Develop qPackages with qCreate: : CHEAT SHEET
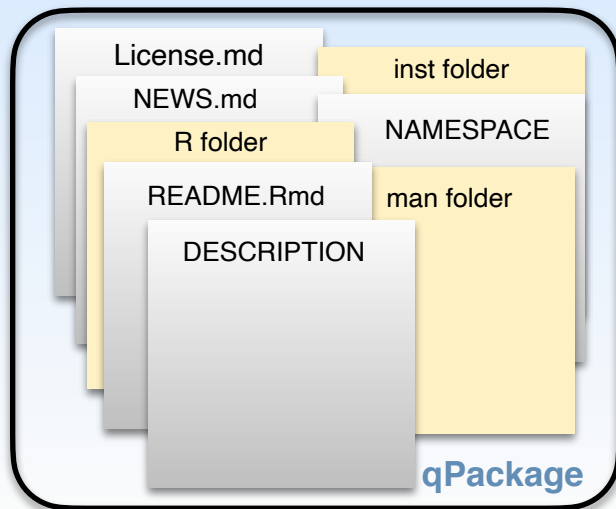
Basics qCreate is composed of a set of functions which aims to facilitate any users willing to contribute to the qPackages ecosystem. The functions provided allow to easily **set up** a qPackage with the required files and folders, **import any datasets** into the package, **clean and standardise** the dataset in order to be in line with qPackages requirements, and finally **export** them into a database. This facilitates the interoperability, contrast, and comparison of data within and between qPackages.
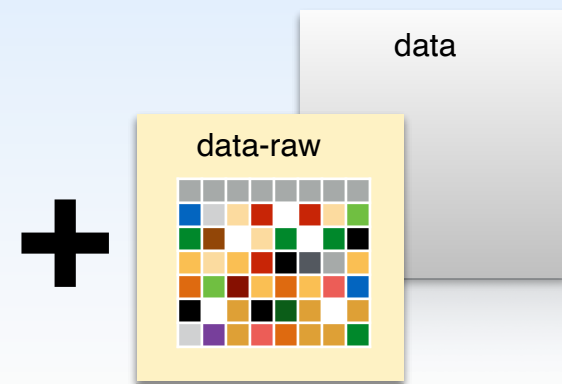
PROCESS

1. Collect

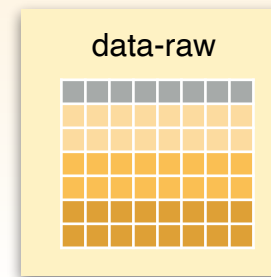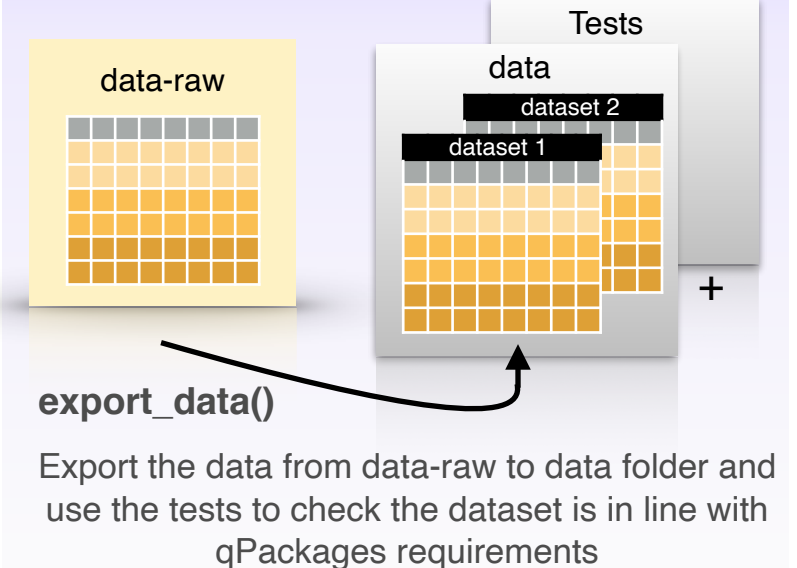Create a qPackage with **setup_package()** and then, import external data with:

License.md
NEWS.md
R folder
README.Rmd
DESCRIPTION
inst folder
NAMESPACE
man folder
qPackage

import_data()

data

data-raw

2. Correct

Clean the dataset with these functions:

standardise_dates()
+
standardise_titles()
=

data-raw

data-raw

3. Connect

Tests

data
dataset 2
dataset 1

export_data()

Export the data from data-raw to data folder and use the tests to check the dataset is in line with qPackages requirements

FUNCTIONS

1. setup_package()

```
setup_package(package,
              contributor,
              role,
              orcid)
```

The name of the package has to start with q

Enter the names, surnames, the role, and orcid number of all the users contributing to the qPackage

2. import_data()

```
import_data(dataset,
            database)
```

The dataset consists of one table that will be cleaned in order to be imported into a database.

Databases are composed of multiple superposed datasets that are cleaned in a standardized way. One example could be dataset = "IEADB", database ="agreement"

3. standardise_dates()

```
standardise_dates(signature)
```

Transform the dates column into messydt format

Signature	Signature	Format
13 November 1999	1999-11-13	messydt
1980	1980-01-01:1980-12-31	messydt
1980.08.03	1980-08-03	messydt
?	NA	messydt
01/03/2017	2017-03-01	messydt
2010-00-00	2010-01-01:2010-12-31	messydt
29 Apr 1980	1980-04-29	messydt

4. standardise_titles()

```
standardise_titles(title)
```

The column with treaty titles to be standardized

Title	Title
Accord de Paris	Paris Agreement
nootka sound convention	Nootka Sound Convention
El tratado de libre comercio	The Free Trade Agreement
Japan-korea fishing agreement	Japan-Korea Fishing Agreement

5. code_agreements()

```
code_agreements(dataset,
                title,
                signature)
```

The function extracts meaningful information (like type of treaty, the parties or acronyms) from the title and paste it all together with the signature year to generate informative qID.

Title	Signature	qID
Paris Agreement	2015-12-12	PARIS_2015A
Nootka Sound Convention	1790-10-28	NTKSND_1790A
Protocol To The Eastern Pacific Ocean Tuna Fishing Agreement	1983-03-15	ESPOTF_1983P:ESPOTF_1983A
Japan-Korea Fishing Agreement	1908-10-31	JPN-KOR[KRF]_1908A

6. export_data()

```
export_data(dataset,
            database,
            source)
```

The database name in which all similar datasets will be exported to

Indicate the URL from which the external dataset has been downloaded