Programming: The Next Step

Group presentations

1. Sit with your supervisor
2. Present 2 minutes
3. Brief feedback afterwards

Today

Approaching the top

- Alpha testing
- Superpowers^2
- Report / user manual
- Final presentation
- Deadlines

Alpha Testing

Bug report

For each bug specify

- the steps to reproduce
  - description of what went wrong (user perspective)
  - when relevant: systems specs where error occurred (OS, browser)
- what you expected to see
- what you saw instead
  - provide a screenshot

Stink bugs

Insect

Pentatomidae are a family of insects belonging to the order Hemiptera, which are generally called stink bugs or shield bugs. Wikipedia

Scientific name: Pentatomidae

Higher classification: Pentatomoidea

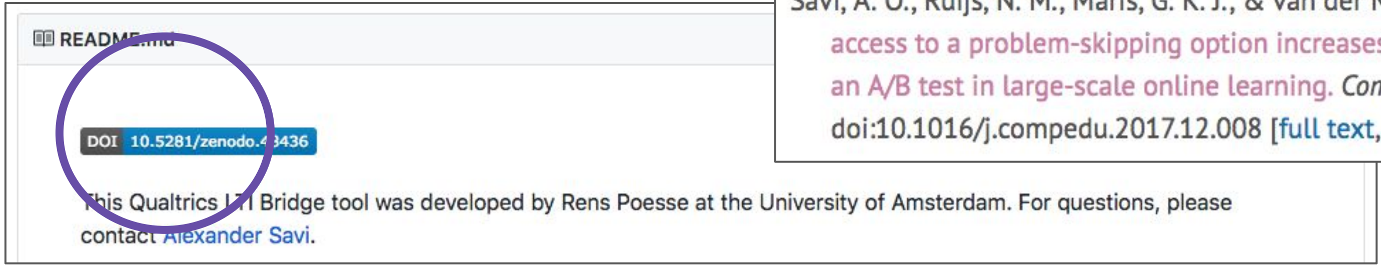
Rank: Family

Lower classifications

View 10+ more

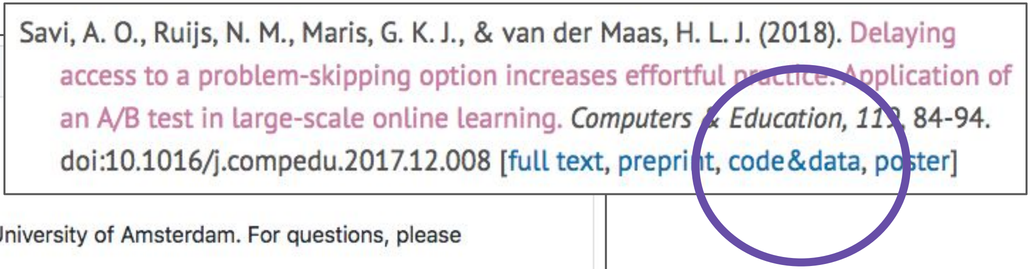
Superpowers^2

- Build a package in R with Karl Broman and RStudio, or in Python
- Publish your code, because it's good enough
- Cite your code with a DOI
- Deploy your Shiny app on the web


README.md

DOI 10.5281/zenodo.43436

This Qualtrics LTI Bridge tool was developed by Rens Poesse at the University of Amsterdam. For questions, please contact Alexander Savi.


Savi, A. O., Ruijs, N. M., Maris, G. K. J., & van der Maas, H. L. J. (2018). Delaying access to a problem-skipping option increases effortful practice: Application of an A/B test in large-scale online learning. *Computers & Education, 119*, 84-94. doi:10.1016/j.compedu.2017.12.008 [full text, preprint, code&data, poster]

Final Presentation

Finalize shared presentation.

1. Goal
2. Design
3. Implementation
    a. Problems? Solutions?
    b. What would you do differently next time?
4. Verification
    a. How did testing go?
    b. What would you change if you had more time?
5. Demo

Present next week (Thursday, May 31st) in 5 minutes.

Report / User Manual

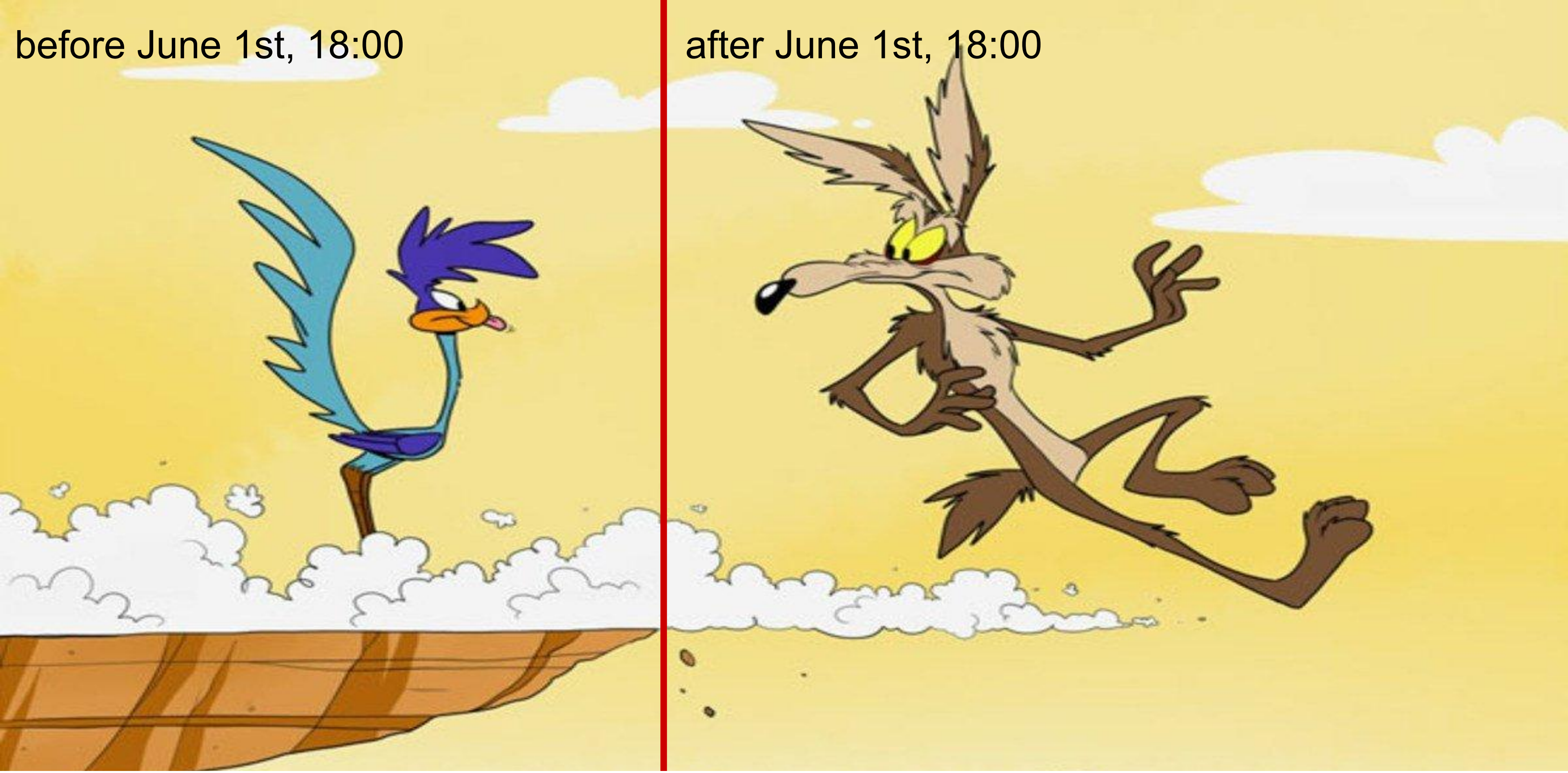
What

1. Theoretical background describing task / technique
2. Design (user and software perspective) including a flow-chart
3. Screenshots and examples of the software
4. Step-by-step manual for users, including installation guide

How

- Separate report, *or*
- Mimic the style of the used language or repository
  - manual
  - vignette
  - GitHub's README.md
  - interactive document with Shiny elements

Keep the *user* in mind! Make sure it's clear and easy to use. Have someone proofread!



Upload presentation (pdf), report, and software (out-of-the-box) zipped in YourName.zip

Grading

60% software

- Functionality
- Coding style
- Within code documentation
- Version control
- Testing (verification) procedure

20% documentation

- Manual incl. task/technique description (requirements), flowchart of design, how-to for users

20% presentation

- Final 5-minute presentation
  - Preparation (e.g., working demo, within time limit)
  - Clarity (e.g., goal, design, implementation, functionality, screenshots)
  - Difficulty of the project
  - Quality of the software (based on what's shown)

NB. *Your chosen topics will not be equally difficult, so effort will too be taken into account.*

Questions?

Happy coding!