

I was pondering making coin objects with Gimp using the **Cylinder** setting of **Map Object**. First I made a couple of perspective view still coins:





Using **GAP** combined with both **Move Path** and **Apply Filter On Layer(s)** under the **Frames Modify** function, I was able to make this:

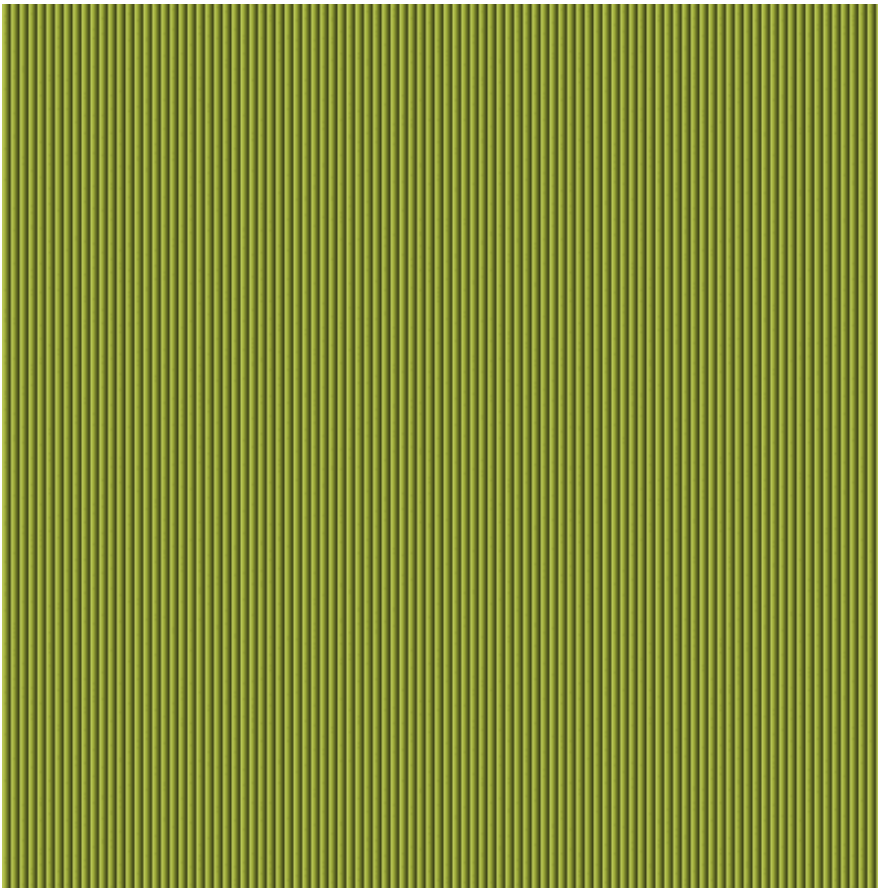


How This Was Accomplished

I began with a 400x400 square image. Getting a proper round rod shaped cylinder in Map Object requires beginning with a square image (I think ).

I wanted my coin to have a ridge on the side rather than be smooth. So I made this background for developing

the side of the cylinder (coin):



I made it by placing a **vertical guide** at both 0 and 4 (I also had a **horizontal guide** at position 200). Then using **d5e328 as my foreground color** and **a0ab1e as my background color**, I used the **Blend Tool** set for a **Linear Shape** and a **Sawtooth Wave Repeat**. I then positioned my cursor at point 0,200 (intersection of the vertical guide at 0 and horizontal guide at 200) and holding down my left mouse button dragged the cursor to point 4,200. Releasing my mouse button, it created a striped background. However, that background was more blended. In order to make it a sharper more defined color separation, I adjusted the **Brightness and Contrast** of the background and then used a **Colorize** final step. There are other ways to do this.

I found a public domain image of Wilber over at [Wikipedia](http://en.wikipedia.org/wiki/Wilber). It was shaded. Since I am making an animated GIF, which allows only 256 colors, I simplified it down to a few basic colors:

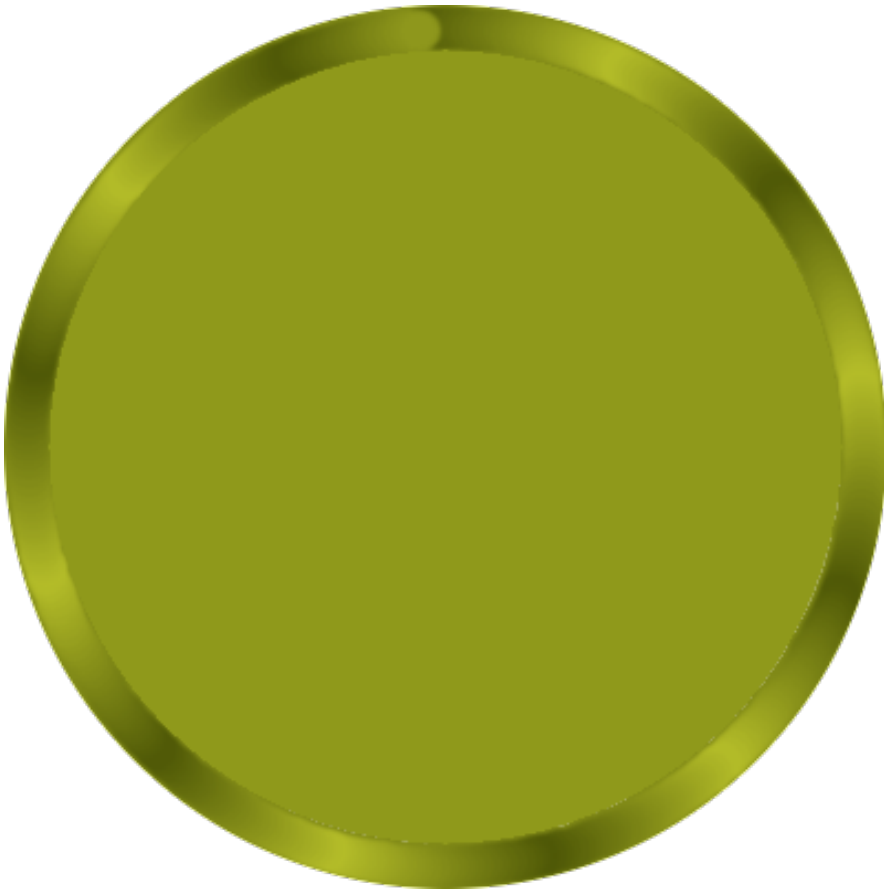


I then used the **Fuzzy Select Tool** along with the **Free Select Tool** to select various parts of Wilber to make this:



I also used FX-Foundry's **Bevel and Emboss** script to make **Inner Bevels** for the various parts to give them a sort of 3 dimensional appearance.

I then developed my coin base:



I filled a 400x400 circular selection with color 8f991b. I then shrank the selection by 10 pixels and using a 21x21 hard round brush, I created a new layer, reset my foreground and background colors to the default black and white and set my **Pen Tool** up to **Use Color From Gradient**, and set the **Length to 100** and the **Repeat to Triangular Wave**. I then **Stroked the Selection**. When the **Stroke Dialog** window opened, I selected to use the **Pen Tool** for creating the stroke.

I then set that "stroked" layer to **Overlay Mode** and merged it down on the 400x400 circular selection layer.

I added "golden Wilber" on top of that to make the front of my coin:



For the back side of the coin, I made another 400x400 circular selection, then **Shrunk it by 20 pixels** and **saved that as a Path**. I then made the text "GIMP" and "CHAT". I widened the space between each letter by adjusting the **letter spacing value** in the **Text Tool Options Dialog**. I applied GIMP to the circular Path as it was. I then copied the Path and then using the **Flip Tool**, I flipped it vertically and applied the CHAT text to the flipped circular Path. I had to rotate each of the resulting word Paths by 45 degrees to get them into the desired position.

After filling each path, I again used the **FX-Foundry Bevel and Emboss script** set to **Inner Bevel** to give them a 3-d appearance. I had to adjust their final positions using the **Move Tool**. Finally, I flipped the backside of the coin using the **Flip Tool** first **Vertically**, and then **Horizontally**:



Putting It Together With GAP

With GAP, I created a separate 400x400 background. Created **60 frames** from it (59 duplicates). I then used **Move Path** to add the ridged background image above into frames 1 through 60.

I then used **Frames Modify** set to **Apply Filter on Layer(s)** for **Layerstack 0** for **frames 1 through 30**. I selected **Map Object** using **Apply Varying** and set the **Orientation Tab** to **X-Rotation** value of 90.00 (this value remains the same for all frames), and **Z-Rotation** value of 0.00.

For all frames, I used **No Light** under the **Lighting Tab**. Under the **Options Tab**, I had **Transparent Background** selected. **Map To** set to **Cylinder**. Under the **Cylinder Tab**, the **Top** and **Bottom** were selected from the images I posted above. The **Radius** of the Cylinder was left at 0.25. The **Length** of the Cylinder was set to a thin 0.03 to make it look like a coin.

After clicking OK (and Continue in the little box that opens), Map Object reopens and asks for the final value at frame 30. I wanted the coin to go 180 degrees over the first 30 frames (to spin from front to back). That makes six degrees per frame. However, since the first frame is at position 0 rather than 6, frame 30 will be a value of 174.0 degrees.

After processing those first 30 frames, I then again selected **Frames Modify** with a selection of **Apply Filter on Layer(s)**, still using **Layerstack 0**, but this time **Frames 31 through 60**. Again, **Map Object** is selected using **Apply Varying**. The only settings needing changed are the **Z-Rotation** values. The first setting will be -180.0 degrees (that is minus 180). After clicking OK, when the second rendition of Map Object opens, I set the final Z-Rotation value to -6.0 degrees.

After everything processed, using **Frames to Image**, I made a multi-framed image setting each frames timing to 100ms. I added a plain black background to each frame using [saugoode's combine background animation script](#). I then used the Optimize for GIF function under the Filters | Animation section to make an optimized file. Finally, I saved it as an animated GIF file.

Can This Be Done Without GAP?

It could be done manually, but that would take a long time adjusting each layer manually.

If you have GAP installed, one of the options it installs is the **Filter All Layers** option under the Filters heading in a Gimp Image Window. You could make **two 30 layer images** with **all layers being copies of the base 400x400 background image** I have posted above. In another image, you would have as layers the Front and Back side of the coin.

To the **first 30 layer image**, you would run **Filter All Layers** then select **Map Object** and **Apply Varying**. Set **Options** to Transparent Background, Map To set to Cylinder, **Light Tab** set to No Light, **Cylinder Tab**, select the appropriate Front and Back images, leave the **Radius** at 0.25 and the **Length** is set to 0.03. In the **Orientation Tab**, set the X-Rotation value to 90.0. Set the first Z-Rotation value to 0.0 degrees. Click **OK**. Click the **Continue** Button on the little dialog window that opens.

When Map Object opens again, change the **Z-Rotation** value to 174.0 degrees. Click OK. You may have to click a second Continue button. After the process finishes, save the file as **rotation1.xcf**. Close out the file.

Go to the second 30 layer file and again run **Filter All Layers**, select **Map Object** and **Apply Varying**. The only thing you will need to change is the **Z-Rotation** value. Set it to -180.0 degrees (that is minus 180.0). Click **OK**. Then click on **Continue** when the little Continue Dialog window opens.

After some processing again, Map Object will again open. This time set the **Z-Rotation** value to -6.0 degrees. Click OK. Once it finishes processing, save the file as **rotation2.xcf**. Close out this file.

Now, open **rotation1.xcf**. Then select:

File | Open As Layers

Select **rotation2.xcf**

Now, you will have a 60 layer image file.

You can use [saugoode's combine background animation script](#) to add a background behind the coin in each frame.

You can also use [saugoode's animation settings script](#) to set the delay value for each layer rather than doing it manually.

Save the final result as an animated GIF file.

Thank you for checking this out.



Additional Notes:

I'll add a little more detail.

First, you always have open your parts.xcf image. That is the one with the parts you will be using to make the coin, the Wilber layer, the "Gimp Chat" layer (flipped vertically and horizontally as I mentioned before), and the ridged side wall layer.

Open a 400x400 (if that is the size you are using) square image with a Transparent Background. Name that background_000001.xcf.

Use Duplicate Frames to make 59 more duplicates, giving a total of 60 frames.

Use Move Path to add in the 400x400 ridged side wall layer. Make sure when adding the ridged side wall layer you are using a Step Mode of None.

After doing that, do a Frames Modify. In the Dialog window that opens, set From Frames to 1 and To Frames to 30.

Click on the Function button, select Apply Filter on Layer(s)

In the dialog that opens, select Map Object and click the Apply Varying Button.

In the Options Tab, set Transparent Background, Map To Cylinder.

In The Light Tab, select No Light.

In The Cylinder Tab, leave the Radius at it's default value. Change the Length to 0.03.

For the Top Cap select your Wilber Layer. For the Bottom Cap, select the "Gimp Chat" Layer.

In The Orientation Tab set the X Rotation Value to 90.0 degrees. Leave the Z Rotation Value at 0.0 degrees. Click OK.

Map Object processes the first frame.

A little Continue Dialog comes up, just click on Continue.

Map Object will reopen for you. The only adjustment you need to make the rest of the time is the Z Rotation value. No other values need to be adjusted. Now make the Z Rotation value 174.0 degrees. Click OK.

Map Object will process frame 30.

If a Continue dialog opens again, click Continue.

Then Map Object will creates tweens for frames 2 through 29 (it already did frames 1 and 30).

Once that is finished, again do a Frames Modify.

This time, set your From Frames value to 31, and To Frames value to 60 in the Frames Modify Dialog window.

Click on the little Function button and select Apply Filter on Layer(s)

Select Map Object in the dialog that opens, and click the Apply Varying Button.

Map Object opens. Change the Z Rotation value to -180.0 degrees. Note the minus sign here. Click OK.

Map Object creates frame 31.

If a Continue Dialog opens, click Continue.

Map Object opens again. This time change the Z Rotation value to -6.0 degrees. Click OK.

Map Object creates frame 60.

If a Continue Dialog opens, click Continue.

Map Object creates for frames 32 through 59 (31 and 60 were done at each of the previous two settings of -180.0 degrees and -6.0 degrees.)

If all went well, you can now run Frames To Image at this point.

I think you will be able to proceed from there.

Hope these added details help some.