

QUIRKY

MODULE QUIRKY-SYNTAX

```
SYNTAX  AExp ::= Int
        | Id
        | AExp AExp / [strict]
        | AExp AExp + [strict]
        | AExp AExp - [strict]
        | AExp AExp * [strict]
        | AExp AExp % [strict]
        | (AExp) [bracket]

SYNTAX  BExp ::= Bool
        | AExp < AExp [seqstrict]
        | AExp > AExp [seqstrict]
        | AExp <= AExp [seqstrict]
        | AExp >= AExp [seqstrict]
        | ! BExp [strict]
        | AExp eq AExp [strict]
        | BExp and BExp [strict(1)]
        | (BExp) [bracket]

SYNTAX  Block ::= {}
        | {Smt}
```

```
SYNTAX  Smt ::= Block
        | Id = AExp ; [strict(2)]
        | does BExp Block if_not Block [strict(1)]
        | int Ids ;
        | dont_stop_if (BExp)Block
        | function ()Block
        | function Id()Block
        | Smt Smt
```

```
SYNTAX  Ids ::= List{Id, “, ”} [strict]
```

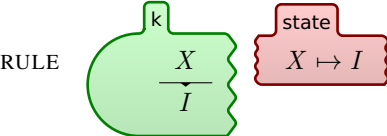
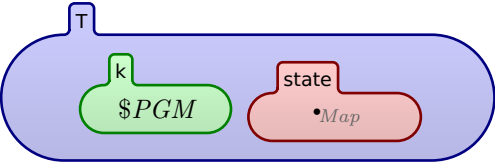
```
SYNTAX  AExps ::= List{AExp, “, ”} [strict]
```

END MODULE

MODULE QUIRKY

```
SYNTAX  KResult ::= Int
        | Bool
```

CONFIGURATION:



RULE $\frac{I1 \quad I2 \ /}{I1 \div_{Int} I2}$ requires $I2 \neq_{Int} 0$

RULE $\frac{I1 \quad I2 \ +}{I1 +_{Int} I2}$

RULE $\frac{I1 \quad I2 \ -}{I1 -_{Int} I2}$

RULE $\frac{I1 \quad I2 \ *}{I1 *_{Int} I2}$

RULE $\frac{I1 \quad I2 \ \%}{I1 \%_{Int} I2}$

RULE $\frac{I1 < I2}{I1 <_{Int} I2}$

RULE $\frac{I1 > I2}{I1 >_{Int} I2}$

RULE $\frac{I1 <= I2}{I1 \leq_{Int} I2}$

RULE $\frac{I1 >= I2}{I1 \geq_{Int} I2}$

RULE $\frac{I1 \text{ eq } I2}{I1 ==_{Int} I2}$

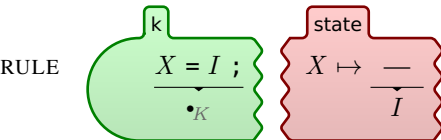
RULE $\frac{! \ T}{\neg_{Bool} T}$

RULE $\frac{\text{true and } B}{B}$

RULE $\frac{\text{false and } \text{---}}{\text{false}}$

RULE $\frac{\{\}}{\bullet_K}$ [structural]

RULE $\frac{\{S\}}{S}$ [structural]



RULE $\frac{S1 \quad S2}{S1 \curvearrowright S2}$ [structural]

RULE $\frac{\text{does true } S \text{ if_not } \text{---}}{S}$

RULE $\frac{\text{does false } \text{---} \text{ if_not } S}{S}$

RULE $\frac{\text{dont_stop_if } (B)S}{\text{does } (B) \ \{S \ \text{dont_stop_if } (B)S\} \text{ if_not } \{\}}$ [structural]

RULE $\frac{\text{int } X, Xs ; \quad Xs}{\bullet_K}$ requires $\neg_{Bool}(X \text{ in keys } (\rho))$

RULE $\frac{\text{int } \bullet_{Ids} ;}{\bullet_K}$ [structural]

END MODULE