Modules (Lmod) environment system

We are using module system called Lmod in Oulu University computing servers. It is installed, because there are plenty of software versions / libraries available for users. This is short guide for using module system. It is really straightforward to use. Module system is also used in CSC Rahti and Puhti supercomputers

Loading module is done by command module load software. Command does not output anything. Software is usually named with versions, examples: matlab/2019b, matlab/2018a etc.

```
module purge
```
command unloads all the loaded module files.

```
[jekorhon@kataja6 ~]$ module load matlab
[jekorhon@kataja6 ~]$ module list
Currently Loaded Modules:
  1) matlab/R2020a
```

Unloading module can be done by one software at the time or unloading them all. If you want to unload one software, type command module unload matlab/2019b.

```
[jekorhon@kataja6 ~]$ module unload matlab
[jekorhon@kataja6 ~]$ module list
No modules loaded
```

There is also some short instructions included in module system. Not all software have these. Command for this example is module spider julia/1.3.1

```
[jekorhon@kataja6 ~]$ module spider julia/1.3.1
```

```
julia: julia/1.3.1
```

Description:
Julia programming language
This module can be loaded directly: module load julia/1.3.1

Help:
The full documentation for Julia 1.3.1 is available at:

https://docs.julialang.org/

as well as many great tutorials and learning resources:

https://julialang.org/learning/
Another example:

[jekorhon@kataja6 ~]$ module spider matlab
---------------------------------------------------------------------------
matlab:
---------------------------------------------------------------------------
  Versions: matlab/R2019a matlab/R2019b matlab/R2020a
---------------------------------------------------------------------------

For detailed information about a specific "matlab" package (including how to load the modules) use the module's full name.
Note that names that have a trailing (E) are extensions provided by other modules.
For example:
  $ module spider matlab/R2020a

More information can be found from Aalto University's guide:
https://scicomp.aalto.fi/triton/tut/modules.html