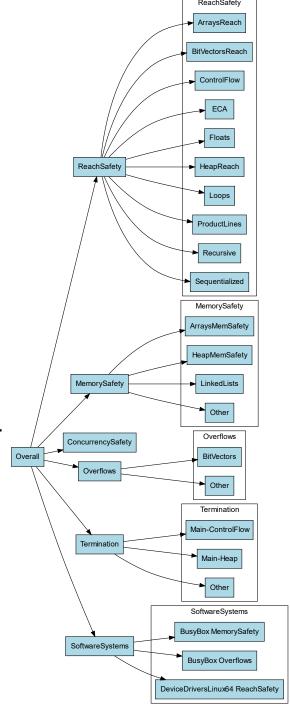
- ► A survey for SV-COMP <u>categories</u>:
- ReachSafety (consist of the following sub)
  - ReachSafety-Arrays
  - ReachSafety-BitVectors
  - ReachSafety-ControlFlow
  - ReachSafety-ECA (event-condition-action)
  - ReachSafety-Floats
  - ReachSafety-Heap
    - ✓ data structures on the heap, pointer aliases, function pointers.
  - ReachSafety-Loops
  - ReachSafety-ProductLines
  - ReachSafety-Recursive
  - ReachSafety-Sequentialized
- Specification:

CHECK( init(main()), LTL(G ! call(\_VERIFIER\_error())) )



- MemSafety (consist of the following sub)
  - MemSafety-Arrays
  - MemSafety-Heap
  - MemSafety-LinkedLists
  - MemSafety-Other
- ConcurrencySafety
  - ConcurrencySafety-Main
- Overflows
  - Overflows-BitVectors
  - Overflows-Other

- Termination
  - Termination-MainControlFlow
  - Termination-MainHeap
  - Termination-Other
- SoftwareSystems
  - Systems\_BusyBox\_MemSafety
  - Systems\_BusyBox\_Overflows
  - Systems\_DeviceDriversLinux64\_ReachSafety

- Overall
- Falsification
  - The category Falsification consists of all verification tasks with safety properties and the results "correct TRUE" and "incorrect TRUE" are not counted. (The weighting schema is the same as for Overall.)

Points	Reported result	Description
0	UNKNOWN	Failure to compute verification result, out of resources, program crash.
+1	FALSE correct	The error in the program was found and a violation witness was confirmed.
-16	FALSE incorrect	An error is reported for a program that fulfills the specification (false alarm, incomplete analysis).
+2	TRUE correct	The program was analyzed to be free of errors and a correctness witness was confirmed.
+1	TRUE correct, witness unconfirmed	The program was analyzed to be free of errors but the correctness witness was not confirmed.
-32	TRUE incorrect	The program had an error but the competition candidate did not find it (missed bug, unsound analysis).