

# The Open Multilingual Wordnet (OMW)

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#### Overview

This is my final project report for the Season of Docs program. I worked on the Open Multilingual Wordnet project with the Global Wordnet Association.

Global Wordnet Association is a free, public and non-commercial organization that provides a platform for discussing, sharing and connecting wordnets for all languages in the world.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> "Global WordNet Association." <a href="http://globalwordnet.org/">http://globalwordnet.org/</a>.

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The Open Multilingual Wordnet provides access to open wordnets in a variety of languages, all linked to a collaborative Interlingual Index. The goal is to make it easy to use wordnets in multiple languages. The individual wordnets have been made by many different projects and vary greatly in size and accuracy. The Open Multilingual Wordnet and its components are open: they can be freely used, modified, and shared by anyone for any purpose. <sup>2</sup>

### **Community Bonding**

The Global Wordnet Community is amazing, helpful, and amiable. We started by deciding the time for the weekly video conference for Season of Docs. Mentors devoted a lot of time and effort to the project, cleared doubts regarding the project in weekly conferences and through Gmail & Github. They also shared relevant research papers and books. Pull requests were thoroughly reviewed that helped me refine my documentation as well as code quality. It was a wonderful experience working with mentors and fellow tech writers across the globe.

#### **Project Description**

The main objectives of the project were threefold:

- Have a guide for someone contributing new wordnet
- Have a guide for someone searching the wordnet
- Have a guide for interacting with the Collaborative Interlingual Index.

These three guides are a collection of different documentations.

Documentation written for these three guides includes: upload documentation, LMF documentation, documentation for the Global Wordnet converter, metadata documentation, TSV conversion documentation, validation report documentation, search page documentation, installation documentation, providing the feedback documentation, and the CILI documentation.

<sup>&</sup>lt;sup>2</sup> "OMW - Luis Morgado da Costa." <a href="https://www.luismc.com/omw/omw">https://www.luismc.com/omw/omw</a>. Accessed 3 Dec. 2020.



#### Contributions

Apart from the planned documentation as per the proposal, I noticed that a few enhancements could be done. I documented the steps for contributing to the Open Multilingual Wordnet. In the last week of the program when I had finished all the deliverables, I added basic styling to the web pages and improved the overall UI. I also reviewed my peer's pull requests.

#### Doc Development Pull Requests:

Title	My contribution	Pull Request	Documentation Link	Status
Search page Documentation	<ul> <li>Created this documentation from scratch.</li> <li>Added as an HTML page.</li> <li>Added basic styling using CSS.</li> <li>The search page and the Glob documentation page got bifurcated in the PR 102 with some changes.</li> </ul>	PR 92 PR 102	<u>Documentation</u>	PR merged in the org Github repository.
OMW Glob documentation page	<ul> <li>Created this documentation from scratch</li> <li>This page is part of the search guide but is an independent webpage.</li> <li>Added as an HTML page.</li> <li>Created a route for the glob page in the init.py file.</li> </ul>	PR 92 PR 102	Glob page documentation	PR merged in the org Github repository.
README.md file	<ul> <li>Enhanced the existing README.md file.</li> </ul>	PR 95 PR 100 PR 102	README.md file	PRs merged in the org Github repository.
Upload documentation.	<ul> <li>Updated the existing Upload documentation.</li> </ul>	PR 95	Upload documentation	PR merged in the org Github

				repository.
Validation report	<ul> <li>Created this documentation from scratch</li> <li>Added as an HTML page.</li> <li>Created a route for the validation report page in the init.py file.</li> <li>Added necessary links to this guide in the existing web pages.</li> </ul>	PR 95	Validation report page documentation.	PR merged in the org Github repository.
Lmf Documentation	<ul> <li>Minor enhancements in the existing guide.</li> </ul>	PR 95	LMF documentation.	PR merged in the org Github repository.
Documentation for the Global Wordnet converter.	<ul> <li>Created this documentation from scratch</li> <li>Added as an HTML page.</li> <li>Created a route for the documentation for the converter and the validator page in the init.py file.</li> <li>Added necessary links to this guide in the existing web pages.</li> </ul>	PR 95	Global Wordnet Converter	PR merged in the org Github repository.
Contributing a wordnet Guide	<ul> <li>Enhanced the existing contributing guide.</li> </ul>	PR 95	Contributing a wordnet Guide.	PR merged in the org Github repository.
Contribution Guide.	<ul> <li>Created this documentation from scratch</li> <li>Added as an HTML page</li> <li>Created a route for the contribution page in the init.py file.</li> <li>Added necessary links to this guide in the existing web pages.</li> </ul>	PR 100	Contribution guide.	PR merged in the org Github repository.
CONTRIBUTING. md file.	<ul> <li>Created a CONTRIBUTING.md file which contains instructions on who to contribute to the OMW repository.</li> </ul>	PR 100	CONTRIBUTING.m d file	PR merged in the org Github repository.

# Season of Docs

INSTALL.md file created.	<ul> <li>Contributed an INSTALL.md file that contains installation steps.</li> <li>Necessary changes were made in the README file after creating the INSTALL file.</li> </ul>	PR 102	INSTALL.md file	PR merged in the org Github repository.
Metadata documentation	Did small enhancements in the existing documentation.	PR 95	Metadata Documentation.	PR merged in the org Github repository.
Feedback Page Documentation	<ul> <li>This documentation is written from scratch.</li> <li>Added as an HTML page.</li> <li>Created a route for the feedback page in the init.py file.</li> <li>Added links to this page in the home page and the help page.</li> <li>Also did some minor changes in the contribution template in the PR 104.</li> <li>A responsive accordion is added as part of this guide.</li> </ul>	PR 104	Feedback page documentation.	PR merged in the org Github repository.
CILI guide	<ul> <li>Restructured the existing CILI guide.</li> <li>Made the necessary changes in the existing HTML template.</li> </ul>	PR 105	New Structure for the CILI guide	PR merged in the org Github repository.
Tsv2lmf documentation	Did few enhancements to the existing guide.	PR 95	Tsv2Lmf documentation.	PR merged in the org Github repository.
Improving General Styling of OMW.	<ul> <li>Added a vertical menu on the help page.</li> <li>Added a responsive back to the top button across various OMW web pages which stays with the user as one scroll down.</li> <li>Made all the Images responsive across the OMW.</li> <li>Styled the contents boxes across the</li> </ul>	PR 106	PR 106 contains all the styling changes and the 11 commits which were made to style the pages.	PR is under review.



OMW web pages.  • Some miscellaneous CSS changes such as changing the color and the padding of existing components.			
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# Issues fixed by me which were not a part of the proposal

Issue	My contribution	Pull request	Status
<u>#97</u>	Documented a contribution guide for the OMW.	PR 100	Issue solved.
<u>#99</u>	<ul> <li>Made it easy to find a new wordnet page from both the CILI page and the wordnet page.</li> </ul>	PR 102	Issue solved.
<u>#101</u>	<ul> <li>Added feedback links to the search page and created a column for feedback on the home page.</li> <li>Added sorted source meta to the search page and created a function for it in utility.py</li> </ul>	PR 102	Issue solved.

# New Issues opened by me

Issue	My Contribution	Pull request	Status
<u>#103</u>	Raised a need for the forget password feature.		The issue got accepted and I assigned it to myself for post-GSoD.

#### Pull requests reviewed by me:

Review	My contribution	Status	Outcome
281th Commit	Spotted a probable error	Yet to be reviewed	
PR 37 of the gwadoc. (a different project of the org).	Suggested few improvements, and a need for the contributing guide in the OMW project.	Actively reviewed by the community.	<ul> <li>An issue for the OMW contributing guide was created and later the guide was documented by me.</li> <li>Enhancements were made in the documentation by the fellow tech writer Glory.</li> </ul>

# **Project Finalisation & Result**

I have delivered all the documents as planned as per the <u>proposal</u>. Apart from the proposal, I have documented a contributing guide. I have added all the documentation as code documentation has been merged in the develop branch and is ready to be deployed. I have also styled the web pages containing documentation.

# Challenges and Learning

- Since the website code is based on the Flask framework and Jinja2 templating, I had to learn these tech stacks before starting my GSoD work. I devoted the period before Doc Development to strengthen my command over these new technologies as well as community bonding.
- My understanding of Git and working in an open-source organization improved.
- My technical writing skills have become better.



- There isn't much information available on the internet about the things I have
  documented, so the mentors shared their published research papers and also referred a
  book to help me write documentation. I even got a chance to read yet to be published
  paper! In the process, I learned a lot about wordnets and the Collaborative Interlingual
  Index.
- My UI web development skills improved. I got to learn JavaScript as well.
- Working from home and coordinating remotely with different time zones was a challenge, my collaboration and communication skills have developed

#### Post Season of Docs goals

The Open Multilingual Wordnet is in an active development phase, implying that new documentation would be required for the new features and the existing documentation will need appropriate updates. I will keep updating the documentation I have written, and will try to add new documentation for the new features. Post Season of Docs 20 program, I have decided to work on the styling of the web pages. I will try to contribute to the backend as well. I want to step up, and If given a chance I will be glad to be part of Season of Docs as a mentor next time.

#### Acknowledgments

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Bond, Alexandre Rademaker, and Michael Wayne Goodman for all their time and expertise. I am thankful to the organization for discussing the projects, reviewing PRs, weekly video conferences, and providing relevant research papers and books to help me complete this project. I am equally thankful to the Google team for hosting this amazing program and accepting the Global Wordnet Association as one of the participating organizations. Fellow tech



writers Glory and Yoyo have been a great help during the project. Also, a special thank goes to my college and my college facilitators, who allowed me to be part of this wonderful journey. At last, I would like to thank all my friends, seniors, and teachers who have been with me.

#### References

- [1] Global Wordnet Association: <a href="http://globalwordnet.org/">http://globalwordnet.org/</a>
- [2] Open Multilingual Wordnet 2.0: <a href="https://www.luismc.com/omw/omw">https://www.luismc.com/omw/omw</a>
- [3] Toward a truly multilingual Global Wordnet Grid (Francis Bond, Piek Vossen and John McCrae, 2016):

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[4] CILI: the Collaborative Interlingual Index (Francis Bond, Piek Vossen, John McCrae and Christiane Fellbaum, 2014).

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