DocuBricks! Documentation Tool for Open Plant Tech

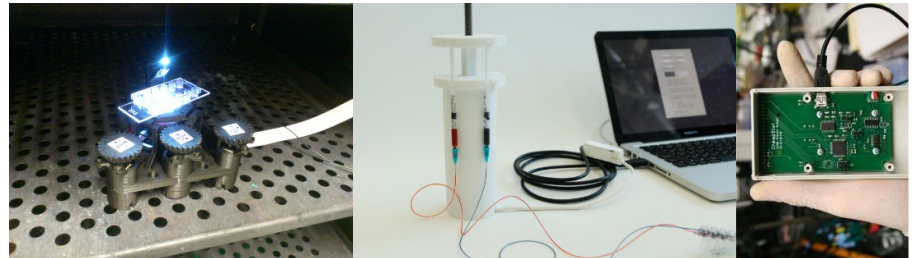- Many open hardware projects exist already

    ...but are hard to recreate

    ...cannot easily be cited

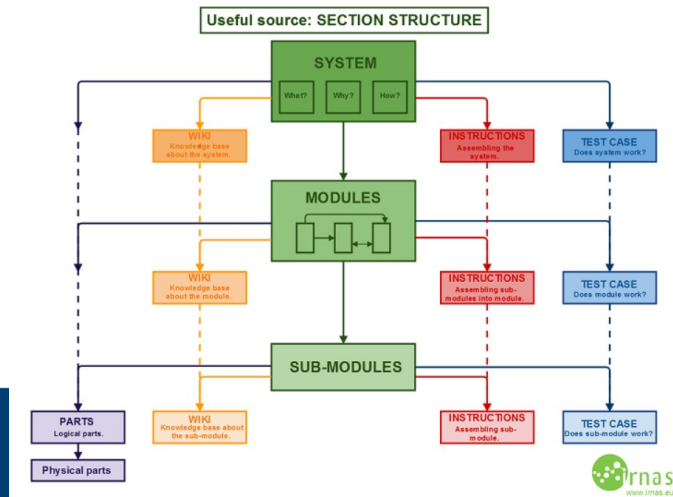   ...calibration/validation/testing
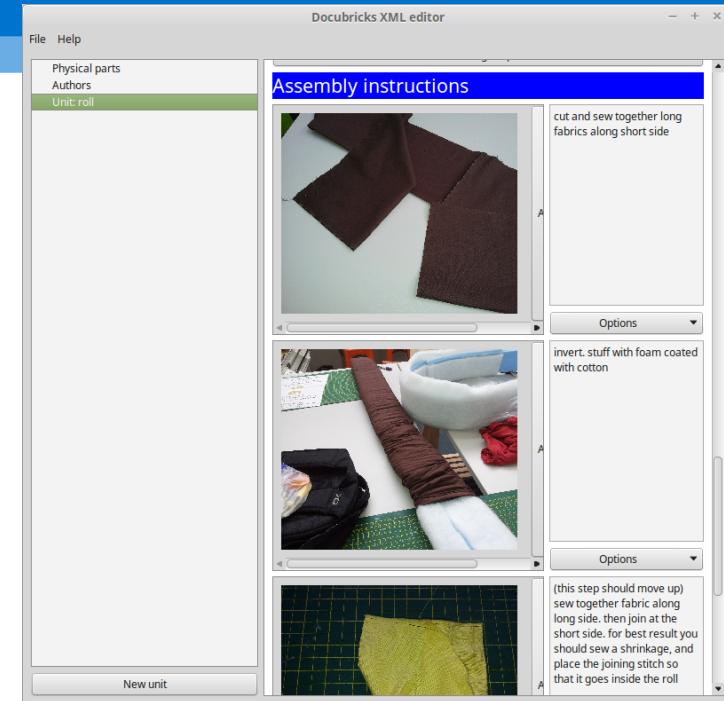
    ...difficult to reuse/adapt

- Significant effort in replicating!

- Every replication is a fork

Create an open and universal Open Source Hardware (OSH) Documentation Software – a modular standard

DocuBricks – Implementation/Deliverables

- OpenPlant project archive format (XML)

  - Bill of Materials (BOM)

  - Assembly instructions

  - Repair and testing information

  - Modular structure

- Desktop app to ensure consistency

  - Linux/Windows/OSX

- Phone app for field usage

- Stand-alone Web browser interface

- Citable database

  - Harvest projects from e.g. GitHub

  - Cross-referencing and module reuse (DOI)

  - Ratings and simple feedback

  - Alternative component suggestions

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Outcomes/Benefits

OpenPlant
OPEN TECHNOLOGIES FOR PLANT SYNTHETIC BIOLOGY

- **A goto methodology for documenting open hardware**

  - Inherently modular

  - Verifiable

  - Useful beyond OpenPlant

  - Self-contained format

  - Open API

- Benefiting to all open hardware project

  - Already five IRNAS projects

  - Several open plant projects

  - Journal commitment

New Open Hardware Journal

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