

# Types of attributes and methods of the class ObservationSet

## Notation

- $O$  denotes the number of observations.
- $N$  denotes the number of names associated with the observations.
- + denotes public attributes and methods (i.e. exported attributes and methods).
- – denotes private attributes and methods (i.e. attributes and methods not exported).

## Attributes

+ **data**: list(named list)

\$observation1

name 1	vector
name 2	vector
...	...
name $N$	vector

\$observation2

name 1	vector
name 2	vector
...	...
name $N$	vector

...

\$observationO

name 1	vector
name 2	vector
...	...
name $N$	vector

+ **names**: vector(character)

+ **item\_key**: character

+ **year\_key**: character

## Methods

+ **observation.set**(**data**: see attribute **data**, **item\_key**: see attribute **item\_key**,  
**year\_key**: see attribute **year\_key**, **names**: see attribute **names**): ObservationSet

+ **subset**(**object**: ObservationSet, **indexes**: vector(numeric) or vector(logical), **keep\_names**: logical):  
ObservationSet

+ **as**(**to**: transactions): transactions (class from the package arules)

+ **get\_all\_items**(): vector

+ **get\_itemsets**(): list(vector)

+ **get\_items\_from\_info**(**info**: named list, **presence**: character, **additional**: vector(character)): vector  
or named list

- + **get\_info\_from\_items**(items: vector, info\_names: vector(character), presence: character): vector  
or named list
- + **get\_complex\_obs**(): ObservationSet
- + **get\_simple\_obs**(): ObservationSet
- + **get\_obs\_from\_items**(items: vector, presence: character): ObservationSet
- + **get\_obs\_from\_info**(info: named list, presence: character): ObservationSet
- + **complexity\_ratio**(items: vector): named vector(numeric)
- + **complexity\_items**(items: vector): named vector(numeric)
- + **co\_occurrence\_matrix**(items: vector): named matrix(numeric)
- **has\_temporal\_data**(): logical