

Wikiprint Book

Title: Checking Human Machine Interactions

Subject: Java Path Finder - summer-projects/2010-hmi

Version: 4

Date: 02/22/2013 12:06:11 PM

Table of Contents

Checking Human Machine Interactions	3
Abstract	3
Contact	3
Program & Timeline	3
Repository	3
Description	3
Project Blog	3

Checking Human Machine Interactions

Abstract

This project will experiment with the use of JPF for checking properties of systems involving humans, user interfaces and the machine being controlled. It will focus on expressiveness of relevant properties, as well as analysis capabilities.

Contact

student: Sebastien Combefis <email> <SC>

mentor: Dimitra Giannakopoulou <email> <dimitra.giannakopoulou@...> <DG>

co-mentor:

Program & Timeline

This project is funded by the [Google Summer of Code \(GSoC\)](#) program. It follows the [GSoC timeline](#) (start 05/24, finish 08/16).

Repository

The sources for this project are available from a Mercurial repository on <http://bitbucket.org/>

Description

The first part of the project will involve experimenting with the current JPF support in order to model human machine interactions and check properties. As a result, we will identify types or patterns of properties and analysis capabilities that JPF will need to be extended with.

The second part of the project will involve implementation of the identified extensions and further experimentation with examples in order to improve the usability.

We expect to use the following capabilities of JPF:

- listeners for property verification
- learning within the compositional verification extension for identifying the part of the system behavior that needs to be controlled through an interface.

Project Blog

(most recent on top)

2010-05-07 (NR) - project page created

2010-05-21 (DG) - project details added to wiki