***SoftwareX* article template** *Version 2 (July 2021)*

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# *Title / name of your software*

# *Names of authors / main developers (incl. affiliations, addresses, email)*

# Abstract

# *(ca. 100 words)*

# Keywords

# *(maximum of six)*

# Metadata

# *This ancillary data table is required for the sub-version of the codebase. Please replace the italicized text in the right column with the correct information about your current code and leave the left column untouched.*

|  |  |  |
| --- | --- | --- |
| **Nr** | **Code metadata description** | ***Please fill in this column*** |
| C1 | Current code version | *For example: v42* |
| C2 | Permanent link to code/repository used for this code version | *For example:* [*https://github.com/mozart/mozart2*](https://github.com/mozart/mozart2) |
| C3 | Permanent link to reproducible capsule | *For example:* [*https://codeocean.com/capsule/0270963/tree/v1*](https://codeocean.com/capsule/0270963/tree/v1) |
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| C5 | Code versioning system used | *For example: svn, git, mercurial, etc. (put ‘none’ if none used)* |
| C6 | Software code languages, tools and services used | *For example: C++, python, r, MPI, OpenCL, etc.* |
| C7 | Compilation requirements, operating environments and dependencies |  |
| C8 | If available, link to developer documentation/manual | *For example:* [*http://mozart.github.io/documentation/*](http://mozart.github.io/documentation/) |
| C9 | Support email for questions |  |

# Motivation and significance

# *In this section, we want you to introduce the scientific background and the motivation for developing the software.*

# *Explain why the software is important and describe the exact (scientific) problem(s) it solves.*

# *Indicate in what way the software has contributed (or will contribute in the future) to the process of scientific discovery; if available, please cite a research paper using the software.*

# *Provide a description of the experimental setting. (How does the user use the software?)*

# *Introduce related work in literature (cite or list algorithms used, other software etc.).*

# Software description

*Describe the software. Provide enough detail to help the reader understand its impact.*

# Software architecture*:*

# *Give a short overview of the overall software architecture; provide a pictorial overview where possible; for example, an image showing the components. If necessary, provide implementation details.*

# Software functionalities*:*

# *Present the major functionalities of the software.*

# Sample code snippets analysis (optional).

# Illustrative examples

*Provide at least one illustrative example to demonstrate the major functions of your software/code.**OPTIONAL:* *You may submit an explanatory video or screencast*. *Only one MP4 formatted video (max. size 150MB) is possible per article and this should be uploaded as a single supplementary file with your submission. Recommended video dimensions are 640 x 480 at a maximum of 30 frames / second.*

1. **Impact**

*This is the main section of the article and reviewers will weight it appropriately.*

*Please indicate:*

# *Any new research questions that can be pursued as a result of your software.*

# *In what way, and to what extent, your software improves the pursuit of existing research questions.*

# *Any ways in which your software has changed the daily practice of its users.*

# *How widespread the use of the software is within and outside the intended user group (downloads, number of users if your software is a service, citable publications, etc).*

# *How the software is being used in commercial settings and/or how it has led to the creation of spin-off companies.*

*Please note that points 1 and 2 are best demonstrated by references to citable publications.*

# Conclusions

**Acknowledgements**

*Optional. You can use this section to acknowledge colleagues who don’t qualify as a co-author but helped you in some way.*

# References

*If the software repository you used supplied a DOI or another Persistent IDentifier (PID), please add a reference for your software here. For more guidance on software citation, please see our guide for authors or this* [*article on the essentials of software citation*](https://f1000research.com/articles/9-1257/v2) *by FORCE 11, of which Elsevier is a member.*

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***including this paragraph.***

***Thank you!***