Tool Demo: The MPS Language Workbench

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Abstract—The JetBrains MPS is a comprehensive environment for language engineering. New languages can be defined as standalone languages or as modular extensions of existing languages. Since MPS is a projectional editor, syntactic forms other than text are possible, including tables or mathematical symbols. In this session, we will TODO

Keywords-language engineering, language extension, language composition

I. Introduction and Motivation

Finding and working with the right abstractions for describing a problem or its solution is one of the central pillars of software engineering. Once the right abstractions have been found, things can be expressed more concisely, are easier to understand, the description can be analysed and other artifacts can be synthesized. A language is the purest form of abstraction, adding a suitable concrete syntax to work with the abstractions effectively. An IDE that supports syntax coloring, code completion, error annotation and refactoring makes working with the language and its abstractions even more productive.

Many software systems are composed from several concerns, each of them expressed with its own set of abstraction, possibly by different people, some of them may not even be programmers. So, to describe a real-world system, ideally several languages are necessary.

Looking at software engineering in this light, an environment is needed in which language creation is easy, languages can be composed and the concrete syntax is very flexible to encompass the needs of all the stakeholders involved in the software system. The JetBrains MPS open source language workbench is such as system.

II. How MPS Works

MPS is a projectional editor.

III. CONTENTS OF THE DEMO

IV. WHAT THE AUDIENCE WILL TAKE AWAY

V. CONCLUSION

The conclusion goes here, this is more of the conclusion

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