



# R PACKAGE VALIDATION WORKSHOP

Managing  
Validation Projects

# Welcome

- Multiple Reports
- Ordering validation elements
- Adding and removing users



# MULTIPLE REPORTS

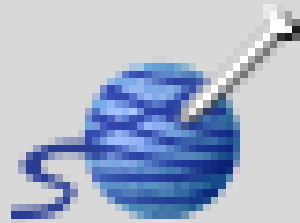
# {valtools} Reports

- Key stake holders may not be programmers
- Not all stakeholders need a full report

# Managing multiple reports

- Requirements report – confirming with key stakeholders expectations
- Validation report – Runs code and versions outputs
- validation.yml
  - Controls which report is run
  - Output location

# Validation Report Rendering



- `Valtools::vt_validate_report()`
  - Automatically runs report
  - Versions and Dates
  - Runs in fresh R session

# vt\_validate\_report Behavior

```
package: sample.package  
working_dir: vignettes  
output_dir: inst  
report_rmd_name: Requirement_Adoption.Rmd  
report_naming_format: Requirement_Adoption_Report_{package}_v{version}_{date}  
- usernames:
```

- output\_dir
- report\_rmd\_name
- report\_naming\_format



# VALIDATION ELEMENT ORDERING



# Ordering options

- Requirements, Test Cases and Test Code are developed over time
- Order/Importance of each changes over time

# Given Set of Requirements, How would you order them?

- Numeric Vector Expectations
- Data Ingestion Expectations
- Character Vector Expectations
- Data Writing Expectations

# Ordering options

- Updating Requirements and Validation Reports by hand
  - Ensure order matches across updates
  - If any numbering impacted, need to update

# Ordering options

- `vt_get_child_files(loc="yaml")`
  - Vector of files in order of yaml
- `vt_file()`
  - Serialized across vectors



# USERS ACROSS TIME



Change is the only constant.

Heraclitus

“ quote fancy

# interactive prompting from vt\_use\_\*

```
> vt_use_req("requirement_001")
Item created:requirements/requirement_001.md
User `ehhughes` does not exist in the config file
Add user to config file?
[Y/n]: Y
Please supply some information for recording users within the package.
Note, that this information can be updated at any time though
`vt_add_user_to_config()`

Please provide the name of the person associated with the username
`ehhughes` and press `Enter`.
Name: Ellis Hughes

Please provide the title of the person associated with the username
`ehhughes` and press `Enter`.
Title: Programmer

Please provide the role of the person for this validation associated with
the username `ehhughes` and press `Enter`:
Role: Requirements writer

User `ehhughes` added to validation config file.
Filename(s): requirement_001.md added to validation config file.
* Modify 'C:/Users/ehhughes/Documents/Projects/R PACKAGE VALIDATION FRAMEWORK/test1234/vig
nettes/validation/requirements/requirement_001.md'
> |
```

# Validation Users

```
1 package: sample.package
2 working_dir: vignettes
3 output_dir: inst
4 report_rmd_name: Requirement_Adoption.Rmd
5 report_naming_format: Requirement_Adoption_Report_{package}_v{version}_{date}
6 usernames:
7   a_user:
8     name: A user
9     title: Programmer
10    role: Validation Lead
11   b_user:
12     name: B user
13     title: Manager
14     role: Requirement Author
15   user_b:
16     name: Val A Dashun
17     title: Programmer II
18     role: Tester
```



# Validation Team Recording options

- vt\_add\_user\_to\_config()
- vt\_drop\_user\_from\_config()



# COMPLETE EXERCISE 06