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SpaDES virtual workshop

June 11-13th, 2024



OUTLINE

- 1. Environments in R
- 2. simList
- 3. simList accessors



ENVIRONMENTS IN R

"The job of an environment is to associate, or bind, a set of names to a set of values." <u>Environments · Advanced R. (had.co.nz)</u>

They are similar to lists, with a few exceptions:

- Every name in an environment is unique.
- The names in an environment are not ordered
- An environment has a *parent*.
- Environments have reference semantics.

For SpaDES purposes it is important to know thes

- The "global environment" (globalenv()). Commonly the workspace and where most R users manipulate their objects.
- The "current environment" (environment()). For most R users it is the same as globalenv(). In SpaDES, users will have to interact with the `simList` environment but also understand that functions have their own environments.

It's actually an *environment*

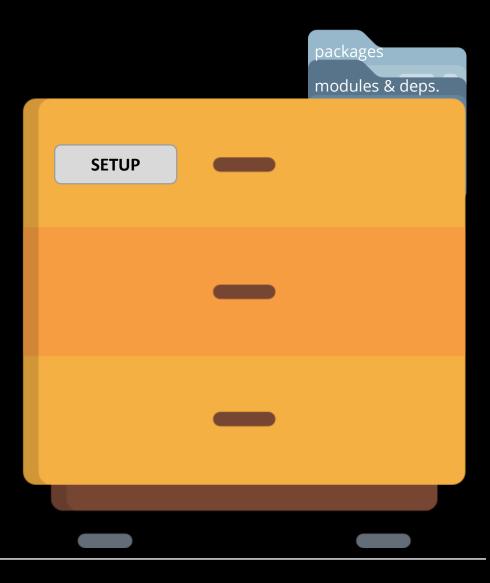
The simList



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It has particular slots that ensure the correct functioning of a SpaDES workflow

It contains important metadata, including package dependencies



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		packages modules & deps.
SETUP		in/outputs params. functions
OBJECTS	_	
	_	

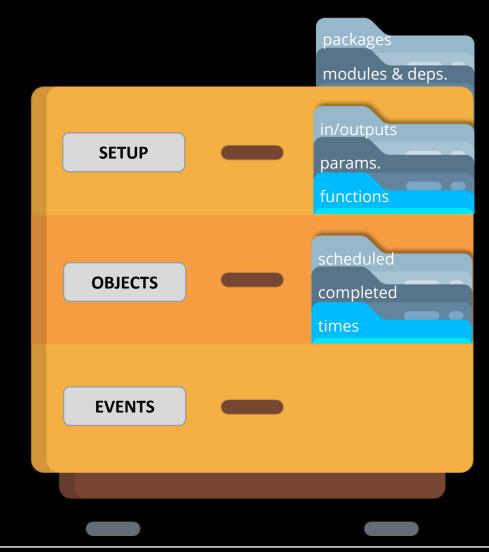
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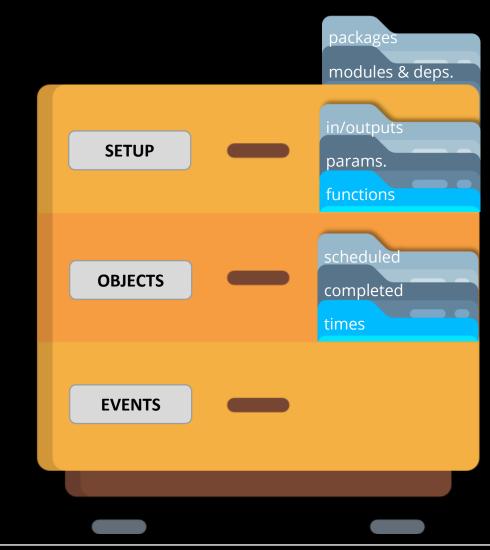
It contains all module code and objects (parameters, inputs and outputs)

It contains the list of completed and scheduled events and the timings at which they happened



SIMLIST ACCESSORS

"accessor functions" facilitate extracting information from the simList





TIME TO LOOK AT SOME CODE



Robust and nimble scientific workflows, using SpaDES

Workshop Agenda

This is a *hands-on* workshop

Please **ask questions**, share your troubles and successes

Last 15 min of each WOYO is for discussion

We are always available via **Teams chat**