# Electronic Thesis and Dissertation Validator

BY: CHRIS ROSLER, RORY MCLEAN, AND CAM ALBERGHINI

# Solution
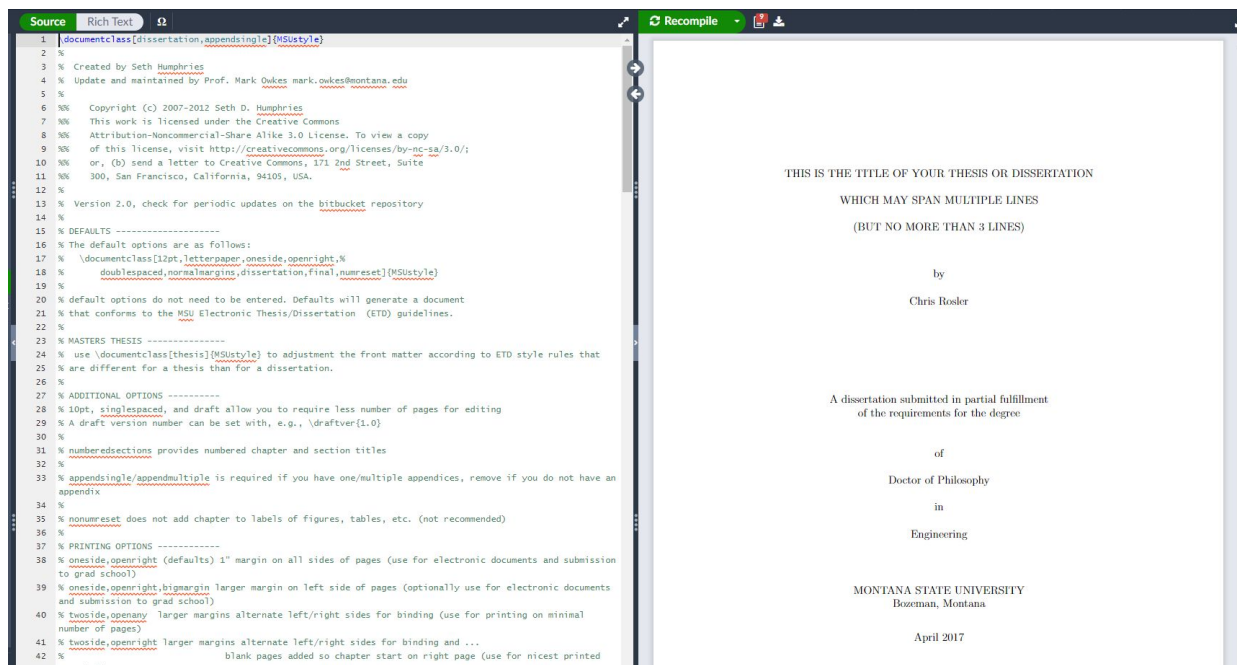
Before conversion to PDF, users have either a Tex or Docx file.

## Latex Handling

Overleaf, Online LaTeX Editor



## Docx
## Zip File of XML

# Docx Overview

Students need their thesis and dissertation to be verified to ensure a uniform template is used before submitting
3 Sections:
Introduction
Body
Bibliography

# Demo

[ETD Validation (etdvalidator.pythonanywhere.com)](http://etdvalidator.pythonanywhere.com)

# Login, Password, Submission and Get Results Pages

# Good Results Page

```
Please check paragraph 199 for a typo
The following words were detected , aestivum, n, mineralization, sameyear, nondestructively, finescale, l, cm, sitespecific, reflectance, triticum, agroecosystems,
Please check paragraph 204 for a typo
The following words were detected , rossel, n, ssurgo, tesfa, bestwick, bockheim, finescale, lilburne, odeh, kriging, cm,
Please check paragraph 206 for a typo
The following words were detected , grylls, n, mineralization, lilburne, philippot, overfertilization, biogeochemical, denitrification, odea,
Please check paragraph 207 for a typo
The following words were detected , n, nonleaching, meisinger, mineralization, nonfertilizer, widesweeping, lilburne, leachingsusceptible, lysimetry, volatilization, denitrification,
Please check paragraph 208 for a typo
The following words were detected , n, ncontaining, urease, semiarid, engel, benbi, ureasedriven, ammoniumbased, tabatabai, volatilization, amides, mineralization, nitrification, ammonification, twostep, bremner, agroecosystems, aminization, hydrolysis, protonated,
Please check paragraph 209 for a typo
The following words were detected , rengel, nitrification, mutert, schroder, cations, ammoniumbased, engel, uexkll, volatilization, agroecosystems,
Please check paragraph 210 for a typo
The following words were detected , nitriteoxidizing, acidifying, phototrophs, oxidoreductase, hydroxylamine, n, longheld, caranto, nitrification, comammox, kuypers, klotz, leininger, daims, ph, anoxygenic, kozlowski,
Please check paragraph 211 for a typo
The following words were detected , incubations, hydrolysis, n, mineralization, d, mineralizable, assimilatory, cooccur, franzluebbers, chitin, schomberg, threeday, glucosaminidase, tabatabai,
Please check paragraph 212 for a typo
The following words were detected , nintensive, wheatbased, n, zea, mineralization, kg, deintensified, galloway, ngp, l,
Please check paragraph 213 for a typo
The following words were detected , leguminous, bhattacharjee, n, medicago, pisum, medik, sativum, nfixing, culinaris, rosenblueth, dinitrogen, ngp, l, rhizobia, metalloenzyme, nitrogenase,
Please check paragraph 214 for a typo
The following words were detected , n, anantharaman, maier, energyintensive, dissimilatory, assimilatory, mackelprang, dinitrogen, denitrification, nloss, dissimilation, kuypers,
Please check paragraph 215 for a typo
The following words were detected strous, , tanimoto, cometabolic, n, hydroxylamine, spott, nitrification, salicylhydroxamic, dinitrogen, codenitrification, anammox, selbie, dissimilation, denitrification, kumon,
Please check paragraph 218 for a typo
The following words were detected , n, thapa, lilburne, nonlegume,
Please check paragraph 219 for a typo
The following words were detected , zentner, workloads, twoyear, mikkelsen, vs, urease, engel, volatilization,
Please check paragraph 220 for a typo
The following words were detected , zillmann, morari, n, bestwick, dampney, zillman, vazquezamabile, grylls,
Please check paragraph 221 for a typo
The following words were detected , n, mineralization, onfarm, agronomic, zillman, complementarity, grylls,
Please check paragraph 222 for a typo
The following words were detected , rossel, lowrelief, tesfa, wellestablished, ziadat, spectralbased, generalizability, geomorphological, vazquezamabile, ndvi, lacoste, topographicallycomplex, laborintensive,
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# Bad Results Page

All title lines must be completely capitalized Date is formatted as month written out and first letter capitalized, then year
Missing by after copyright
Missing year
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Please check paragraph 223 for a typo
The following words were detected , n, lowrelief, agroecosystem, mineralization, finescale, ndvi, agriculturalists, sitespecific,

# Typo Detection

We can expand the dictionary.
There are a lot of programs, we could implement it at a server level if that is necessary, using an ignore and web scraping tool.

# JamSpell and Syntax

Unnecessary Burden to the Server assuming they have experience writing

# Login Page

# Automated Testing

- Selenium on GitHub actions is not a viable testing method.
- Selenium is a viable option – Not with PythonAnywhere due to the billing method
- GitHub actions will not open a file.

# Modifications To Make

- Support for other versions of Word
- Dictionary Expansion

# What About Latex?

It doesn't make sense to check for formatting in something that guaranteedly enforces formatting.