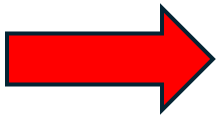
Plenary: Introduction to breakout session 2

Research Software quality dimensions



1. Usability
2. Functionality
3. Technical performance
4. Documentation/Technical support
5. Testing
6. Security/Safety

Scenario:

1. You want to improve your research software (RS) quality, e.g. *Usability*, which is one of the six RS quality dimensions.

2. You want to (ideally quantitatively) **measure** a certain indicator of your RS, which ensures usability. In the case of *Usability* there are the following best practices you could look at:
   - `Does the research software (RS) have a licence`
   - `Is the RS citable, e.g. have DOI, etc.  => does RS have globally unique & persistent identifier`
   - `Is the RS available in a (public) software repo(s)`
   - `Is the RS compatible with different platforms`
   - `Is packaging or containerization provided`
   - `Is GUI and/or API provided to increase usability for workflows`
- Which tools would measure all/any of the six best practices?

3) Which tools would then help to **improve** the RS best practices for the *Usability* dimension?

- Access to spreadsheet listing all six best practices for *Usability*
  - https://docs.google.com/spreadsheets/d/1bbyA8VvnC26Gwr1vxzLHdq0D8V0x1JDVB7zp8RsjU0A/edit?usp=sharing

- Group discussion/filling in of spreadsheet
  - Facilitator to fill it in
  - Participants have ‘view’ access only

- Add any tools that have not been listed but would do a similar job

Spreadsheet to fill in & discuss for "*Usability*"

A1 | fx Tools/Best Practices

	A	B	C	D	E	F
1	Tools/Best Practices	Measures or improves RS quality	Does RS have licence	Additional Info	Is code citable/have DOI or similar	Additior
2						
3	CMake	improves				
4	Docker	improves				
5	gitlab	measures & improves				
6	github	improves				
7	Kubernetes	improves				
8	PyPi	improves				
9	HowFairIs	measures				
10	TortelliniAction(github action)	improves				
11	SQAaaS	improves				
12	Checkstyle	improves				
13	SonarQube	improves				
14						
15						