$wgGroupPermissions['user']['read'] = true; $wgGroupPermissions['*']['read'] = true;

Monitor Collection Phase

From Forge Wiki

(March 30, 2015 -> June 10, 2015)

In this phase, participants provide monitors for either programs or traces, depending on the entered track. Participants can decide to compete on a benchmark described by a pair (team_id, benchmark_number) where team_id is the id of the team that has provided the benchmark and benchmark_number is the number of the benchmark provided by that team.

Contents

All Tracks (Expected Output)

In all tracks a tool should print ‘Property Satisfied’ if the monitored property is satisfied and ‘Property Violated’ if the monitored property has been violated.

Individual tools may output additional information about the monitoring process, available with command-line options. This is encouraged so that output can be checked and confidence in the results established. The following outputs are encouraged:

- Number of events processed, with a breakdown of event kind (option -events);
- Reason for violations or satisfaction i.e. number of events after which a violation occurs, the event at which the violation occurred, variable bindings that relate to the violation (option -witness).
- The trace of events processed by the monitor (option -trace).

All Tracks (Wiki)

In all tracks, it is required that participants put a copy of the specification being used on the relevant Wiki page.

For example, if team 2 wants to compete on benchmark 1 of team 3 in track A then that participant would navigate to A/team3/benchmark1 on the Wiki and enter the specification for benchmark (1,3) written in team 2’s specification language. It is expected that a description of this language will appear in that team’s description on the track page A.

The information added to the Wiki should consist of:

- A formal description in the (well-defined) specification language of choice (which should be referenced).
- A (short) explanation of why this captures the given property.

- A (short) description of how a monitor can be generated from this specification. In addition, a link to a script generating the monitor should be placed on the FTP and associated with the description.

An additional section for this information will be added to the end of each benchmark page.

All Tracks (FTP)

A team competing in each track should provide:

- An installation script for their tool OR a jar file containing their tool.
- A script to install all dependencies required on top of a DataMill Virtual Machine (see https://datamill.uwaterloo.ca/ - script setup.sh). Please contact the chairs by May 22 if you need help with this.

This submission should be placed under:

/submissions/<track_name>/<your_team>

The per-benchmark contributions should be placed under:

/submissions/<track_name>/<your_team>/<their_team_id-benchmark_number>/

Please note that all scripts should be stand-alone and should execute on the DataMill Virtual Machine. Scripts should also be well-documented so that they can be inspected for correctness.

C Track (FTP)

A contribution for the C track consists of

- A script to perform instrumentation/setup the monitoring. Where possible please use any instrumentation already provided.
- A script to run the monitored program. This should ideally be derived from a script provided with the benchmark for running the unmonitored program.

If your tool does not fit this setup, then please contact the chairs before May 22.

Java Track (FTP)

A contribution for the Java track consists of:

- An AspectJ file containing all necessary instrumentation and calls to the relevant monitor.
- A script to perform instrumentation. Ideally this would be a single call to the AspectJ compiler as in the benchmark submission.
- A script to run the monitored benchmark. Ideally this would be a single call as in the benchmark submission.

Offline Track (FTP)

A team competing in the Offline Track should supply:

- A script that takes two inputs: 1) the location of a trace file, 2) the location of a specification file.

A contribution for the Offline track consists of:

- A specification file (preferably the same as that given on the Wiki)

Evaluation will consist of using the generic team script with the benchmark trace and the provided specification file. If this architecture is not possible for a team, then please contact the chairs before May 22.

If it is not possible to perform instrumentation via AspectJ, then please contact the chairs before May 22.

Retrieved from "https://forge.imag.fr/plugins/mediawiki/wiki/crv15/index.php/Monitor_Collection_Phase"

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