Package: sanitizers (via r-universe)

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Type Package

Title C/C++ Source Code to Trigger Address and Undefined Behaviour Sanitizers

Version 0.1.1

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Description Recent gcc and clang compiler versions provide functionality to test for memory violations and other undefined behaviour; this is often referred to as ``Address Sanitizer'' (or 'ASAN') and ``Undefined Behaviour Sanitizer'' ('UBSAN'). The Writing R Extension manual describes this in some detail in Section 4.3 title ``Checking Memory Access''.

This feature has to be enabled in the corresponding binary, eg in R, which is somewhat involved as it also required a current compiler toolchain which is not yet widely available, or in the case of Windows, not available at all (via the common Rtools mechanism).

As an alternative, pre-built Docker containers such as the Rocker container 'r-devel-san' or the multi-purpose container 'r-debug' can be used.

This package then provides a means of testing the compiler setup as the known code failures provides in the sample code here should be detected correctly, whereas a default build of R will let the package pass.

The code samples are based on the examples from the Address Sanitizer Wiki at <https://github.com/google/sanitizers/wiki>.

License GPL (>= 2)

URL https://github.com/eddelbuettel/sanitizers, https://dirk.eddelbuettel.com/code/sanitizers.html

BugReports https://github.com/eddelbuettel/sanitizers/issues

Repository https://eddelbuettel.r-universe.dev

RemoteUrl https://github.com/eddelbuettel/sanitizers

RemoteRef HEAD

RemoteSha 68fde939fe8c94dbb49b59491c983efb2f003070

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Author(s)

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