

A Flexible Tool for Shape Analysis

IDP Presentation

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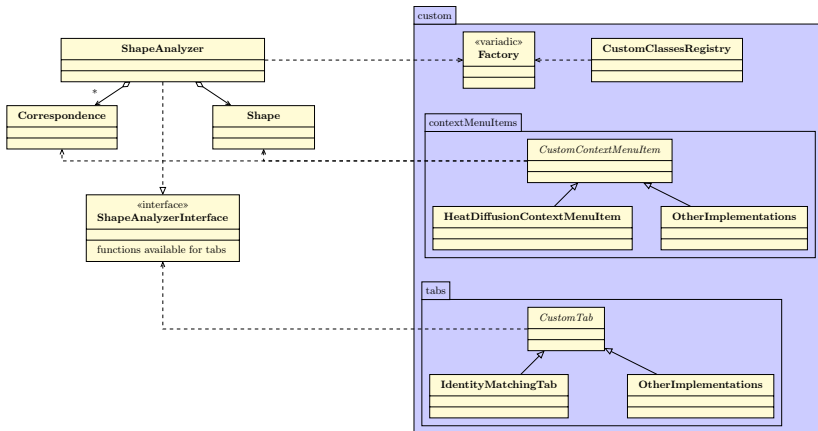
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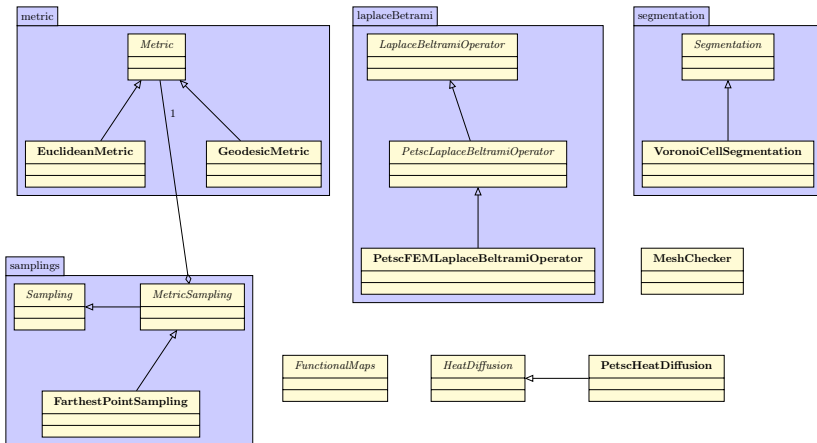
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2 Class Overview

3 Customs

4 Demo Time: Functional Maps





CustomContextMenuItem

or

CustomTab?

Example:

VoronoiCellsContextMenuItem



```
template<class T = Metric>
class VoronoiCellsContextMenuItem : public CustomContextMenuItem
{
public:
VoronoiCellsContextMenuItem<T>
(shared_ptr<Shape> shape, ShapeAnalyzerInterface* shapeAnalyzer)
: CustomContextMenuItem(shape, shapeAnalyzer) { }

    virtual void onClick(vtkIdType pointId, vtkIdType faceId,
        QWidget* parent) {
        (...) }
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```
virtual void onClick(...) {
    bool ok;
    vtkIdType source = QDialog::getInt(...);
    if (!ok) { return; }
    (...)
    if(ok) {
        try {
            auto m = make_shared<T>(shape_);
            auto fps = make_shared<FarthestPointSampling>(
                shape_, m, source, numberOfSegments);
            VoronoiCellSegmentation segmentation(shape_, m,
                fps);

            shape_>setColoring(segmentation.getSegments(),
                Shape::Coloring::Type::PointSegmentation);
        } catch(metric::MetricError& e) {
            QMessageBox::warning(parent, "Exception", e.what())
                );
        }
    }
}
```

