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Modifying the SPARK Tools

1 Introduction

In a few cases it would be beneficial for the NuSPADE project to make modifications to the SPARK tools. For example, the SPADE restrictive mode outlined in CS-note 8. Ultimately these modifications are destined for integration into the SPARK tools. This will allow NuSPADE to be used effectively with a standard SPARK distribution.

2 Guidelines

The following highlights the preconditions and postconditions that should be met where making modifications to the SPARK tools.

2.1 Preconditions

- **Necessary -** Modifying the Praxis tools is seen as a worst case scenario for NuSPADE and Praxis. Where possible and sensible, changes should be achieved outside the Praxis tools.
- **Definite -** The modifications should perform a definite operation that is unlikely to require future tweaking.
- **Unobtrusive -** The modifications should have no noticeable negative effect on the system performance. Further, the new functionality should be a natural extension to the tool.

2.2 Postconditions

- **Dormant -** The extra functionality should always be disabled by default. Fortunately, all of the Praxis tools have facilities for accepting flags from the command line. These flags can be used to switch on the extra functionality as desired.
- **Documented -** All changes should have user documentation. If Praxis ever chose to officially document the extended behaviour, these documents should serve this purpose.
- **Correct -** Ideally changes made to the Praxis tools should correctly implement the required functionality. More intensive testing and scrutiny will be placed on code heading to the Praxis controlled tools than our research tools.
- **Natural -** Changes should be made by following the existing coding style.

*Notes in this series are for ϵ-baked ideas, for $1 \geq \epsilon \geq 0$. Only exceptionally should they be cited or distributed outwith the NuSPADE project (EPSRC GR/R24081).