

Author Carpentry: Recent Developments

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Summary



- Research compendium
- Different workflow strategies, all following FAIR standards
- Have you develop your own workflow for your research?



Research compendium



We introduce the concept of a compendium as both a container for the different elements that make up the document and its computations (i.e. text, code, data,...), and as a means for distributing, managing and updating the collection.

- Gentleman, R. and Temple Lang, D. (2004)

https://research-compendium.science/

Research compendium



Guide for Reproducible Research https://the-turing-way.netlify.app/reproducible-research.ht ml

"Working reproducibly means others can check your results - even early on in the research process. Thus, the full analysis and methodology is transparent."



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Different ways



- The Top 10 FAIR Data & Software Things are brief guides (stand alone, self paced training materials), called "Things", that can be used by the research community to understand how they can make their research (data and software) more FAIR (Findable, Accessible, Interoperable and Reusable).
- https://librarycarpentry.org/Top-10-FAIR/
- Research Software:
 https://librarycarpentry.org/Top-10-FAIR//2018/12/01/research-software



Different ways - Research Software



Findability

Thing 1: Create a description of your software

Thing 2: Register your software in a software registry

Thing 3: Get and use a unique and persistent identifier for your software

Accessibility

Thing 4: Make sure that people can download your software



Different ways - Research Software



Interoperability

Thing 5: Explain the functionality of your software

Thing 6: Use standard (community agreed) formats for inputs and outputs

Reusability

Thing 7: Document your software

Thing 8: Give your software a license

Thing 9: State how to cite your software

Thing 10: Follow best practices for software development



How does your workflow look like?



Think for a moment and try to draw your own workflow for your last project.

- Can you think of how a research compendium would look like in this case?
 What types of files would you include?
- Would you consider your workflow to be FAIR? Why or why not?



Thank you!

You can find me on Twitter: @Fichulina