

2014-09-12 Meeting notes

Date

Sep 12, 2014

Attendees

[John Clyne](#), Alan

Notes

DataMgr and renderer

Discussed Alan's DataStatus API document [DataStatusAPI.pdf](#) and made decisions about which methods would be most appropriate for the DataMgr, and which should remain in the DataStatus class (or elsewhere)

Agreed to change Renderer API to pass DataMgr and RendererParams as arguments to `Renderer::PaintGL()`. This would do away with treating these as global variables and would alleviate need for special handling of Undo/Redo: Undo and Redo would be possible by simply passing in the new Params object as a parameter.

Discussed the need for additional Param classes Set and Get methods that would allow for dirty bit flags. These will be implemented and may be used by the Flow renderer

Agreed to add return status codes to the Renderer's PaintGL and InitializeGL methods. Derived classes would be responsible for returning an error status and logging an error message to MyBase. We will also look at adding the protected, pure virtual methods `_paintGL()` and `_initializeGL()` to the renderer. Derived classes would implement these and the Renderer paint and initialize methods could be implemented:

```
int Renderer::paintGL() {  
  
    int rc = _paintGL()  
  
    if (rc<0) return(rc)  
  
    return(Renderer::GetOpenGLStatus())  
  
}
```

John will add a `GetOpenGLStatus()` method to the renderer to check for OpenGL errors()

GUI

We've not previously had any discussion on architectural or layout changes desired for the GUI. Scott's proposed new tab layout looks promising, but needs to be explored further. The internal architecture also needs to be explored and desired improvements identified.

Action Items

Item	Lead
Add missing DataMgr methods identified in DataStatus document	John
Revise DataStatus class in response to above DataMgr changes	Alan
Refactor Renderer to accept DataMgr and Params as arguments, add return status to init and paint methods	Alan
Assess state of GUI internals and propose needed changes	Alan
Evaluate possibility of migrating to Qt 5	Alan
Implement OpenGL status method on renderer	John