Artifact - Historia: Refuting Callback Reachability with Message-History Logics

ACM Reference Format:

1 INTRODUCTION

This document explains the artifact for the Historia paper [1]. The goal of this document is to first give a set of instructions for reproducing the experimental results and then give a technical explanation of how the implementation connects to the technical contributions.

2 PREREQUISITES - RUNNING THE HISTORIA DOCKER CONTAINER

We have configured the experiments to be run within a Docker container provided with this artifact. This Docker file may be found in the root directory of this archive and is labeled historia.docker.Please follow the instructions to install docker from https://docs.docker.com/engine/install/.

Importing the docker container can be done with the following command.

```
docker import historia.docker
```

The docker container may be run with the following command. [TODO: expose web port and swap with jupyter command]

```
docker run --memory=8G --memory-swap="16G" --rm -it historia bash
```

All subsequent steps may be done through the web interface at http://localhost:8080.

3 REPRODUCING THE HISTORIA RESULTS

In this section, we explain how to generate the tables shown in the evaluation section. [TODO: system cfg and slowness adding to timeouts]

3.1 Running RQ1

3.2 Running RQ2

REFERENCES

[1] Shawn Meier, Sergio Mover, Gowtham Kaki, and Bor-Yuh Evan Chang. 2023. Historia: Refuting Callback Reachability with Message-History Logics.. In Object-Oriented Programming Systems, Languages, and Applications (OOPSLA).

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