VTK examples hackathon April 27'th 2017.

HANGOUT

• https://hangouts.google.com/hangouts/ /kitware.com/dave-demarle

VTKWIKIEXAMPLES (roughly 600 C++, plus Python, Java, C#)

- https://github.com/lorensen/VTKWikiExamples
- http://www.vtk.org/Wiki/VTK/Examples
- Test results on dashboards
- https://open.cdash.org/index.php?project=VTKWikiExamples (old school, not very visible to vtk devs)
- https://open.cdash.org/index.php?project=VTK#!#Expected_Nightly_Remote_Modules (new school, slightly better)

IN SOURCE EXAMPLES (roughly 100)

- https://gitlab.kitware.com/vtk/vtk/tree/master/Examples
- Compiled by VTK buildbots
- A handful of the examples add tests (TestMedical1)

ON VTK WIKI EXAMPLES

• Bill explained the wiki examples

Master copy is wiki page

Barriers to entry that made wiki ideal at first are less important today (KW will eventually remove wikis and maybe move to gitlab)

Bill's script pulls and puts into https://github.com/lorensen/VTKWikiExamples
Is now a VTK remote module, tested (remote modules track) and easy to add to buildbot Script automatically makes a test for each example

POTENTIAL TOPICS TO WORK ON DURING HACKATHON

- Why have two different sets. Can we move source examples to wiki?
 - Tests too
 - And examples from the book and user guide
 - o And exercises from Kitware's VTK courses
- How about move to something more modern than the wiki?
 - Existing wikiexamples tend to show up high in google searches which is essential. Copy/Paste and run it also great.
 - Security hole of anyone editing wiki and having code run next day onsubmitter machines is bad (automatically merge to devel, then manually merge to master?)
 - o something with area tags to better index and search
 - Different ways to sort
 - Class to example
 - Visual images

- Ad-hoc structure (language/area)
- Take inspiration from ITK's wiki examples (Sphynx from a git repo)
- o gitlab/markdown
- Paraview/vtk.js web github.io right next to project
 - Per checkin updates web page, including the code and interactive example
- Vtkweb has one example reachable from paraviewweb web page
- Setup more dashboard submitters for examples?
 - Cole's submitter of vtkwikiexamples itself
 - Bill's vtk dashboard for remote module
- What examples are not enabled currently?
 - INSRC/MFC...
 - INSRC/Materials
- What examples are broken?
- What areas do we not have enough coverage for?
 - Web-based examples vtkis or remote-renderer
 - Coverage of VTK by running vtkwikiexamples is about 30%, adding in source examples may not increase it much
 - Vtkweb, should find a way to make it more prominent in vtk examples
 - Maps, projections
 - Example of creating each dataobject type
- Update doxygen so that each class also points to the wikiexamples that cover it?
- Port automatic regression test infrastructure from Cxx to Python so that py examples can be tested?