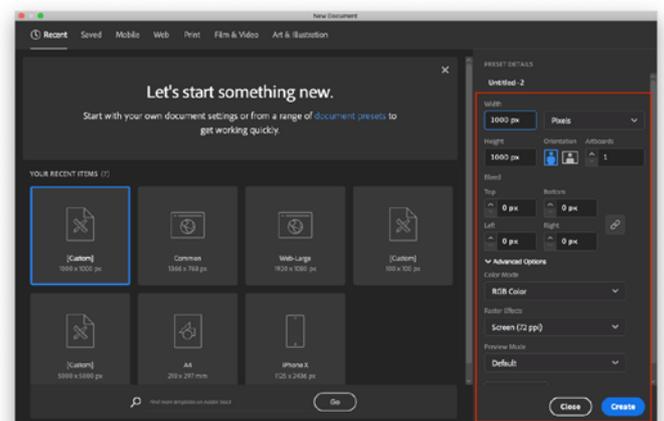
Sci-Fi button worksheet



This task will begin in Adobe Illustrator to create a basic shape, before copying it into Adobe Photoshop to apply colour and effects.

1. Setting up the canvas

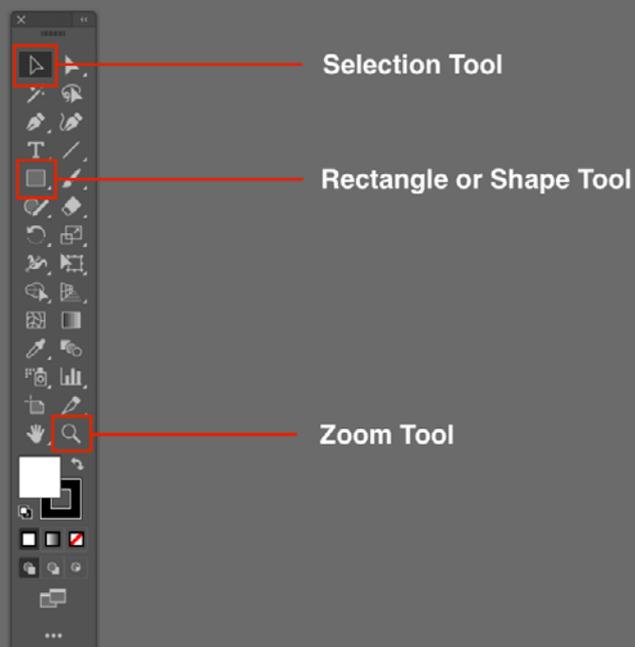
- Open Adobe Illustrator, or an alternative Vector Graphics program like Inkscape or Affinity
- Create a new canvas. Start with 1000 x 1000 pixels (px)



2. Basic tools in Illustrator

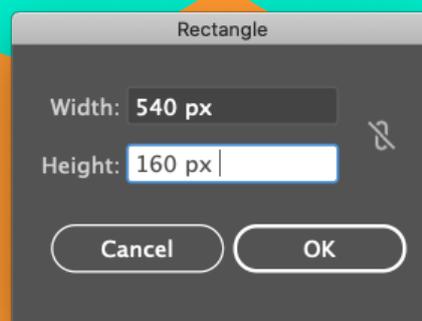
These are a few of the key tools we will use throughout this first section:

- **The Selection Tool (V)** for selecting objects on the canvas
- **Rectangle or Shape Tool (M)** for drawing objects
- Right click on this tool to choose different shapes such as Ellipse or Polygon
- You may also want to use the **Zoom tool** to zoom in or out at any point



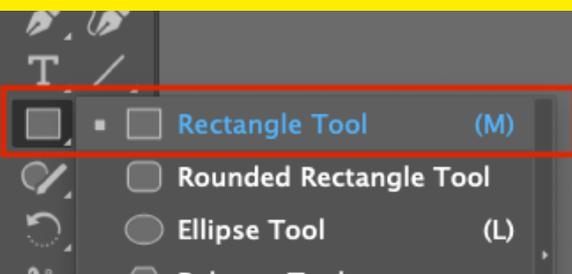
Top tip:

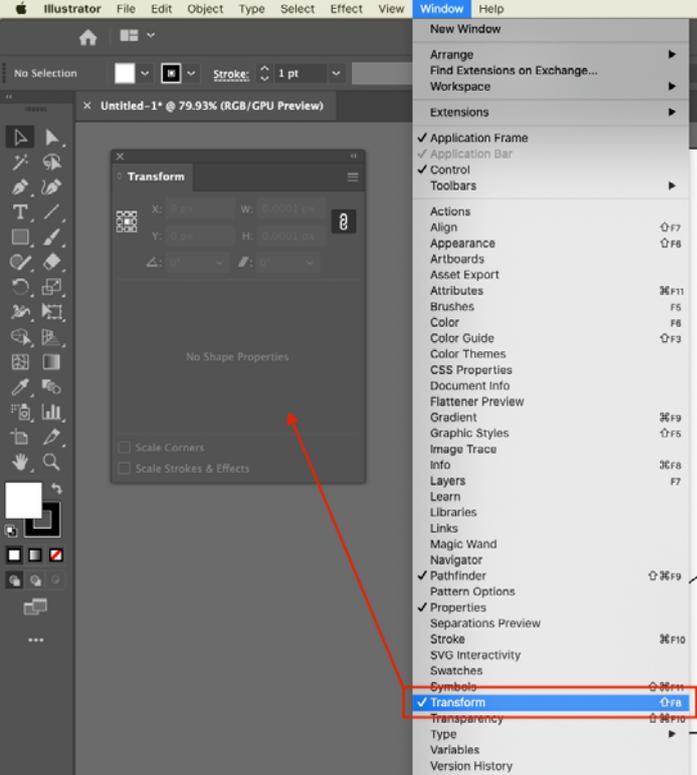
Instead of dragging to create the rectangle, you can also just click once anywhere on the canvas to set the size manually using this dialogue box.



3. Create a shape

- In the **Toolbar**, find the **Shape Tool** and choose the **Rectangle Tool**. Alternatively, press **(M)** on the keyboard for a shortcut
- **Click and Drag to draw a rectangle**
- Using the **Selection Tool (V)**, click on the Rectangle and set the size to **540 x 160 px**





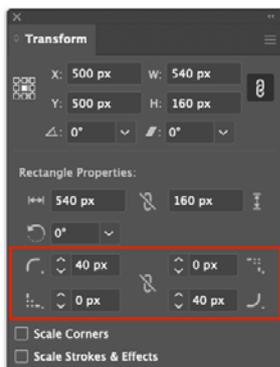
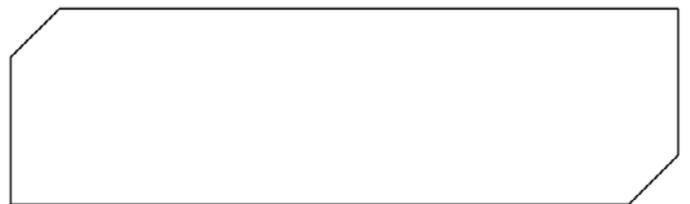
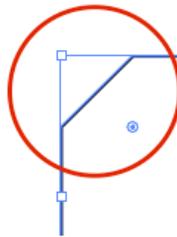
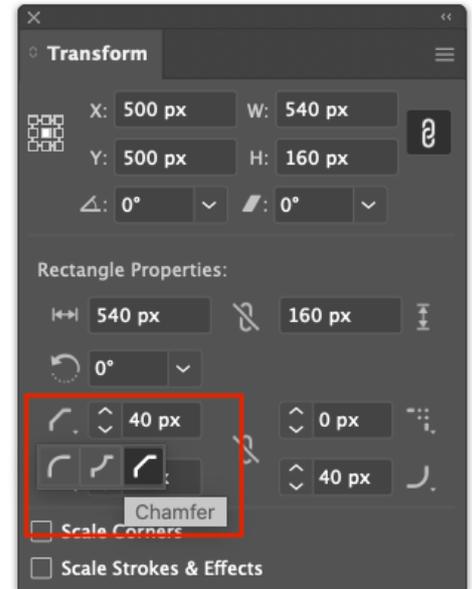
- Click on the small icon next to the pixel value and change the 'Corner Type' to 'Chamfer'
- This gives us a cut-corner effect, perfect for the Sci-Fi theme
- Do the same for the bottom right corner

4. Customising the corners

Go to **Window > Transform** and check that it is ticked on

This will display the Transform Panel, where you can change the properties of a selected object.

- Select the Rectangle using the Selection Tool (V)
- Look to the Transform Panel and make sure the 'Link' icon has a cross through it. This will let us change each corner independently
- Set the top left and bottom right corners to 40px



Now we have our basic shape

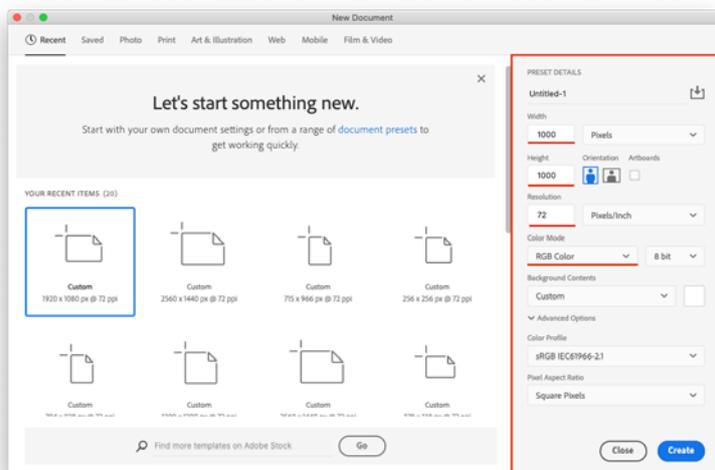
We are going to take this into Photoshop to add colour, effects and text.

5. Copy the shape

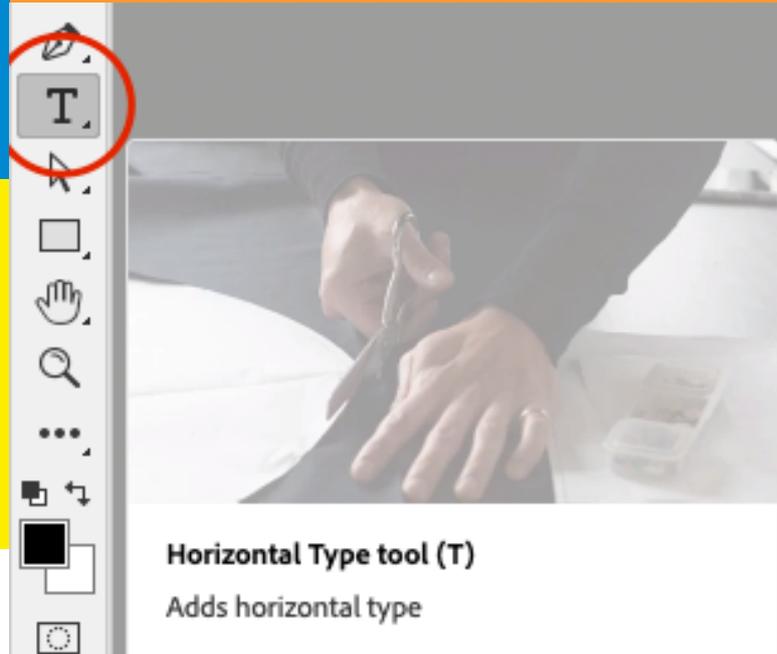
- Using the **Selection Tool (V)** click on the Rectangle
- Press **Cmd + C (Mac)** or **Ctrl + C (Windows)** to copy the shape

6. Create a canvas in Photoshop

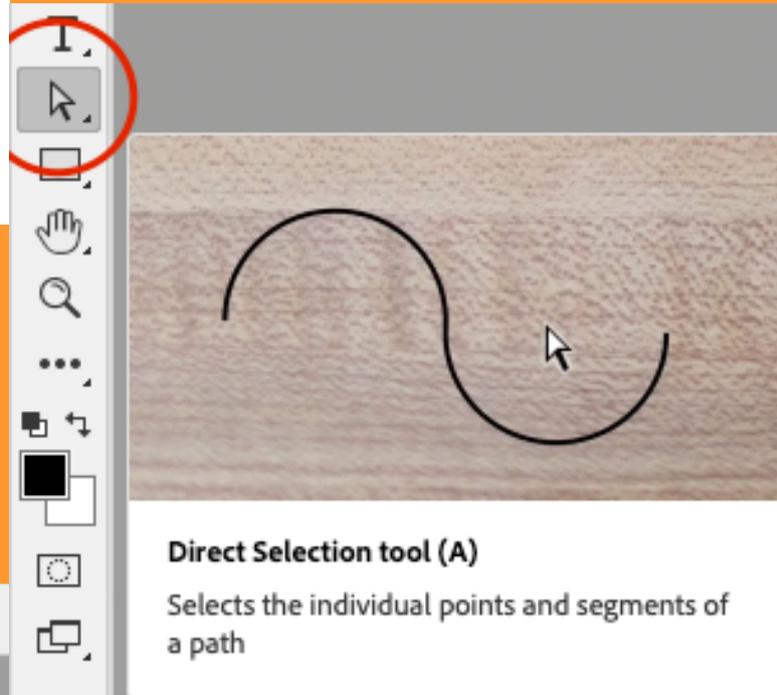
- **Open Photoshop** and **Create a new document**
- We'll use **1000 x 1000 px** again and set the **Resolution to 72** and the **Color Mode to RGB**.



The **Type tool** to create a text box.



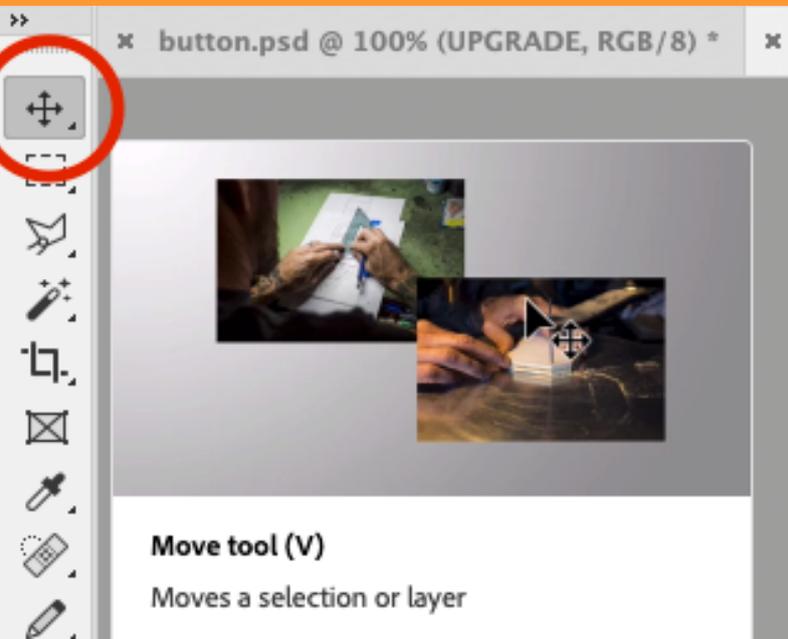
The **direct selection tool** to select and change the properties of an individual shape.



7. Basic Photoshop tools

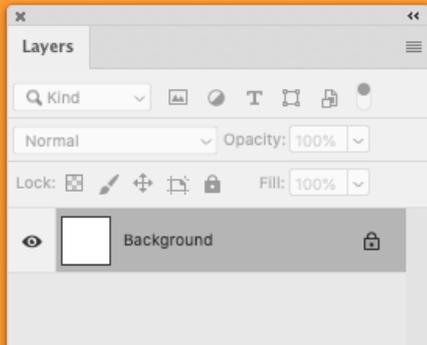
These are some of the tools and panels I will refer to throughout this section.

The **move tool** to click and drag a layer around on the canvas.





These tools can be selected from the **Tool Bar** on the left side of the screen, which may look slightly different depending on your preferences.



We'll also be interacting with the **Layer Panel**.

If you can't see this, go to **Window > Layers** and make sure it is ticked **ON**.

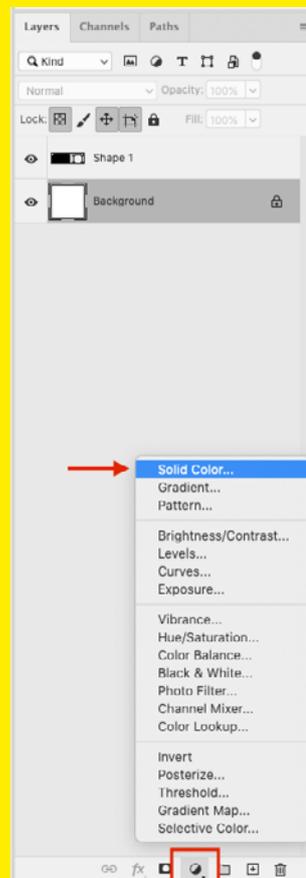
The panel will normally be in the bottom right of the screen.

The shape should now be placed on the canvas. It should also be its own "Shape" layer in the Layer Palette.



9. Changing the background colour

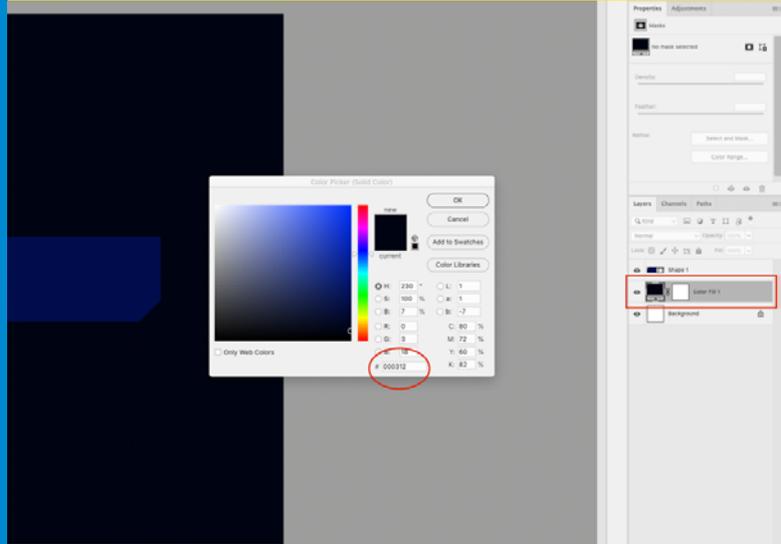
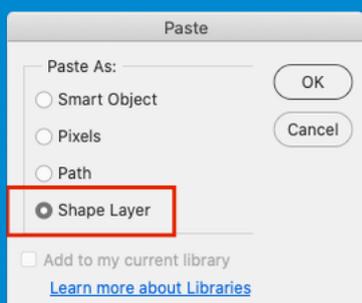
We want a nice colour for the button to sit on. Add a **Solid Colour Fill Layer** to the canvas. Pick a dark colour. I used **#000312**.



Note: In the Layer Palette, make sure your **Rectangle (Shape 1)** is above the new **Color Fill Layer**. If it's not, click and drag the layers in the palette to rearrange.

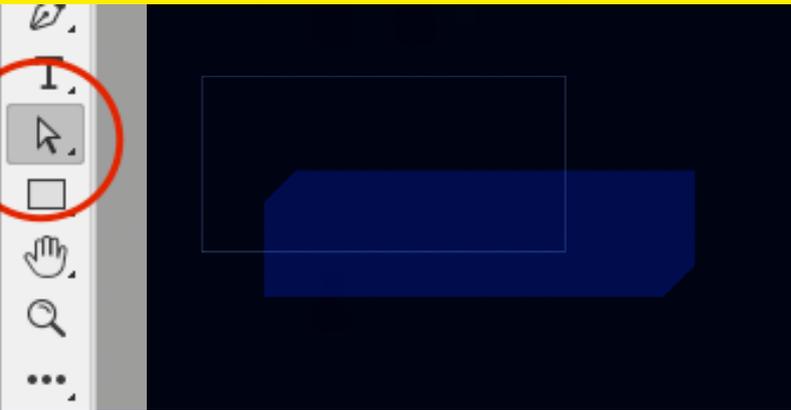
8. Pasting the shape from illustrator

- Before moving our shape into Photoshop, **Press "D"** on the keyboard to reset the default foreground colour to Black. This just makes sure that our shape will be black so we can easily see it.
- While in Photoshop, press **Cmd + V (Mac)** or **Ctrl + V (Windows)** to paste the Rectangle we copied from Illustrator.
- When prompted, choose **'Shape Layer'** as the type. This will make it a vector shape meaning it will be easy to edit and add styles later on.



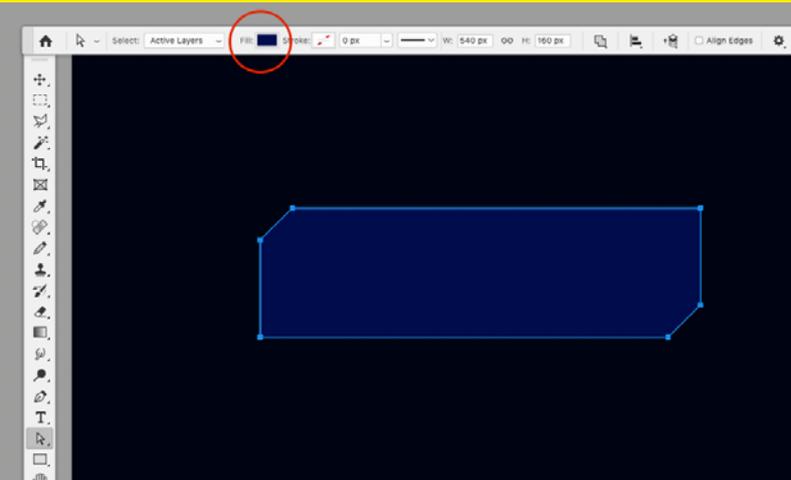
10. Change the shape colour

Using the “Direct Selection Tool” click and drag to select the entire shape.

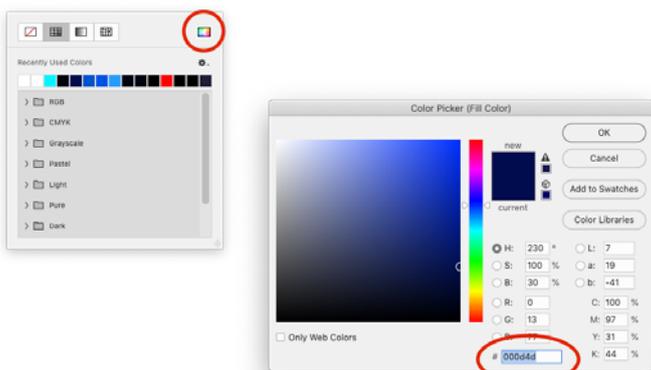


Once the shape is selected, click the ‘Fill’ colour swatch in the top bar.

Note: If you can't find this, go to Window > Options and make sure it is ticked ON.

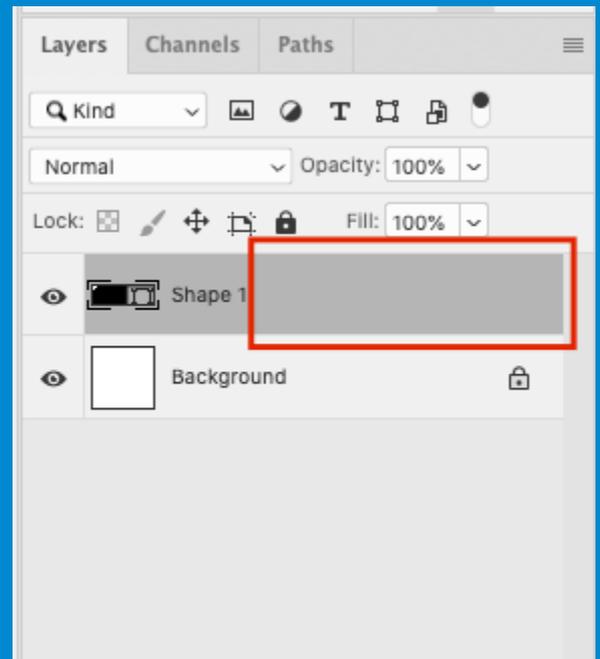


Choose a colour for the button shape. Something lighter than your background but still quite dark will work well. I used #000d4d.

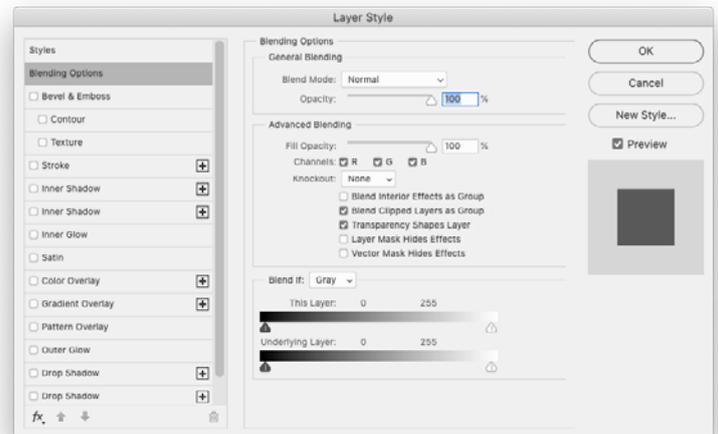


11. Adding styles and effects

Double click the empty space next to the layer name to open the Layer Style dialogue.



This is where we can easily add effects such as borders, glows, gradients or shadows to a layer.



12. Add a border (or “stroke”)

The first style we are going to add will be a bright border (also known as a “stroke”) to the shape.

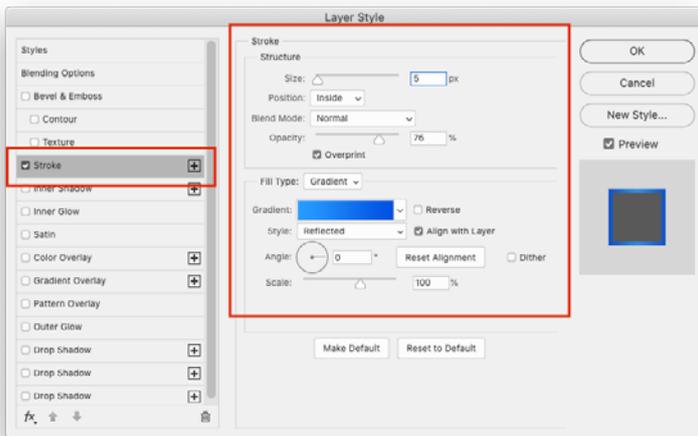
In the left hand list, click on ‘Stroke’.

Note: Make sure you click on the actual word ‘Stroke’ not just the tickbox, in order to get the options to appear on the right.

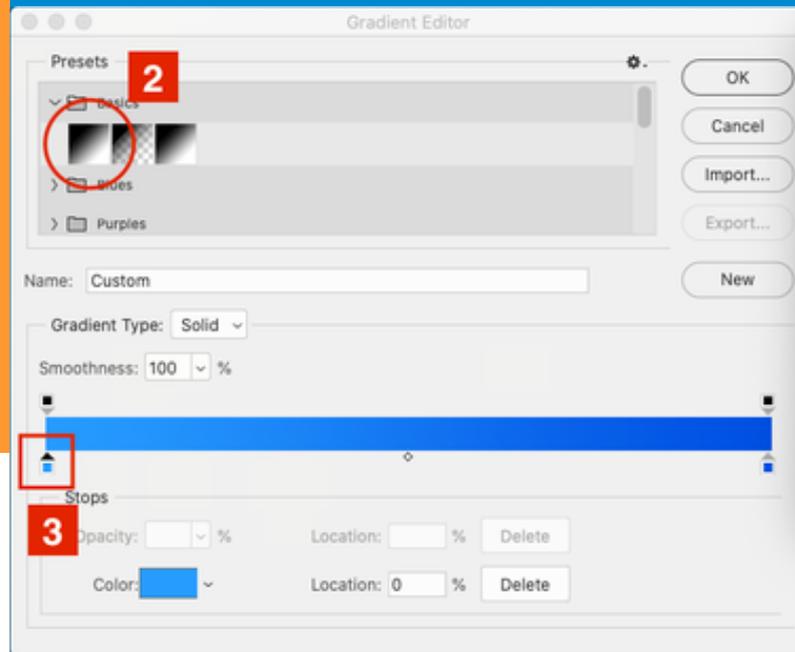


I used the following options:

- Size: **5px**
- Position: **Inside**
- Blend Mode: **Normal**
- Opacity: **76%**
- Change the colour of the Stroke by setting the Fill Type to 'Gradient'.
- Style: **Reflected**
- Tick "**Align with Layer**"
- Angle: **0°**
- Scale: **100%**



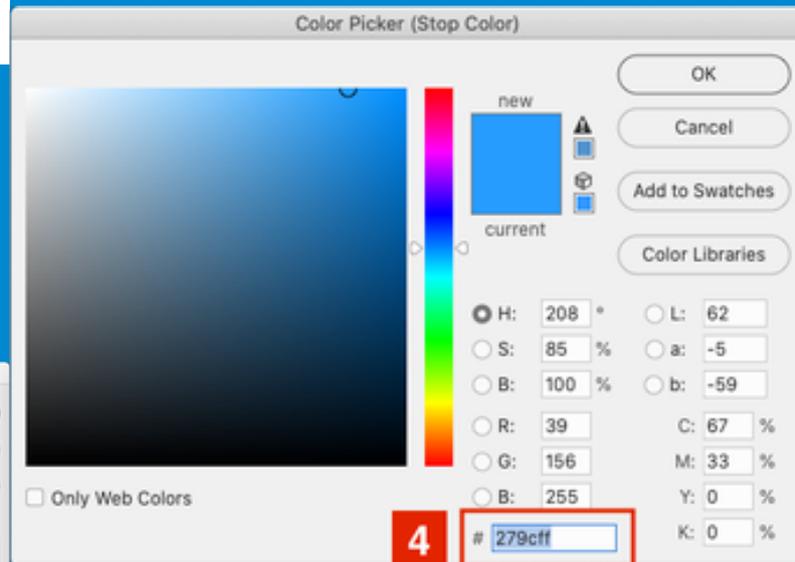
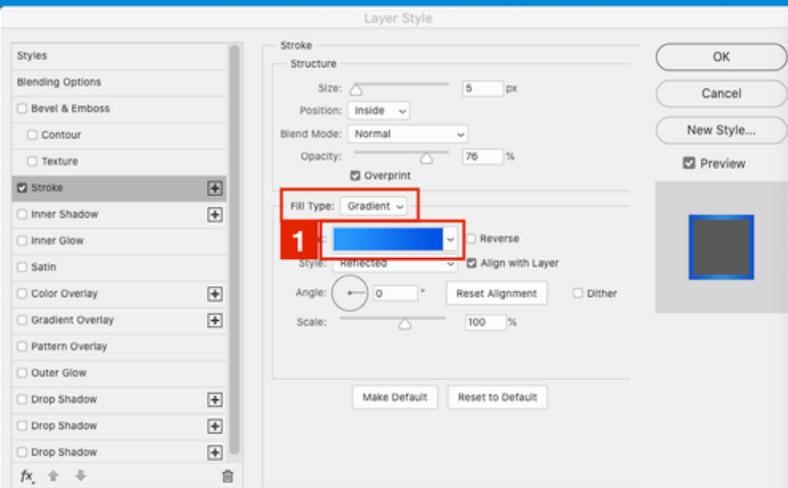
- Pick a basic, two colour gradient from the preset list (as a starting point, if needed)
- Change each colour on the gradient by double clicking the small coloured arrows underneath the bar



- Choose the colour for each end of the gradient
- I used **#279cff** for the light side and **#0050e3** for the darker side.

13. Now we need to customise the colours of the gradient.

- Double click in the coloured box next to "Gradient:" to customise it





This will create a shine effect around the edge of the button. Since the gradient is set to “**Reflected**”, this means that each colour is **mirrored** along the **angle** we specified.

The result is a lighter highlight in the middle of the border, getting darker towards the left and right edges.

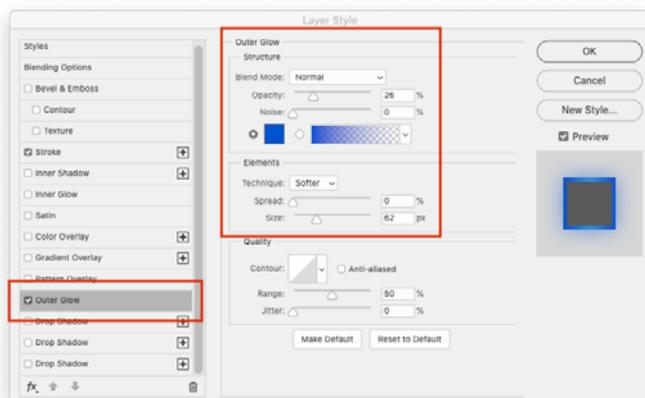
14. Add an outer glow

Add an outer glow in the same way as we did the ‘Stroke’, by clicking the word ‘Outer Glow’ in the left hand list.

For the glow, pick a bright and saturated colour. Play around with **Opacity**, **Spread** and **Size** until you are happy.

I used the following properties:

- Colour: **#0053cf**
- Opacity: **26%**
- Technique: **Softer**
- Spread: **0%**
- Size: **62px**



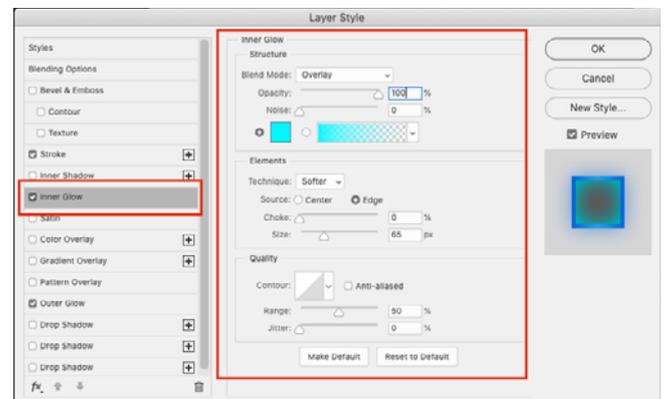
The shape now has a soft blue glow around the outside.

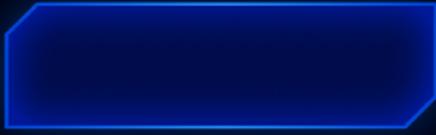
15. Add an inner glow

Using the same process, add an inner glow from the list on the left hand side. Pick a bright colour, such as **#00f6ff**

I used the following:

- Blend Mode: **Overlay**
- Opacity: **100%**
- Color: **#00f6ff**
- Technique: **Softer**
- Source: **Edge**
- Size: **65px**





Choose the 'Pencil' tool (it might be hidden under the Brush Tool in the Toolbar).

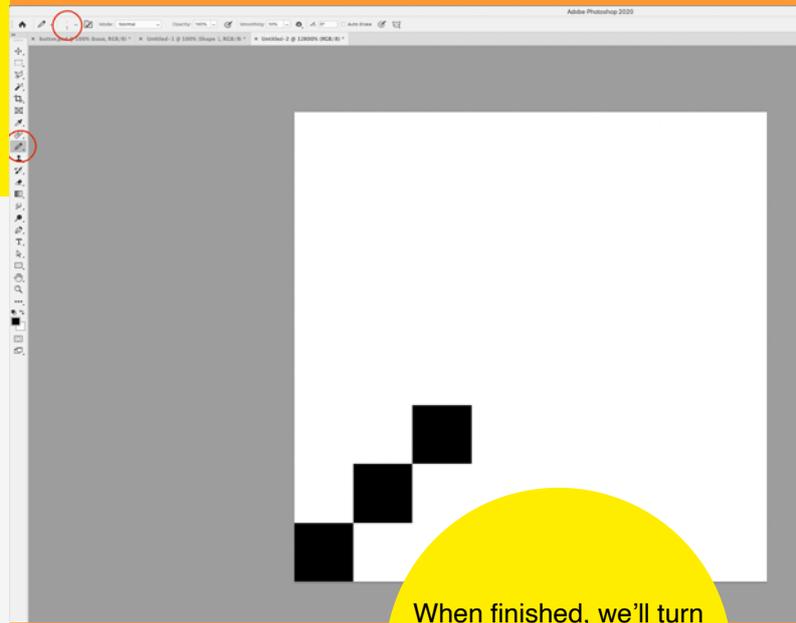


16. Create a "Scanline" pattern

We're going to make a pattern that will tile across the button to create the effect of 'scanlines' - lots of thin, diagonal lines that create a high-tech feeling.

Start off by creating a new canvas for the pattern. It will be really small - only 8px * 8px.

Start drawing 1px blocks across the canvas in a diagonal line, from one corner to the next.



When finished, we'll turn it into a Pattern Switch by going to **Edit > Define Pattern**.

PRESET DETAILS

Untitled-2

Width

8

Pixels

Height

8

Orientation



Artboards

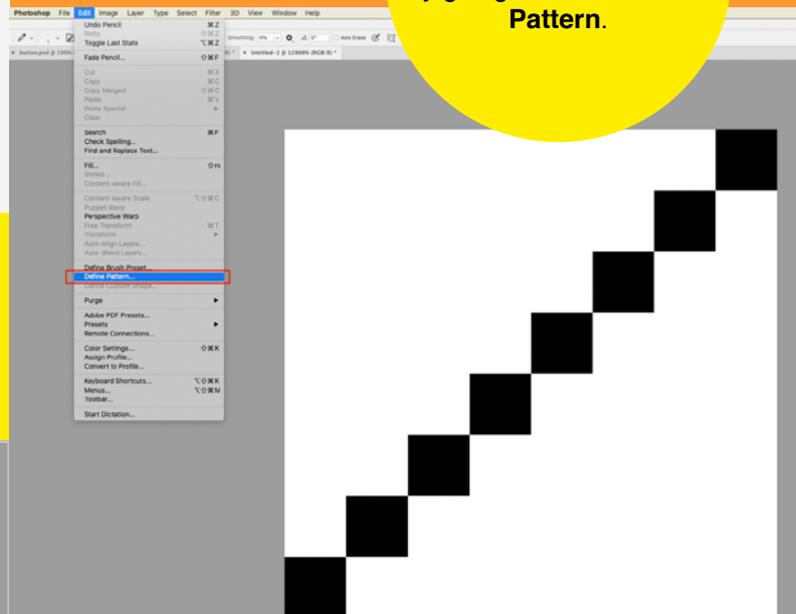


Resolution

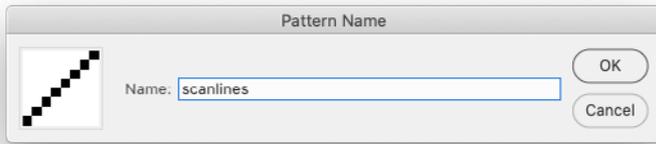
72

Pixels/Inch

The canvas will probably just look like a dot at first. Press **Ctrl + 0 (Windows)** or **Cmd + 0 (Mac)** to zoom all the way in.



Give it a name and press OK.



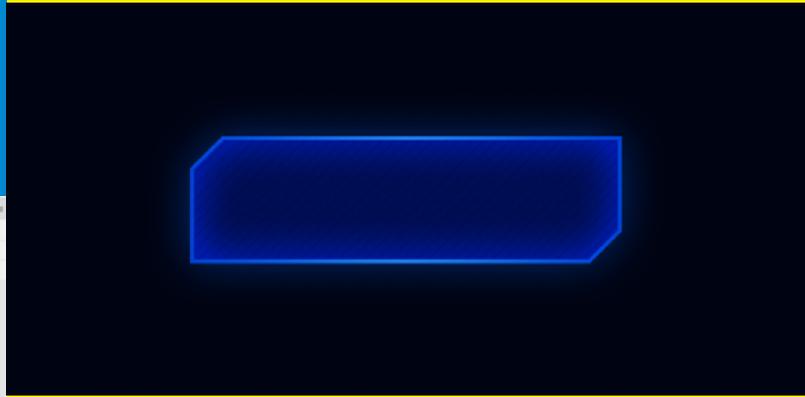
Change the settings until you're happy.

We'll want to keep the pattern quite subtle so it isn't too overpowering. I used:

- Blend Mode: **Overlay**
- Opacity: **10%**
- Angle: **0°**
- Scale: **200%**

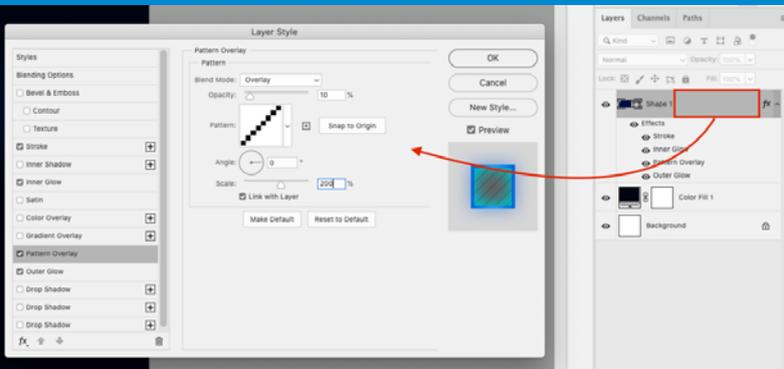
Return to the file containing your Button.

Open up the Layer Style dialogue again by clicking in the empty space next to the layer name.



We now have a faint diagonal pattern going over the whole button.

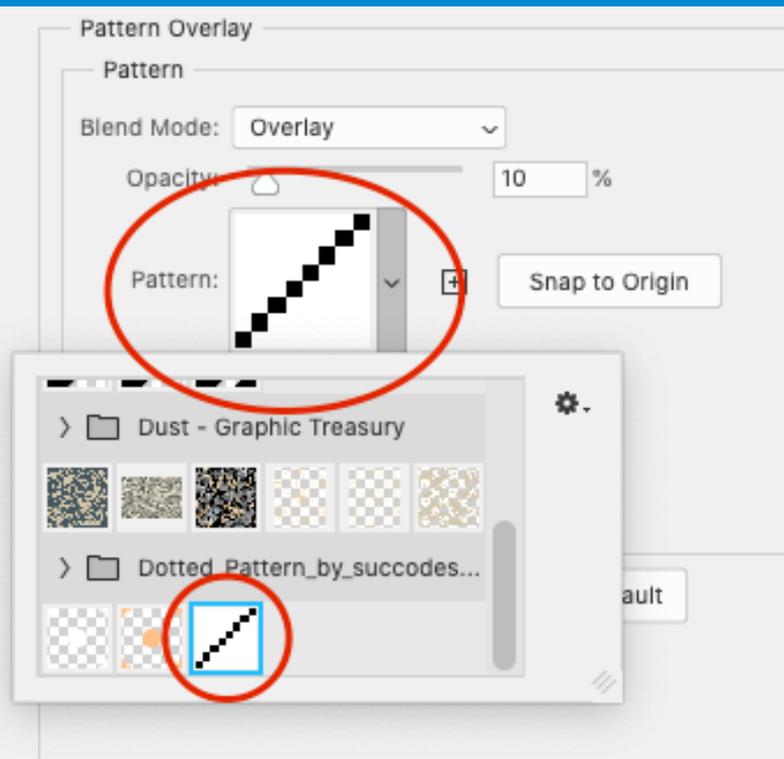
Then, add a Pattern Overlay from the list in the left. Under the "Pattern" section, click the swatch to find your newly created pattern in the list.



17. Add text to the button

- Select the 'Text' tool from the Tool Bar on the left.
- Click and drag somewhere on your canvas to create a text box.
- Type the text for your label, e.g. 'Upgrade'

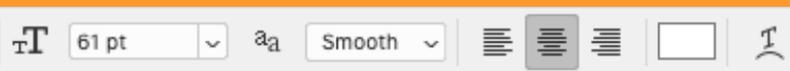
Note: Pick somewhere away from your button, otherwise you might accidentally turn the button shape into the text box.



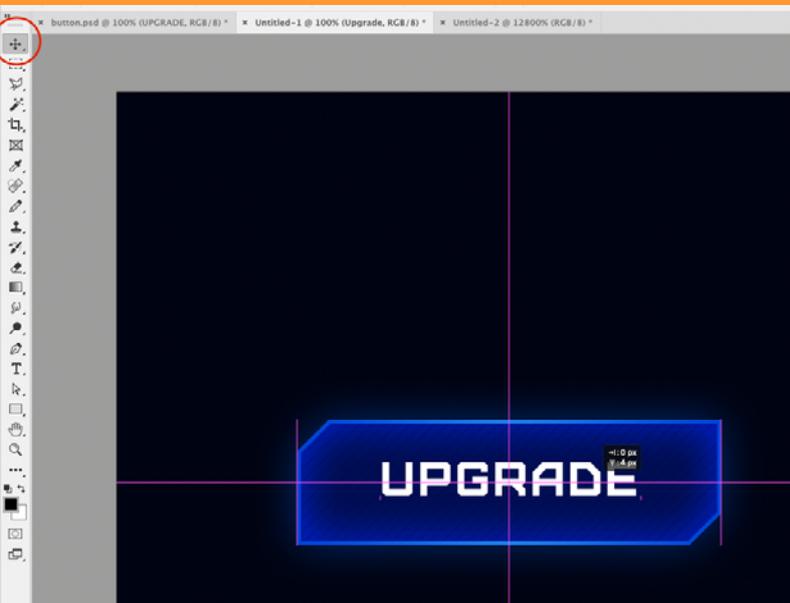
Change the **Font and Size** to something you are happy with. I'm using a Sci-Fi theme font called **Furore** (which I downloaded for free)



The size is **61pt**. Align the text to the centre.



Then use the **Move Tool** to drag the text into the middle of your button.



With the Text Tool selected, use the 'handles' on the edges of the Text box to resize it. Make the width the same as your button, so you know it's in the middle.



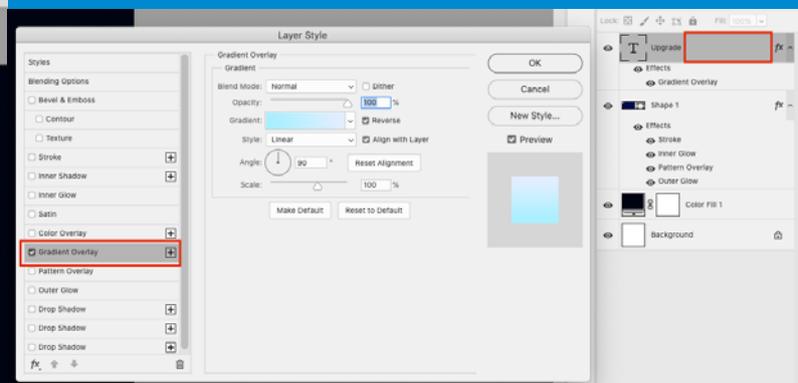
18. Adding styles to the text

We are going to use **Layer Styles** again, but this time we'll **add them to the Text Layer**, not the Shape Layer.

Click the empty space next to your text layer in the Layer Panel. Add a Gradient Overlay

I used:

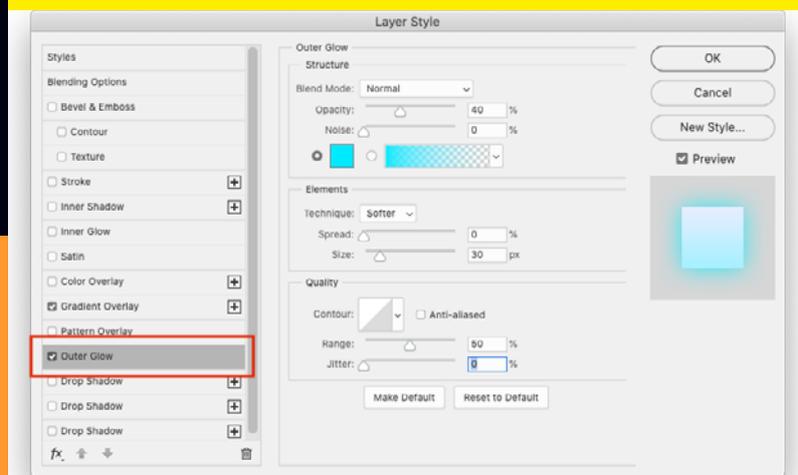
- Blend Mode: **Normal**
- Opacity: **100%**
- Gradient: **#a8f0ff to #e4eeff**
- Angle: **90°**
- Scale: **100%**



19. Now add an outer glow

I used the following properties:

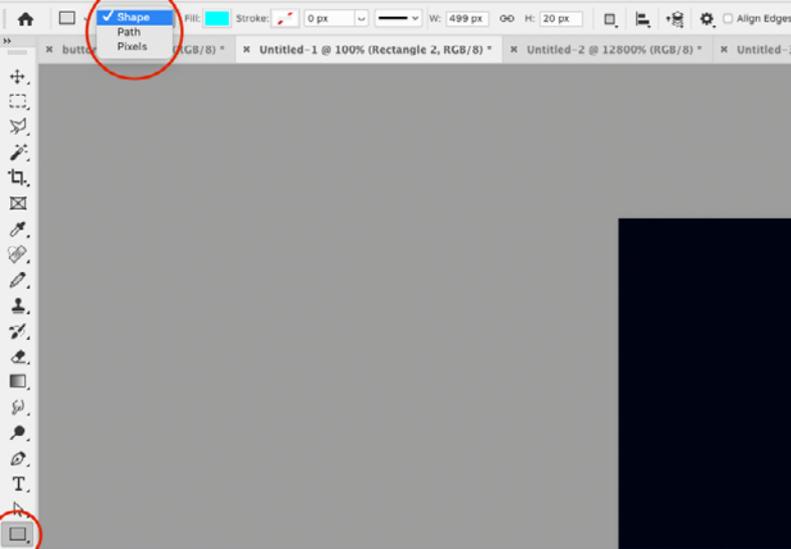
- Blend Mode: **Normal**
- Opacity: **40%**
- Color: **#00eaff**
- Technique: **Softer**
- Spread: **0%**
- Size: **30px**



20. Adding extra details

We can now add some extra personality with details such as small dots or lines around the border.

Make sure the Rectangle tool is set to “Shape” in the top left, this will make sure we can easily edit it as we go forwards.



- Select the shape in the layer palette and press Cmd + T or Ctrl + T to use “Free Transform” and use the handles to change the size

Tip: When holding Shift, resizing will constrain the proportions of the shape. For example, dragging to resize a square will keep it a square, and not squash it.

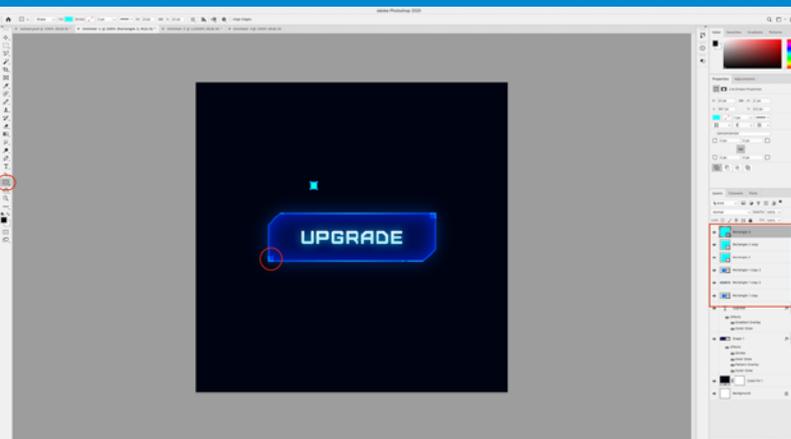
When holding Alt, it will resize from a central point.

Note: Some versions of Photoshop might have these toggled the other way around, you can change it in preferences!

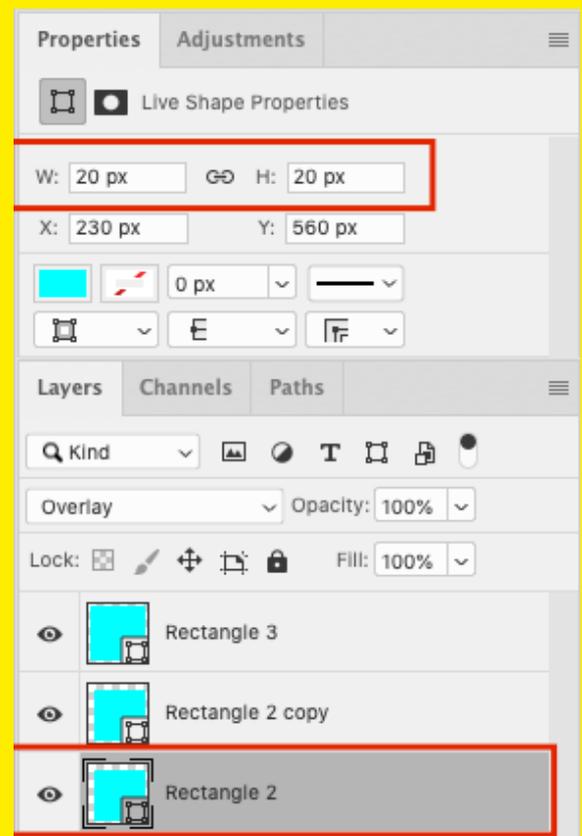


Use the rectangle tool to create some squares or lines and then position them with the Move Tool.

You might want to zoom in using the Zoom Tool to get a closer look.



Using the properties panel to resize a layer manually.



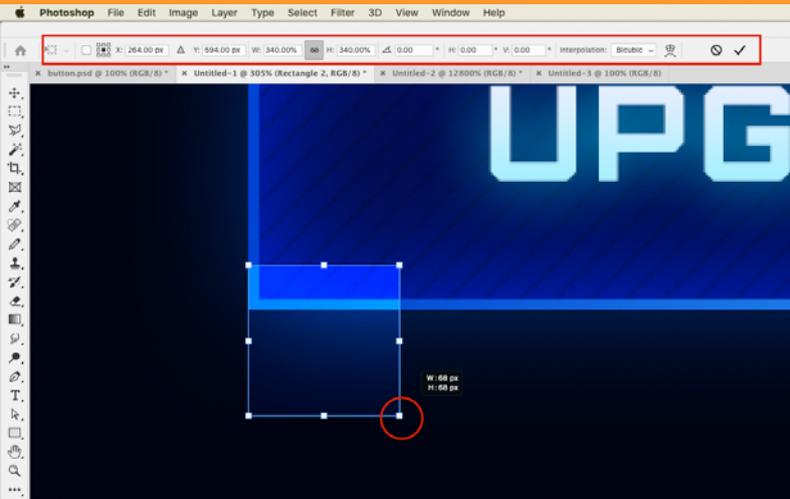
21. Changing the size of shapes

Once you've created a shape, there's a few ways to adjust the size of it:

- Use the **Direct Selection** tool to select the 'points' around the shape and click and drag them around, or nudge them with the arrow keys.
- Open the '**Properties**' Panel and select the shape in your Layer palette. Adjust the width and height values manually.



Using 'Free Transform' to resize by grabbing and dragging, or inserting values along the top bar. You can also rotate a shape here by hovering near the corner handles.



22. Changing the colour, opacity and blend mode of shapes

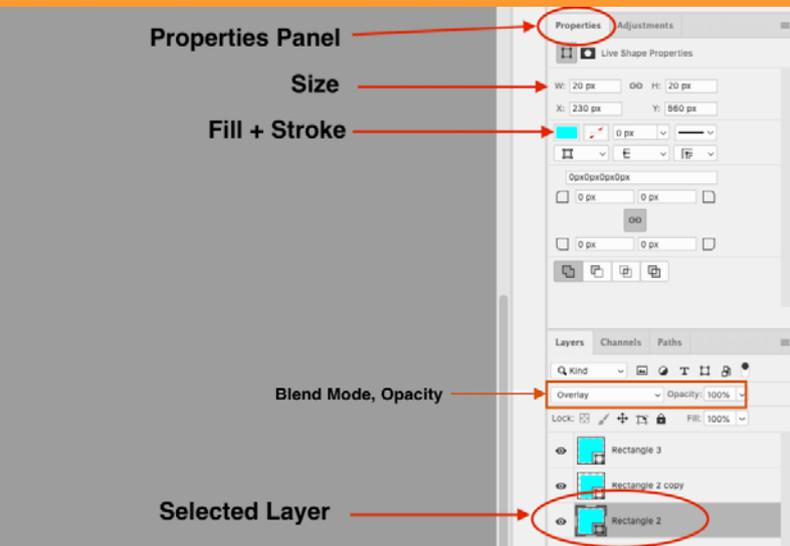
Feel free to change more aspects of your shapes.

You can change things like the **Size**, **Fill Colour** or **Stroke Colour** of a Shape in the **Properties panel**.

You can also change the **Blend Mode** and **Opacity** of an individual layer in the **Layer Panel**.

Conclusion

Well done for taking part in this workshop. We hope you are happy with your button design. Perhaps you can use this or the skills you have learnt for a school or college project? The skills you have learnt from this project are not just about making something that looks impressive. It is as important to consider how and where this type of design will be used. The skills you have learnt today cross over with a number of creative fields including; games design, visual effects, software engineering, and graphic design.



Further resources:

[Screenskills](#)

[Game Maker's Toolkit](#)

[Sprung Studios](#)

Useful links

[Creative Careers](#)

[UCAS](#)



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Finished! Feel free to keep playing around with the tools you have learned, to see what else you can do with the design.

Perhaps make a new one with a different shape or colour scheme?

Or try exploring the other options in the Layer Styles palette?



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