# SoftwareX Article Template

# Title / name of your software

# Authors / main developers (incl. affiliations, addresses, email)

# Abstract.

# *Ca. 100 words*

# Keywords:

# *keyword 1; keyword 2; keyword 3;*

# *Motivation and Significance*

# *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 how it will contribute in the future) to the process of scientific discovery; if available, this is to be supported by citing 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 in as much as is necessary to establish a vocabulary needed to explain its impact.*

# *Software Architecture*

# *Give a short overview of the overall software architecture; provide a pictorial component overview or similar (if possible). 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.**Optional: you may include one explanatory video or screencast that will appear next to your article, in the right hand side panel*. (Please upload any video as a single supplementary file with your article. Only one MP4 formatted, with 50MB maximum size, video is possible per article. Recommended video dimensions are 640 x 480 at a maximum of 30 frames / second. Prior to submission please test and validate your .mp4 file at <http://elsevier-apps.sciverse.com/GadgetVideoPodcastPlayerWeb/verification>. This tool will display your video exactly in the same way as it will appear on ScienceDirect.).

1. ***Impact***

***This is the main section of the article and the reviewers weight the description here appropriately***

# *Indicate in what way new research questions can be pursued as a result of the software (if any).*

# *Indicate in what way, and to what extent, the pursuit of existing research questions is improved (if so).*

# *Indicate in what way the software has changed the daily practice of its users (if so).*

# *Indicate how widespread the use of the software is within and outside the intended user group.*

# *Indicate in what way the software is used in commercial settings and/or how it led to the creation of spin-off companies (if so).*

# *Conclusions*

# *Set out the conclusion of this original software publication.*

# *Acknowledgements*

*Optionally thank people and institutes you need to acknowledge.*

# *References*

# *Referencing should be as appropriate.*

# Required Metadata

# Current code version

# *Ancillary data table required for subversion of the codebase. Kindly replace examples in right column with the correct information about your current code, and leave the left column as it is.*

# *Table 1 – Code metadata (mandatory)*

|  |  |  |
| --- | --- | --- |
| **Nr** | **Code metadata description** | ***Please fill in this column*** |
| C1 | Current code version | *For example v42* |
| C2 | Permanent link to code/repository used of this code version | *For example: https://github.com/mozart/mozart2* |
| C3 | Legal Code License | *List one of the approved licenses* |
| C4 | Code versioning system used | *For example svn, git, mercurial, etc. put none if none* |
| C5 | Software code languages, tools, and services used | *For example C++, python, r, MPI, OpenCL, etc.* |
| C6 | Compilation requirements, operating environments & dependencies |  |
| C7 | If available Link to developer documentation/manual | *For example: http://mozart.github.io/documentation/* |
| C8 | Support email for questions |  |

# Current executable software version

# *Ancillary data table required for sub version of the executable software: (x.1, x.2 etc.) kindly replace examples in right column with the correct information about your executables, and leave the left column as it is.*

# *Table 2 – Software metadata (optional)*

|  |  |  |
| --- | --- | --- |
| **Nr** | **(Executable) software metadata description** | ***Please fill in this column*** |
| S1 | Current software version | *for example 1.1, 2.4 etc.* |
| S2 | Permanent link to executables of this version | *For example: https://github.com/combogenomics/DuctApe/releases/tag/DuctApe-0.16.4* |
| S3 | Legal Software License | *List one of the approved licenses* |
| S4 | Computing platforms/Operating Systems | *For example Android, BSD, iOS, Linux, OS X, Microsoft Windows, Unix-like , IBM z/OS, distributed/web based etc.* |
| S5 | Installation requirements & dependencies |  |
| S6 | If available, link to user manual - if formally published include a reference to the publication in the reference list | *For example: http://mozart.github.io/documentation/* |
| S7 | Support email for questions |  |