

# 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<sup>2</sup>
- Report / user manual
- Final presentation
- Deadlines

# Alpha Testing

## Bug report

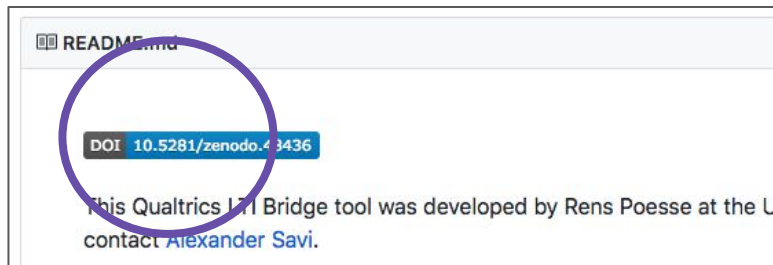
For each bug specify

- 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



# Superpowers<sup>2</sup>

- 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](#)



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!**



before June 1st, 18:00



after June 1st, 18:00



Email presentation (pdf), report, and software ([out-of-the-box](#)) to Alexander Savi

# 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!

