GenPipes RTD DocumentationProject Report



Introduction

<u>Google Season of Docs (GSoD)</u> enables technical writers and open source projects to connect and address the #1 challenge in open source today - <u>documentation!</u>

It is an honor to be part of the very first GSoD initiative and be able to contribute to open source. Having been in the software industry for over two dozen years, I have benefitted so

much from deploying and using open source tools over the years. GSoD has provided me with this cool channel to give back to the community.

This document contains some of my key experiences with GSoD 2019 while working for the GenPipes GSoD documentation Project.

Synopsis

GSoD Timeline Stage	Community Bonding	Documentation Development	Project Finalization & Evaluation
Current Project Status	Doc development in progress 65% content available on RTD Community Bonding in Done, Slack and Google Group Channels, GenPipes channels.	Doc development in progress 90% content available on RTD First Draft v0.9 is complete. Self Review and fixes at RTD in progress.	Documentation review by the team done, all minor issues fixed. No major issues located so far. Final draft v1.0 at RTD in last stages - soon to be tagged in master branch. Final Products: Version 0.99 https://genpipes.readthedocs.io/en/v0.99/ Latest: https://genpipes.readthedocs.io/en/latest/ Link to documentation sources on github: https://github.com/c3g/GenPipes
Stakeholders	Rola Dali, Mathieu Bourgey, Shaloo		
Milestones / Goals	Step 1: PoC - Done Step 2: GenPipes Doc v0.9 docset creation - In Progress Step 3: Refine, Review and Publish first draft at RTD - Review Pending, Draft Completion Pending	Step 2: GenPipes Doc v0.9 docset creation -DONE Step 3: Refine, Review and Publish first draft at RTD -Self Review done. Draft complete and ready for review by mentors, GenPipes team, users	Eval Review Done , all edits reported via Hector, addressed.
Weekly Progress Notes	W (08/12-08/16) - On schedule, User Guide Pipeline reference drafts	W (09/09-09/13) - On schedule,User Guide Pipeline reference drafts	W (11/25-11/30) - Project report finalization & evaluation.

	50% completed	100% completed W (09/02-09/06) - On schedule,User Guide Pipeline reference drafts 85% completed W(09/30-10/04) - On schedule - Draft documentation ready for evaluation on Read the docs. Self review done. Deep review in progress - page by page.	W (11/5-11/22) - Refine documents, tag and publish v1.0 W (10/2-10/18) - Add missing documentation content and remove stubs. Especially with respect to documentation maintenance and GenPipes Pipelines.
Key learning (to be collected in a blog post later)	#2 at present	#4 at present	#6
Challenges	None so far	Content Review Planning - figuring out what is the best way to get that addressed in GenPipes context.	None

Final Products

Following are the final Products of this GSoD Project:

- a. GenPipes RTD documentation
 - i. latest build (current docs) https://genpipes.readthedocs.io/en/latest/
 - ii. Version 1.0 (Final for this GSoD Project)https://genpipes.readthedocs.io/en/v1.0/
- b. C3/GitHub source code https://github.com/c3g/GenPipes. This repo was solely created from scratch for GenPipes documentation.
- c. Project Report (this document)
- d. Status, Worklogs and Plans created along the way See <u>Progress Notes</u> section below.

Details

The following sections contains ongoing work logs and references for GenPipes GSoD Project and day-to-day details.

Key Learnings

- 1. Genomics is fairly complex. As a technical writer, it is challenging to set a 'documentation' meter which is just right for both Genomics developers and users, both new and seasoned ones.
- 2. It helps to organize documentation via RTD into separate sections dedicated for new and seasoned users, GenPipes developers (open source contributors)
- 3. Tradeoff between dynamic content and source code compatibility/maintainability use of .md vs. the use of .rst files for Sphinx based RTD documentation hosting.
- 4. During user guide compilation, several missing pieces of information were identified and details shared with GenPipes mentors so that they can be added in the GenPipes core readme files and imbibed into RTD docs.
- 5. GenPipes users are not very active on Google Groups may be it needs to be highlighted in C3G Website / RTD Documentation area (latter is done via LHS Navigation bar).
- 6. There are limited video how-to for GenPipes new users, those might help in raising adoption and spreading the word through say brief, 2 min to 10 min video tutorials.

Challenges and workarounds

- Content review process is there something that GenPipes prefers? Here is what I propose
 - a. What is the best way to ensure all enhanced pipeline reference guide content here is pulled into GenPipes sources? There is a way to maintain only 1 copy of GenPipes Pipeline reference as GenPipes source / README.md files and pull content from there at the time of making RTD builds. But to do that kind of automation for maintainability, we need a way to ensure the updated content at RTD is pulled into GenPipes sources how to do that, who can help? Currently Hector is helping me get a closure on this query.
 - b. First Draft of RTD docs need to be Review by stakeholders Rola, Hector, Matthiew(?), others?
 - c. It may be helpful if we could seek some newbie GenPipes users and get their inputs esp. wrt onboarding new GenPipes users and whether there are any documentation caveats. Need to recruit them in time (Oct) so that we have addressed their feedback by early November.

2. Many of the GenPipes pipeline steps listed in readme are a rehash of programming steps curt descriptions - it may be more useful if we could write in plain english/genomic terms what each steps is meant to achieve and what is the final outcome - is it a file that can be visualized or compared? Or does it need further processing with some third party/open source tool, say.

Note: GSoD dcoumentation development phase is slated to get over by Nov 22.

November 25 - 29, 2019 at 18:00 UTC Final week: Technical writers submit their final work products and their mentor evaluations

Progress Notes:

- 1. GSoD Project description Reality check item completion details and RTD links for the same. See Self Review doc here.
- 2. All updates to documentation were tracked via issues 64 closed see https://github.com/c3g/GenPipes/issues?q=is%3Aissue+is%3Aclosed
- 3. Weekly Progress Notes (August 5 Nov 29 2019)
- 4. May-July 2019 Notes

Other Useful References

- 2. GenPipes RTD site with latest document drafts, generated as part of this project: https://genpipes.readthedocs.io/en/latest/
- 3. GenPipes Project Proposal (Approved): https://developers.google.com/season-of-docs/docs/participants/project-genpipes
- 4. GenPipes Workbook during Project Idea Evaluation and DIY getting acquainted with GenPipes: <u>GenPipes Eval Data</u>
- GenPipes Project Ideas for GSoD:
 https://bitbucket.org/muggic/gsod2019_genpipes/src/master/