



# R PACKAGE DEVELOPMENT AND VALIDATION

The Validation Report

# Welcome

- Validation Reports in R packages



# VIGNETTE VALIDATION

# {valtools} Reports

- Reports are Rmd and therefore infinitely customizable
- Outputs of Rmd from validation to live in new output location
- Serves as “snapshot” in time of package state

# Validating

- `vt_validate_report()` executes the Rmd and saves output
  - Assumes package is installed in most current state
- `vt_validate_source()` temporarily installs the package and executes the validation Rmd

# Validation Behavior

- Which report, location of output, and output name controlled by the validation.yml
  - report\_rmd\_name
  - output\_dir
  - report\_naming\_format



INCLUDED TEMPLATES

# Requirement Adoption Report

- Signature table looks for users with roles “Validation Lead” and “Tester”, case-insensitive. At least one must be present via `validation.yml/vt_add_user_to_config()`
- Only includes Requirement child files by looking for filenames with “req”. Ordering is alphabetical.



# Validation Report

- All users are added to signature table
- Adds authorship tables for Requirements, Test Case, Test Code, and Functions
- Adds traceability matrix
- Includes all child files via vt\_get\_child\_files()



# ADVANCED USAGE

# Customization options

- Modify the report RMD generated via template
- Write a report RMD from scratch
- Propose a new template via {valtools} issue/PR
- Switch between multiple RMDs by updating validation.yml as the project cycles through adoption and validation phases



# COMPLETE EXERCISE 05