



# FEBRUARY 2008 NEWSLETTER

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# Voice of the PPL



## Editorial

Welcome to the February edition of the PPL newsletter.

Well what do you know! - It's a leap year! - We all get an extra days coding in February! YEY.

**I have actually found some time to do the newsletter - Amazing.**

Since January, I have been very busy with home and work - As my contract in my current role was coming to an end I was on the look out for a new role. I found one which started out OK. After the first week the company (a local government body) decided that in the coming months the role would be changing and the location would be moved out of town. This would mean that eventually the salary would also be brought in line with the other workers in the new location.- New role had to go! No one likes salary cuts! - Due to this, and a reduced amount of computing resources in the new role, the newsletter got put back and back - Sorry Alain! - won't happen again! - I should be back at the old place within a week or two - more resources and time for PPL! :)

But its here now and hopefully the quality has not slipped because of the above! :)

This issue, for your edification I present my Star wars™ credits scroller in full, with documented source code in the newsletter archive. Unzip it, run it and change it to your hearts content - as ever with my submissions you are free to do anything you want with it. All I ask is that you don't pass it off as your own. (As if you would eh?)

Again, the only contact about the newsletter I have had is from Alain asking where it is....

Come on guys, where are your good ideas, code snippets and submissions??? WE are missing them.

Lets try and keep up the spirit of PPL :)

Until next month...

**Thank you**

**The Arianesoft Team**



### Whats' new in the land of PPL

Registered User count: 876 - Another 30 registered members since January. This is great. The more the merrier.

Browsing the forums briefly, I see that nothing has happened in the 'Made with PPL' thread since the middle of January.

Whats happened? - You all hibernating or something. Has no one got anything to show or share that they made over the Christmas period?

I had hoped we would find some star coders popping up in the new year, but alas no.

Maybe Alain, we need to give better recognition to those users who submit work in progress or code snippets? How I don't exactly know yet!

So really nothing much has happened this month! That is quite sad.

Oh well, fingers crossed that Feb (with its extra day) will bring out the best in our members!

See Ya' all next month.

Mike.



[For the PPL - Tutorial -](#) Surfaces - By ME!

Surfaces .. One of the many interesting features of PPL.

Interesting because they can be manipulated in some unusual ways. So what are surfaces? Well surfaces are areas of memory that are used to store, display and change sprites or bitmaps.

Think of them as a ream of paper - Each piece of paper is a layer. Draw on the top sheet and the pages beneath it remain untouched. As with each piece of paper in the ream, surfaces can hold different images or data.

Surfaces can be transparent or solid, any size from 1 x 1 pixels to 10 times the screen area - all that limits you is the physical memory on the device or the PC.

So ... Here is a quick guide to how they work, and what you can do with them.

## SURFACES

If you have looked at my Star wars™ credits scroller that I uploaded to the forum way before Christmas, you will see the sort of effects that you can create when you use surfaces. Because surfaces are so flexible, I was able to generate the scroll text in real time from a text file.

This is what I did... (Step by step as documented in the source code)

1. Create an array and load each line of the text file into each elemental row of the array.
2. Work out the colours of the distance scan lines so that the scroller will appear to get fainter as it gets closer to the centre of the screen.
3. Load the Background in to what will become the backmost (layer 1) surface.
4. Create an empty surface that is the same width as the screen but 14 times the size of the text array + 2 times the size of the device screen. This should give enough room to create blank areas front and back of the scroller.
5. Set the render target to the new surface - Because this is a surface it is rendered off screen so you cant see what is going on at this stage.

This next screen shows the output of the temporary surface.



(Note: The image has been scaled for this page. The original temp surface measures 240 x 1494 pixels in size and takes up 700KB of memory)

You can see from this output how easy it is to create bitmaps and graphics on the fly - Refer to the scroller source code (included in the newsletter archive) for my example.

If you look in the code I included a marker for the logo (X-Wing) - by placing syntax commands in the scroll text file you should be able to add anything to your surface in real time as its generated. With some clever coding you should be able to create all your sprites or graphics on the fly.

6. Set the render target back to the previous value (in this case it was the screen buffer)

7. Transfer the background image to temp surface number 3.

8. Draw 1/2 a screen size of the generated text (On the left) to the bottom half of temp surface 2. This ensures that the unmodified top of the screen gets copied at the same time as each of the modified scan lines from temp surface 2.

9. Set the transparency of temp surface 2 to black.

Now here is the clever bit - The 1/2 screen size of the generated text is a window area that we will scroll down the text surface and then display on the screen.

10. For each scan line in the window we now have to process the perspective so that the scroll text disappears into the distance. We do this by assuming that the middle of the vertical screen is the vanishing point, and the bottom of the screen is the full width of the screen.

We calculate the size of the current scan line as follows;

trapezoidStart\$ = Round((xMax\$ - (xMax\$ \* nScale\$)) / 2)

trapezoidEnd\$ = Round(xMax\$ \* nScale\$)

11. Using Draw surface EX allows us to specify tint colour (for the fading distance) when copying each scan line from temp surface 2 to temp surface 3.



12. Copy temp surface 3 to the screen buffer in its entirety.

13. Check that the window on the temp surface has not reached the end. If it has, start again.

The results are impressive, but can be improved.



As you can see the scroll text is stretched as it approaches the horizon.

I want some clever person to see if they can change the code and make it so that the size of the text remains constant through out the scroller so that it reflects the actual size of the text on the generated surface.

I am hoping that someone will take this up and submit the corrected code for us all to share.

If you decide to have a go, why not replace my background and text with some of your own and then add it to one of your projects and submit a screen shot of the scroller in situ.

Well that's it, I hope you liked the tutorial and found it useful. - The source code is un optimised and can be made faster (Maybe you could use last months optimisation tutorial as a starting point?)

You will probably find it as useful to check out the source code in the included archive as it is documented thoroughly.

**Next month.....**

Hopefully there will be the requested multi-forms tutorial that Alain requested. If not, I am sure I can find something to keep you going through March.

Regards

Mike.



### Applications Review - Serene Screen

This month I wanted to give you a review of my experiences with Andrew Beery's Serene Screen Smartphone app, but I regret that I am unable.

Through lack of time and resources I cannot bring you a review that does justice to this great application.

There are no reviews of this that I can find (I have googled until my fingers hurt) so I can't even point you guys in that direction.

The only link I can find is the one that Andrew himself posted on the forum at Release Candidate post, so I will include it here again to save you having to find it.

<http://video.yahoo.com/video/play?vid=1408864&fr=>

If somebody out there on the beta/RC list wants to do a review, then I will include it in a future newsletter, or course with full credit to the author.

I am really gutted not to be able to bring this to you, and apologise if you were waiting for it.

Sometimes things happen that are outside of your control.

Thanks

Mike.



## Developments

Erm.... Due to lack of submissions, there is nothing to report on this page this month.

You will have to refer back to last months issue for what should still be in development.

Hopefully next month I will have some great things to show you.

So.. To fill in the white space..

This is a most worrying Issue - I would love to know if anyone else has suffered from this!

I bought a new memory card for my HTC Prophet recently. Nothing special just a 2GB PNY (not even HC, just bog standard; Not the most expensive but still a named brand).

I formatted it as normal, copied the contents of my 1GB card to it and inserted it into my Prophet. All seemed well until about 1 week later when my wife complained that I had not returned an SMS she sent me.

Ah .. - for some reason I am unable to open the text messaging application.

What the heck is going on here then???

I soft reset the device and tried again .. Same problem.

I removed the SD card and voila text messaging works (But no messages).

I re-inserted the SD card and again, no text messaging application.

AAARRRGGGHHH!

Even with the SDHC patch installed into WM6 (Found it by googling) the SD card still caused the Prophet to stop the SMS app from working.

I have since tried the 2GD card in an IPAQ H220 PDA and it works without issue. Now correct me if I'm wrong, but the IPAQ is older than the Prophet by a good 2 years if not more, so why does it read a 2GD card when a newer device won't????

It's a good job I did not have anything important on the memory card (IE PPL and source code) otherwise it could have been lost.

I suppose the moral of this tale is to be content with 1GB for PPL and not be greedy. :(

Just be careful if you upgrade your device storage card .. Take a reliable backup of your data before trusting a higher capacity format, even if the device 'supports it'.

[Mike]





### See Ya' Next Month

There will be a change to the format of the newsletter next month. I have been scouring various sources to see how others produce newsletters and flyers and have some better ideas to give this newsletter a 'WOW' factor.

It will be sleeker, better designed and generally a more pleasurable read.

If I can find more tutorials then I will include more than one every month, but if not, then one is better than none.

Thanks again for sticking with us and PPL and take care until next month!

The ArianeSoft Team.