



2D/3D Graphics in Java

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Agenda

- There is no agenda (mostly)
- JDK 6
 - > SplashScreen
 - > New multi-color gradient paints
 - > OpenGL pipeline improvements
 - > Java2D/JOGL interoperability
- Contributing to the JDK
- Q&A

SplashScreen API

- One simple class: SplashScreen
- One simple command line option: `-splash:<file>`
- (Or, in JAR manifest: `SplashScreen-Image: <file>`)
- Image formats supported: PNG, GIF, JPEG

SplashScreen API

- Closes automatically after first Frame shown
- Or, you can update/close SplashScreen manually
- For example:

```
public static void main(String... args) {  
    SplashScreen splash =  
        SplashScreen.getSplashScreen();  
    Graphics2D g2d = splash.createGraphics();  
    g2d.fill(...);  
    splash.update();  
    // complete application startup, etc.  
    splash.close();  
}
```

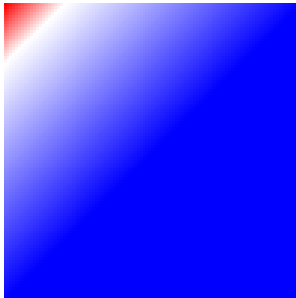
Linear/RadialGradientPaint

- First new “core” paint impl's since JDK 1.2
- Original GradientPaint only allows for two colors
- New LinearGradientPaint and RadialGradientPaint are similar, but allow for any number of colors/stops

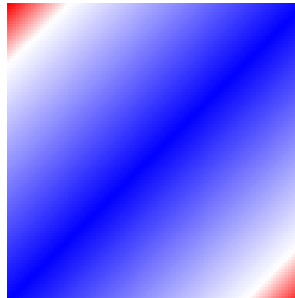
Linear/RadialGradientPaint

- LinearGradientPaint

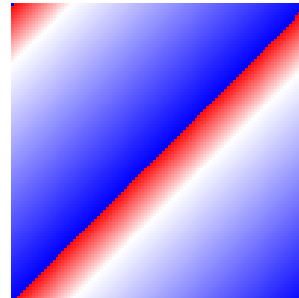
NO_CYCLE:



REFLECT:

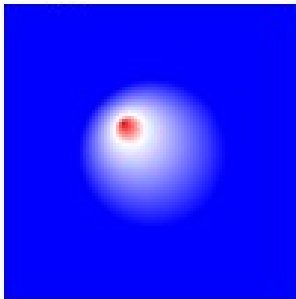


REPEAT:

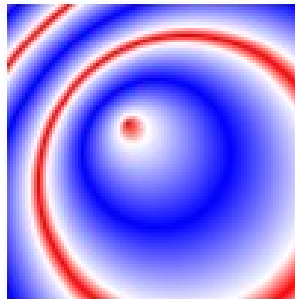


- RadialGradientPaint

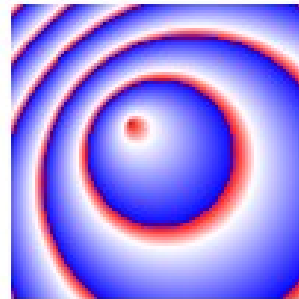
NO_CYCLE:



REFLECT:



REPEAT:



OpenGL Pipeline Improvements

- Eh, just go read my blog
- In a nutshell:
 - > Faster
 - > Stable(r)
 - > (Experimental) Java2D/JOGL mixing in Swing apps

Get Involved with JDK 7!

- Contribute a fix and ... gain worldwide fame and 5746 guaranteed MySpace “adds” in a single day ... spruce up your college application ... get accepted to your first-choice school ... make hundreds, no thousands of new friends at said school ... put it at the top of your resume ... get a fancy internship ... bowl over your mentors with your incomparable wit/charm/skills ... woo your future husband/wife/partner ... have better looking kids ... afford your dream house (you know, the one with the indoor pool) ... live to see your 164th birthday
- <http://jdk7.dev.java.net> for more details



Demos, Demos, Demos

NASA WorldWind



Aerith

<http://aerith.dev.java.net>



The screenshot shows the Aerith web application interface. At the top, there are tabs for "Lobby" and "Trip Report", and a user profile icon labeled "Aerith". Below the tabs is a horizontal strip of ten small image thumbnails. The main area is a map with a red route. A "Edit Waypoint" dialog box is open over the map, displaying the following information:

- Location:** 37,39512, -122,10188
- Name:** Mountain View
- Title:** Mon Waypoint Favori
- Summary:** Chaque waypoint peut avoir des photos associees pour publication sur le Web sous forme de slideshow 3D via une applet.

At the bottom of the dialog box, there is a row of five small image thumbnails, each with a close button (X) in the top right corner. Below the map, there are three buttons: "Save", "Preview", and "Publish".

Aerith

<http://aerith.dev.java.net>



Shameless Self Promotion

- Blog
 - > <http://weblogs.java.net/blog/campbell>
- New album, *Literary Gentlemen*, out October 17th
 - > <http://labonnesoupe.org>

Other Blogs/Sites Worth Reading

- JavaDesktop front page
 - > <http://javadesktop.org>
- Chet Haase (animation, graphics, “humor”)
 - > <http://weblogs.java.net/blog/chet>
- Romain Guy (UI design, graphics, photos)
 - > <http://jroller.com/page/gfx>
- Richard Bair (SwingLabs, rich client goodness)
 - > <http://weblogs.java.net/blog/rbair>
- Tim Bray (just plain good stuff)
 - > <http://tbray.org/ongoing>



Thanks!

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