An Event-B Specification of

WellCommented

This project is used to verify that rendering of complicated and long comments work.

1	CONTEXT Tale 1.1 STUFF	
	MACHINE Journey 2.1 r x z	4

```
1
CONTEXT Tale
A context comment.
Test some accented unicode non-ascii chars: ÅÄÖôâôîãüïäáà
Test all unicode Event-B chars: :=\bot \top \land \Rightarrow \neg \lor \Leftrightarrow \forall \exists \mapsto \neq \leq \geq \in \notin \subseteq \subset \not\subseteq \not\subset \otimes \times
Inline tex: 5 \times \sqrt{123}
SETS
                                                                                1.1
STUFF
                                                                                1.2
CONSTANTS
 AAAA
BBBB
         CCCC
         \mathbf{c}
 DDDD
        d
 EEEE
         \mathbf{e}
 FFFF
         f
 GGGG
        g
HHHH
         h
IIII
         i
 maa
         ma
mii
         _{
m mi}
AXIOMS
        partition(STUFF, {AAAA}, {BBBB}, {CCCC}, {DDDD}, {EEEE}, {FFFF},
 axm1:
        \{GGGG\}, \{HHHH\}, \{IIII\}\}
        comment.....
 axm2:
        maa > 1
 axm3:
       mii > 10
       maa > 1 \Rightarrow maa > 1 maa > 1 \Rightarrow maa > 1
axm4:
```

END

MACHINE Journey 7a 2

A machine comment. A complicated comment with % # ! 4^5 x_y More of a comment. Now its done! Some inline tex: $\sqrt{123}$ Here I really want a newline. $x > 1 \Rightarrow \max > 0 \lor \top \Leftrightarrow \bot \forall x \cdot x \in \mathbb{N} \to \mathbb{N}1 \times (\mathbb{Z} \setminus \{123\})$

SEES Tale

VARIABLES 2.1

- x Fin variabel
- r En annan variabel
- z Z represents the unknown STUFF in the universe.

INVARIANTS

```
inv1:
                                                                                                                                                                                                                                             A comment.
                                                                                                                                                                                                                                            Helpful stuff comment with comments en
inv2: x > 0 \lor x > 0 \lor x > 0 \lor x > 3
                                                  \lor x > 0 \lor x > 0 \lor x > 4
                                                                                                                                                                                                                                             masse.
                                                  \vee \ x > {\color{red}0} \lor x > {\color{red}0} \lor x > {\color{red}5}
                                                  \forall x > 0 \ \forall x > 0 \ \forall x > 6
                                                  \forall x > 0 \forall x > 0 \forall x > 7
                                                  \vee x > 0
inv3: r \in 1...99
                                                  The third invariant needs a lot of explanation. For example it 5 \times \sqrt{4} is not good. Must
                                                  exemplify better.
                                                  x > 0 \lor x > 
inv4:
                                                  0 \lor x > 0
                                                  Another interesting comment a lot of text indeded. Will the line break eventually?
                                                  Another line.
inv5:
                                                 z \in \text{STUFF}
```

EVENT INITIALISATION

```
THEN
```

```
init1: x := maa
init2: r := 2
init3: z := HHHH
```

END

```
EVENT About ANY y
```

```
WHERE
```

```
\begin{array}{ll} \operatorname{grd1}\colon & y=1\mapsto 2 & \mathrm{y}=1\mapsto 2 \\ \operatorname{grd2}\colon & \forall y\cdot y\in \mathbb{N}\Rightarrow y>0 & \mathrm{Make\ y\ non-free!\ \%\#!//xyz}\backslash\_ \end{array} Then
```

act1: x := 2Comment x := 2 Another x := 2 Third x := 2

END

About, 3

INITIALISATION, 3

Journey, 3

r, 3

Tale, 2, 3

x, 3

z, 3