Template to prepare preprints and manuscripts using markdown and github actions

Michael D. Catchen [1,2]

[1] McGill University; [2] Québec Centre for Biodiversity Sciences

Correspondance to:
Michael D. Catchen — michael.catchen@mail.mcgill.ca

Purpose: This template provides a series of scripts to render a markdown document into an interactive website and a series of PDFs.
Motivation: It makes collaborating on text with GitHub easier, and means that we never need to think about the output.
Internals: GitHub actions and a series of python scritpts. The markdown is handled with pandoc.

Keywords:
pandoc
pandoc-crossref
github actions

Requirements

> Candidates must submit a thesis proposal at least 7 days prior to the examination. It is the student's responsibility to provide each member of the Examining Committee with a copy, as well as Ancil Gittens in the graduate office. The thesis proposal should address the relevant background, the specific questions to be asked and their significance, the approach and methods, results already obtained, and the anticipated schedule. The proposal should be no more than 10 double-spaced pages (12 font). This limit does not include tables, figures, figure legends, bibliography or the planned timeline to complete work. Committee members will not be responsible for reviewing text in excess of the page limit. The written proposal may include preliminary results if available but must address the whole scope (all chapters) of the projected thesis. The proposal serves two purposes. First, it defines the research area and thus forms a basis for questioning. Second, it is itself part of the evidence upon which a final evaluation will be made. For these reasons, it should be written with care. Please see the additional tips on proposal writing in the document titled "QE Expectations and Advice" (weblink available on Biology Graduate Studies webpage
>
> ---
>
> The student must provide a written proposal for their project to their QE examining committee at least 7 days prior to the scheduled QE. An acceptable proposal must be provided at least 7 days in advance or the QE may need to be rescheduled. It is strongly recommended that a draft of the proposal be provided to the supervisory committee at least a few days prior to the supervisory committee meeting mentioned above. This allows for maximal feedback to be incorporated prior to the QE. The proposal should be similar in nature to an NSERC grant application describing the research approach. In general in your proposal and in all future scientific writing, using subheadings and clear writing to help the reader is a good idea. The guidelines mandate a proposal of 2500 words (approximately 10 pages double spaced). This limit does not include tables, figures, bibliography, figure legends, or a planned timeline to complete work. This 2500 word limit will be enforced. A proposal of 12 pages might not be rejected (or it might), but a proposal of 15 pages

definitely will. Similarly, the presentation at the start of the QE is required to be 1520 minutes. This will also be enforced. Both the written proposal and the oral presentation may include preliminary results if available but must address the whole of the projected thesis. - A successful QE will depend heavily on a top-quality proposal. This proposal should go through multiple drafts and be honed to a very finely worded document that shows the clarity of your thinking through conciseness and exact statements. Some topics you should probably cover are listed below. We recommend discussing omissions from this list with your advisor and your supervisory committee if you think some of these sections are not relevant to your particular project. - Brief review of the current state of knowledge - Precise statement of the question and/or hypotheses - Description of the methods - Detailed description of the experimental or sample design. Be clear about what factors are being controlled or sampled. Provide specific numbers for how many levels of each factor are planned, and how many replicates/samples within each factor. Address any issues that arise from finite effort levels in terms of tradeoffs between replication within vs. between factors (i.e. describe why your plan is optimal). Provide a realistic estimate of the amount of time this will require in the lab or field. - Statistical analysis approach. Describe specific statistical approaches, the output of these approaches, how these can be used to test your hypotheses, assumptions of the tests, and potential problems. - If you will be using novel measurement techniques, provide a detailed description (if you are using standard techniques then references to the standard techniques are enough). - Provide a description of each chapter anticipated in the dissertation (this - may be incorporated into the above sections or as a separate section). - A brief statement of the broader importance of the question to your field and to society - Provide a timeline showing when the research and writing will be performed