

# IstEventB.sty

---

None

*Thai Son Hoang*

*None*

Table of contents

---

1. IstEventB.sty	3
2. User Guide	4
2.1 Package Loading	4
2.2 Package Options	4
2.3 Typsetting Event-B Code	5

# 1. lstEventB.sty

---

`lstEventB.sty` is a LaTeX package for listing [Event-B](#) models. It was developed at the [University of Southampton](#).

## 2. User Guide

---

### 2.1 Package Loading

---

Just like any other package, you need to request this package with a `\usepackage` command in the preamble. So in the simpler case (i.e., without any options), one just types

```
\usepackage{lstEventB}
```

to load the package

### 2.2 Package Options

---

`lstEventB.sty` currently support the following options

- `colour` | `color` : Enable the colours for Event-B code.

## 2.3 Typsetting Event-B Code

The current supported syntax is from [CamilleX](#). In particular, the Event-B mathematical symbols can be typeset using Unicode symbols. Alternatively, the mathematical symbols can be typeset using ASCII combinations (similar to the [Event-B Summary](#), with the exception that the text combinations must be prefixed by `!` (this is to prevent unintended translation of text in longer words). Some other symbols, e.g. `.` and `=` also need to be `!`-prefixed.

### 2.3.1 Predicate-related Symbols

The following table shows the ASCII input for typesetting predicate-related symbols.

ASCII	Symbols	Explanation
<code>!false</code>	$\perp$	False
<code>!true</code>	$\top$	True
<code>&amp;</code>	$\wedge$	Conjunction
<code>!or</code>	$\vee$	Disjunction
<code>=&gt;</code>	$\Rightarrow$	Implication
<code>&lt;=&gt;</code>	$\Leftrightarrow$	Equivalence
<code>!not</code>	$\neg$	Negation
<code>!</code>	$\forall$	Universal quantification
<code>#</code>	$\exists$	Existential quantification
<code>!.</code>	$.$	Quantification dot
<code>=</code>	$=$	Equality
<code>/=</code>	$\neq$	Inequality

### 2.3.2 Set-related Symbols

The following table shows the ASCII input for typesetting set-related symbols. Sets