Designing a Library for Model Analyses using MPS

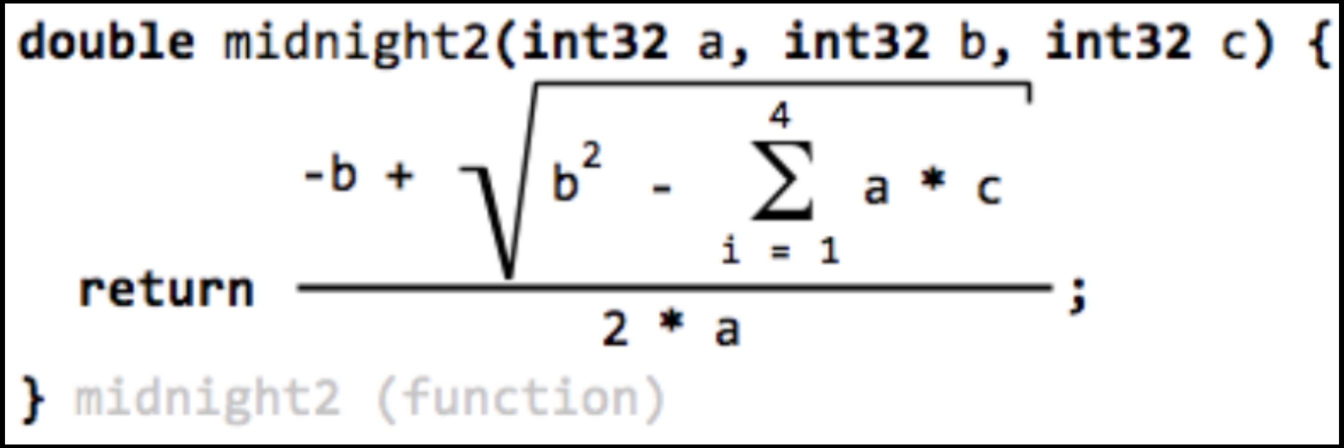
Anthony Anjorin

For a long time there's been a style of software development, **language oriented programming**, that seeks to describe software systems using a collection of **domain specific languages** (e.g., the Unix tradition of “little languages”)

Language Workbenches are a new breed of tools that aim to make language oriented programming a **modern** and **viable** approach

Martin Fowler
(https://www.martinfowler.com/articles/languageWorkbench.html)

MPS
mbeddr
engineering the future of embedded software



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$$\text{return } \frac{-b + \sqrt{b^2 - \sum_{i = 1}^{4} a * c}}{2 * a};$$

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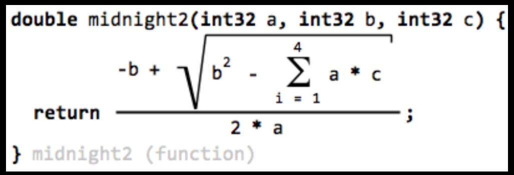

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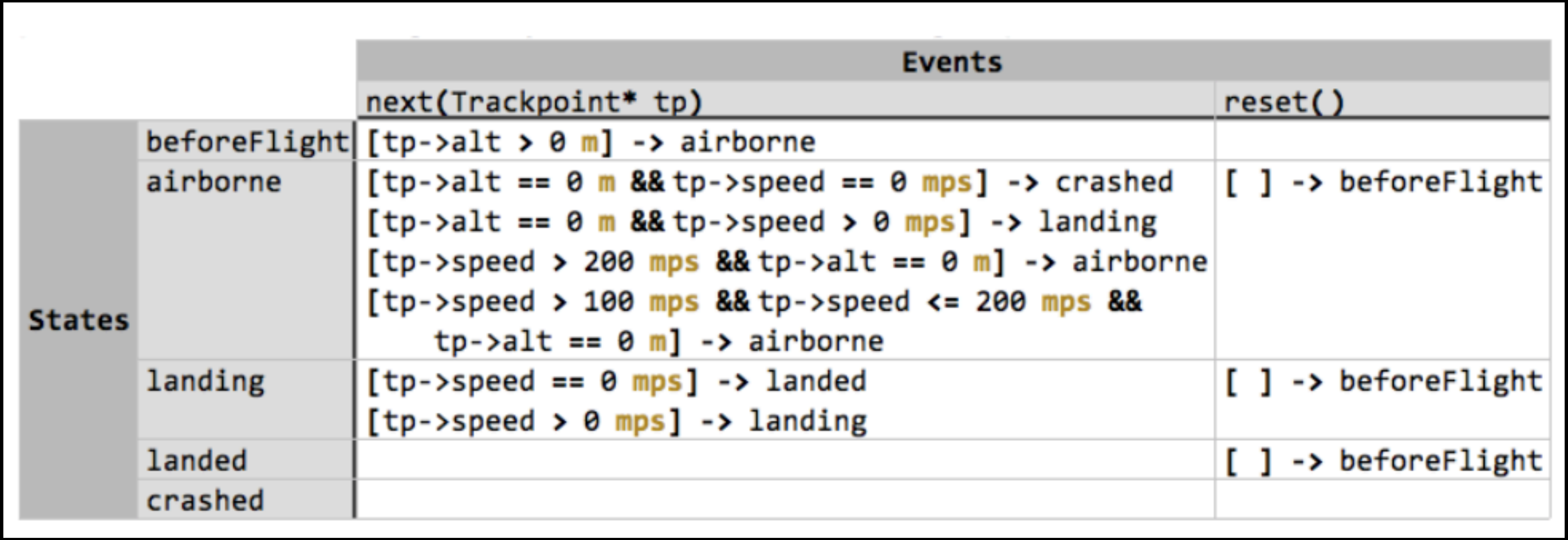

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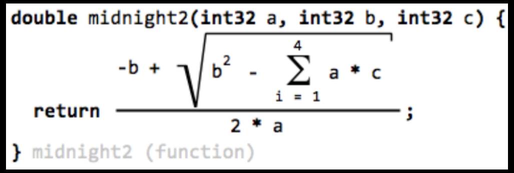

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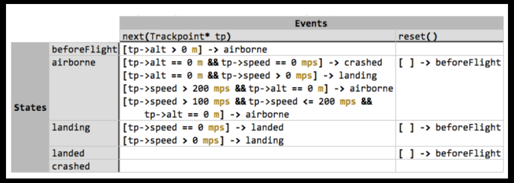

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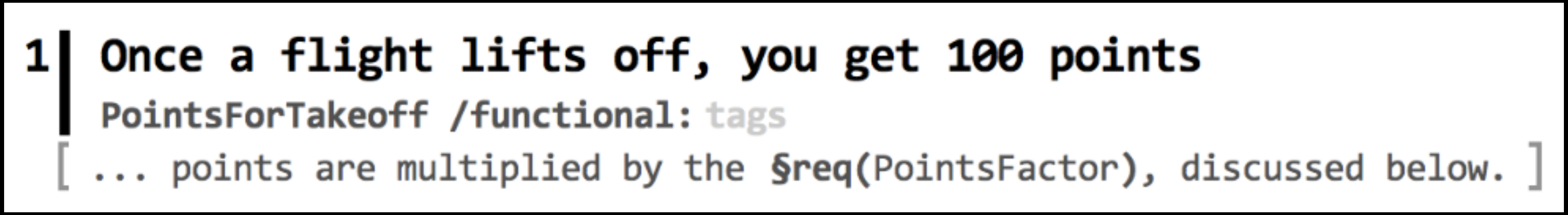

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PointsForTakeoff /functional: tags

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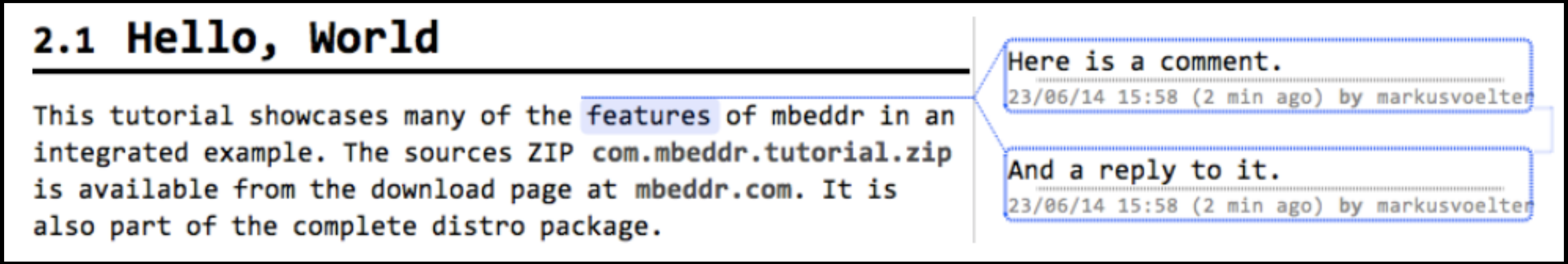

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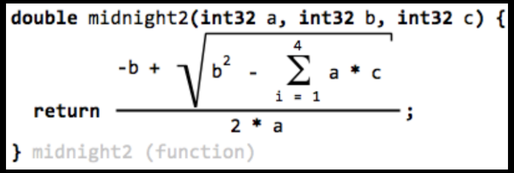

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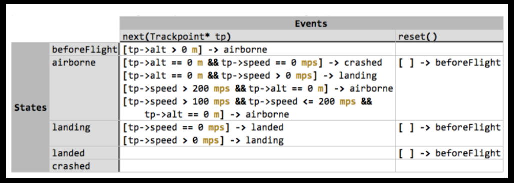

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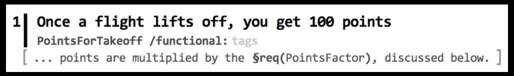

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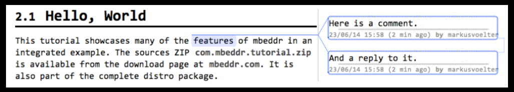

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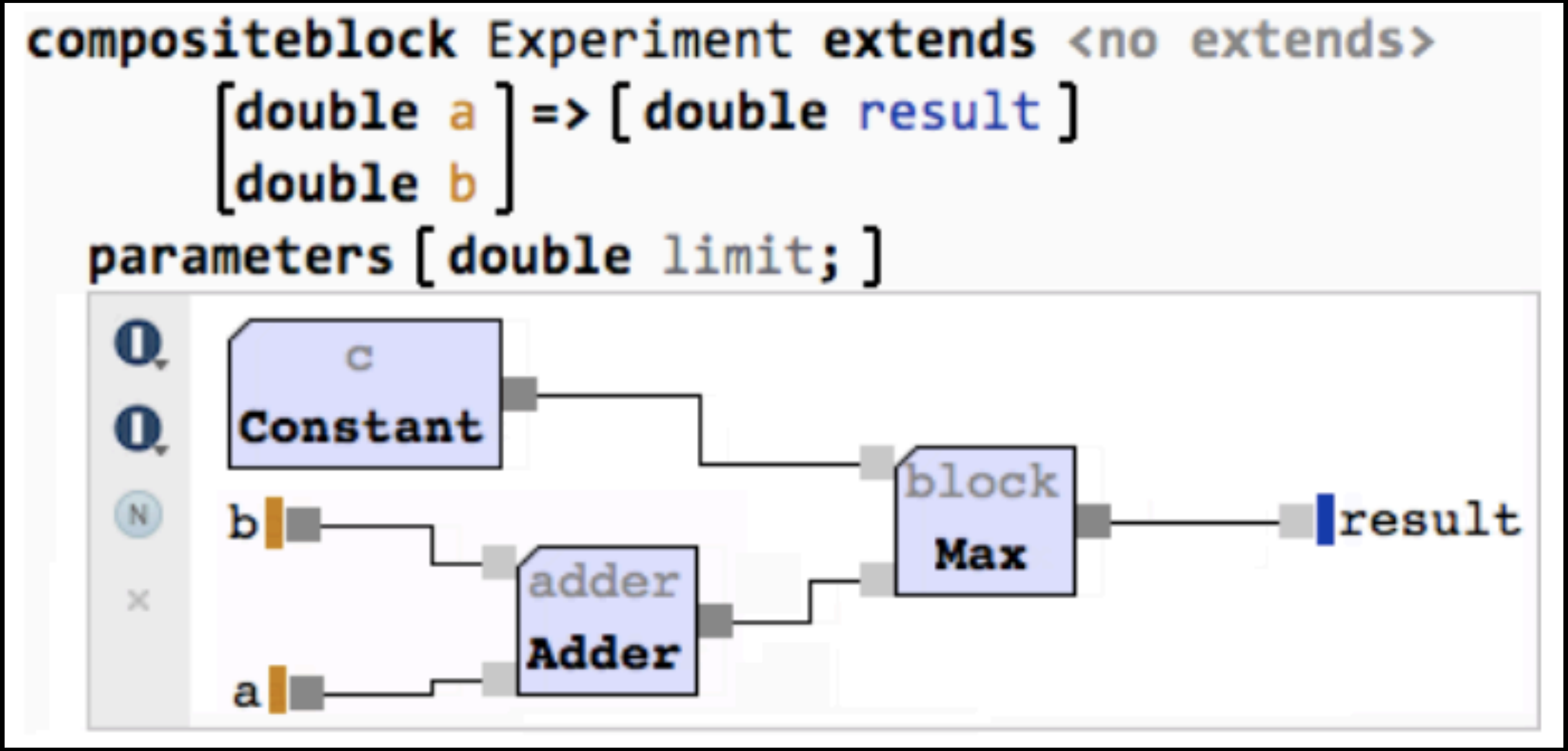

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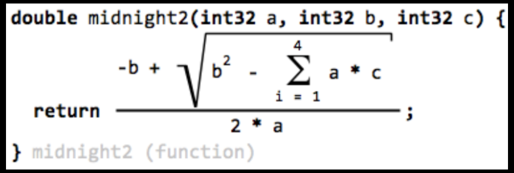

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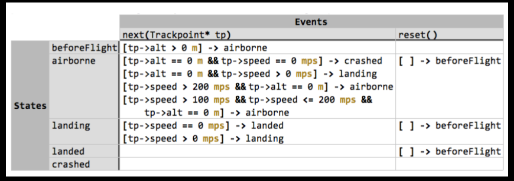

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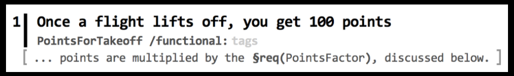

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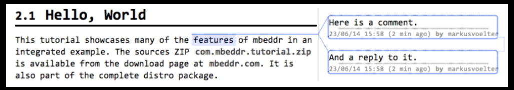

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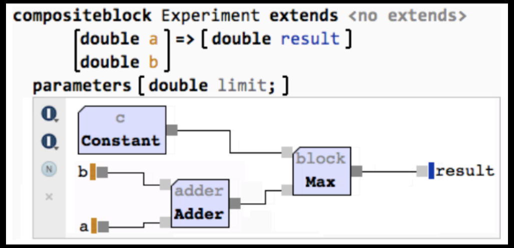

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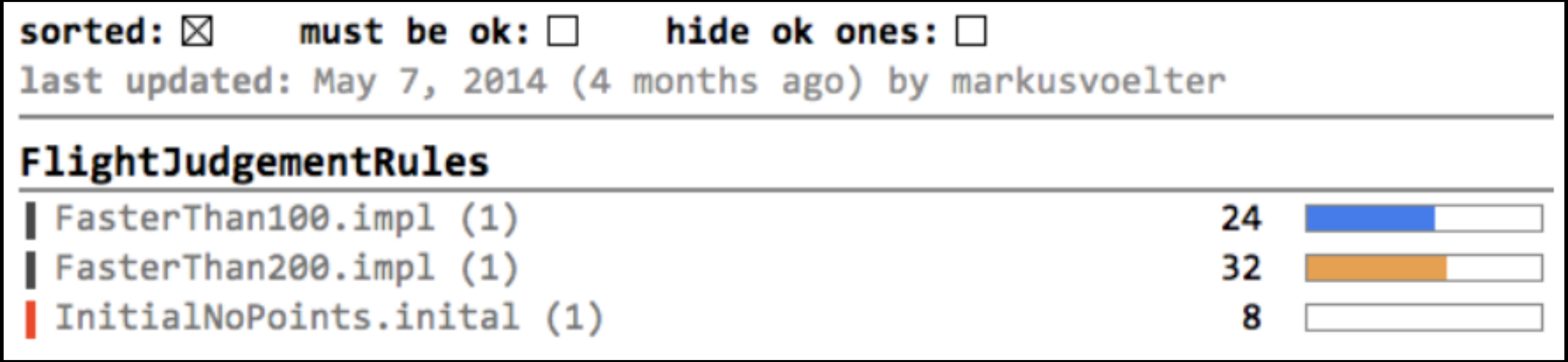
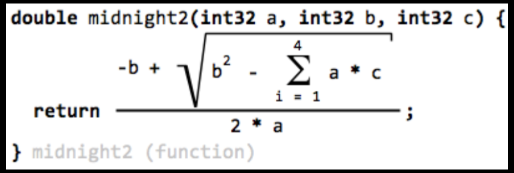


sorted: ☒ must be ok: ☐ hide ok ones: ☐
last updated: May 7, 2014 (4 months ago) by markusvoelter

FlightJudgementRules

FasterThan100.impl (1)	24	▰▰▰▱▱
FasterThan200.impl (1)	32	▰▰▰▱▱
InitialNoPoints.inital (1)	8	▱▱▱▱▱



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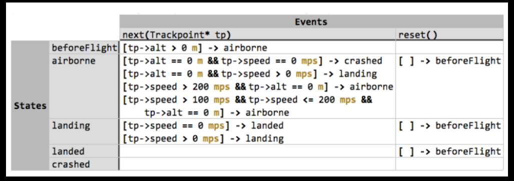

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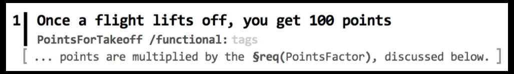

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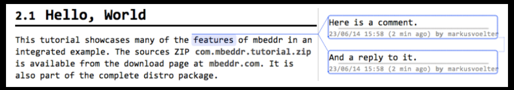

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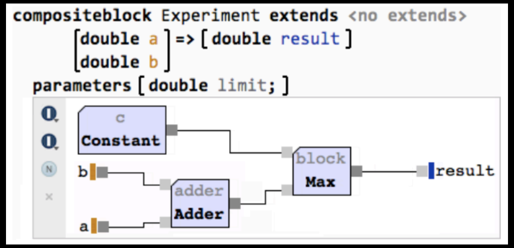

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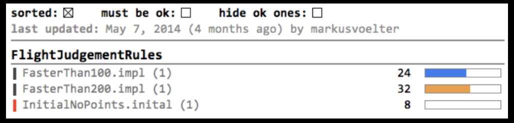

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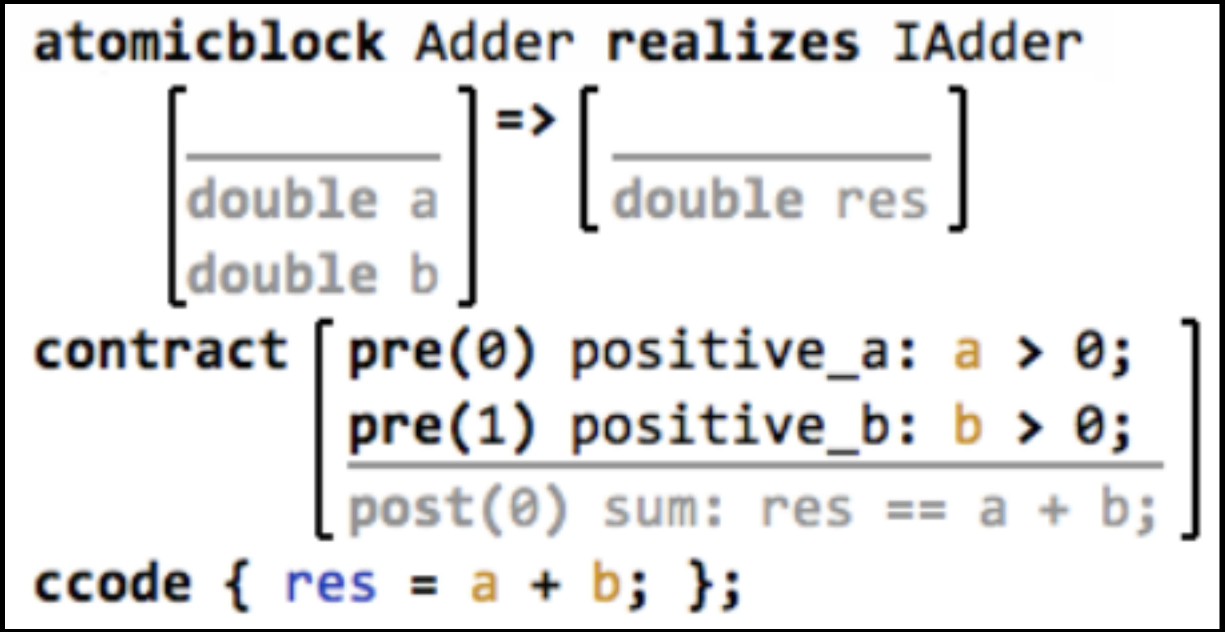

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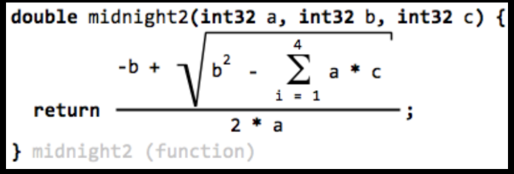
Markus Voelter and Sascha Lisson: Supporting Diverse Notations in MPS’ Projectional Editor



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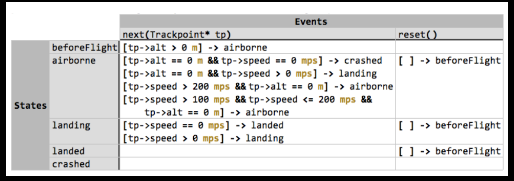

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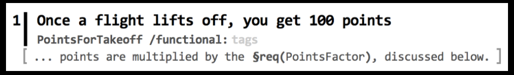

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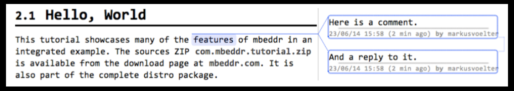

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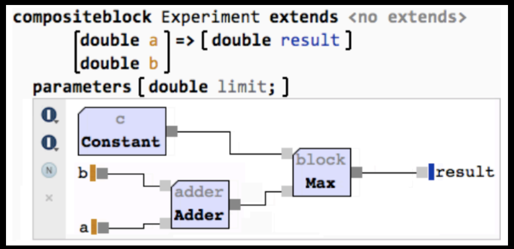

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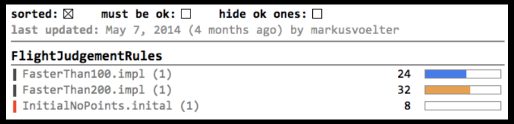

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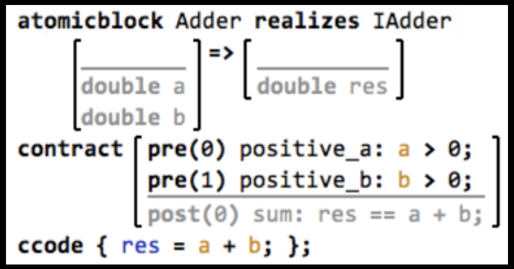

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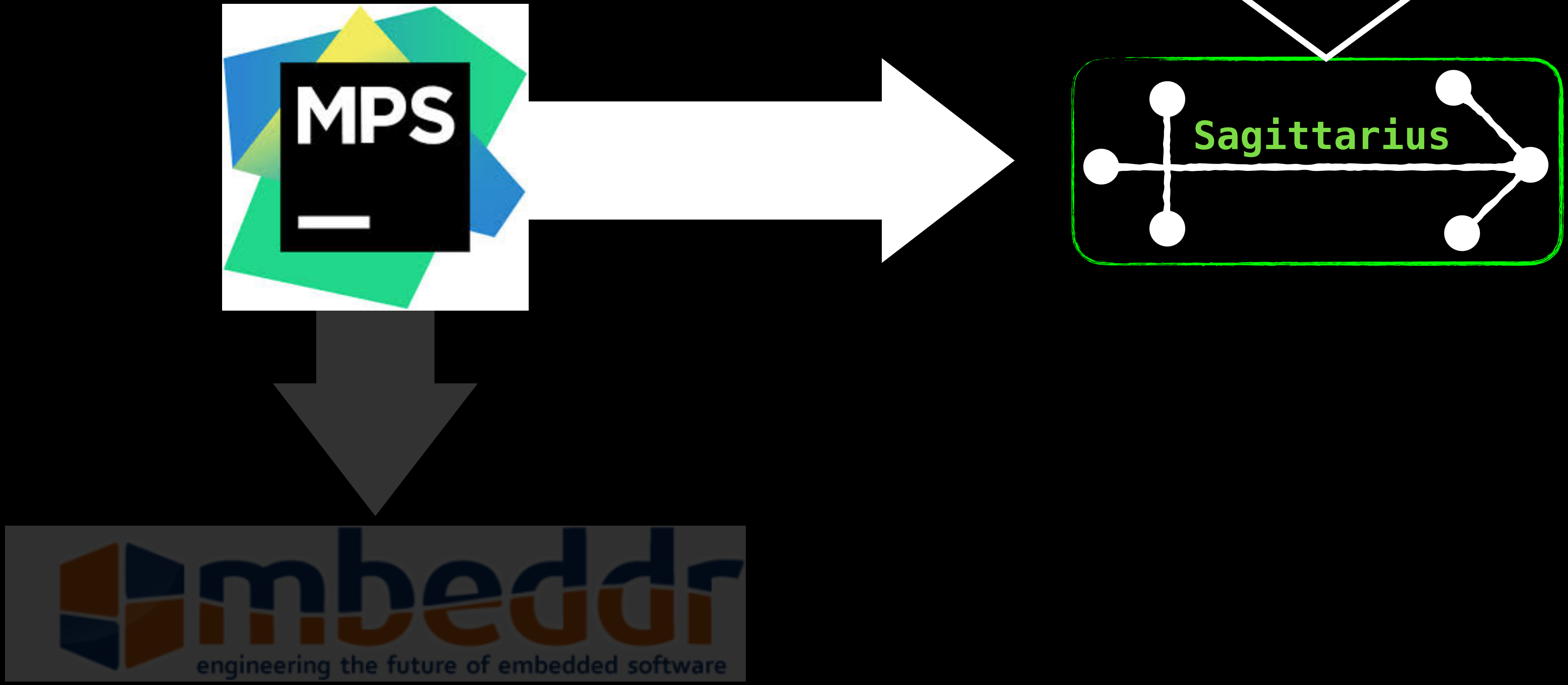
all notations and sub-languages can be **composed** flexibly… even with existing languages such as C, Java, …

we shall use MPS to build a **model analysis framework** as a seamless extension to Java



MPS $\longrightarrow$ Sagittarius ?

1. Get to know a modern and promising **language workbench**
2. Learn how to build, extend, and compose languages in a **model-driven** manner
3. Practice being **creative** in a team