OpenMRS: A Lesson in Open Source Software Development and the Challenges It Can Present

Christian Baliker, Billy Cuttrell, Zach Elmer, Jim Bowring

CSCI 462, College of Charleston

"Guys, I think they need our help"

Introduction

Throughout the semester, we worked on the H/FOSS project OpenMRS. OpenMRS is a software designed to support the delivery of health care in developing countries. While working with the developers and supporters of OpenMRS, we started to work through bug fixing before we ultimately transitioned into the documentation department.

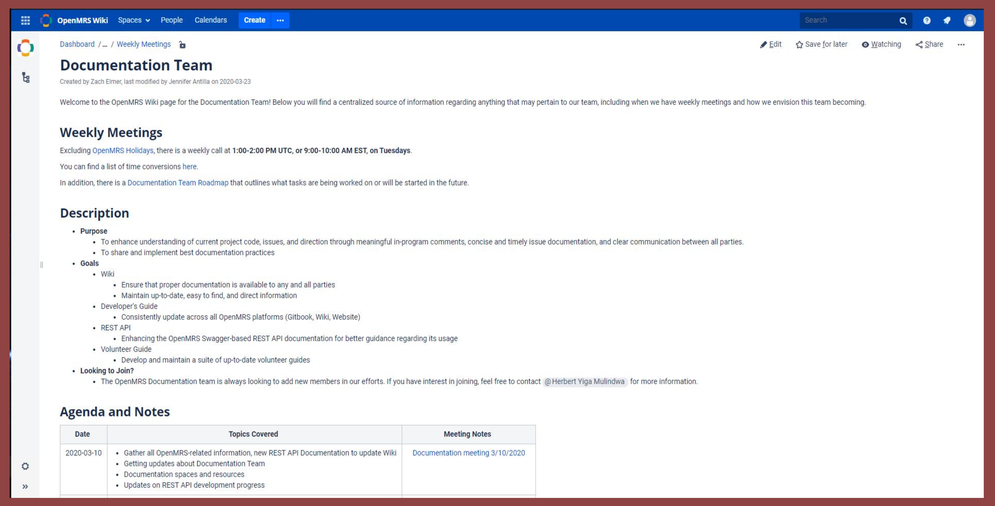
Initial Experiences

When we first started, we wanted to help debug and fix issues within the software. However, we found several big setbacks as we started out. We consistently had problems creating the build using Maven, and even when it did finally start working we then had to redo the process all over again because it ran on an older version of Java.

After we started debugging, the code was vastly under documented. Very few lines of the code were dedicated to comments, making readability difficult. Finally, the issue tracking system used failed to have consistent updates, with some bugs being fixed yet still were designated as "in-progress".

Contributions

After moving to Documentation, we quickly began work on revamping the team wiki page. The first issue card we focused on was creating a specific wiki page for the Documentation team itself, with information available for joining, when they did conference calls, etc. After a couple of days of refining information, our card was approved and set to "Completed".



We then started working on a second card tasked with making sure other Wiki pages had information relevant to the newest documentation for their REST API. Below is a solution we proposed to organize all of the versions into a consolidated table, with a ten-version range in each.

Version	Documentation	Release Date
2.30	**UNRELEASED**	**UNRELEASED**
2.29	**UNRELEASED**	**UNRELEASED**
2.28	https://issues.openmrs.org/projects/RESTWS/versions/26702	2020-03-11
2.27	https://issues.openmrs.org/projects/RESTWS/versions/26604	2020-02-18
2.26	https://issues.openmrs.org/projects/RESTWS/versions/25601	2019-08-27
2.25	https://issues.openmrs.org/projects/RESTWS/versions/24800	2019-06-17
2.24	https://issues.openmrs.org/projects/RESTWS/versions/24701	2019-01-10
2.23	https://issues.openmrs.org/projects/RESTWS/versions/22402	2018-12-12
2.22	https://issues.openmrs.org/projects/RESTWS/versions/22401	2018-02-06
2.21	https://issues.openmrs.org/projects/RESTWS/versions/21708	2017-10-24

Pivot

After over a month of attempting to unravel the complex infrastructure of OpenMRS as well as compete with a disorganized issue tracking system, we found that the project needed help in documentation the most. This decision was also based on the documentation consistently vocalizing that they were lacking the resources to keep up with the Development of OpenMRS. Our contributions to OpenMRS documentation included organizing the documentation team meetings, maintaining accurate Wiki information, and keeping a consistent flow of communication so that team members can work in a more structured fashion.

Conclusion

After spending the semester working on the OpenMRS project, we learned that parts of working within the H/FOSS model certainly have their struggles, and that lacking effective communication between all team members leads to more problems than are necessary in this fashion. However, the members of the project were great people to work with and provided useful feedback when asked, especially when we were setting our environments up to work on the coding side of OpenMRS.