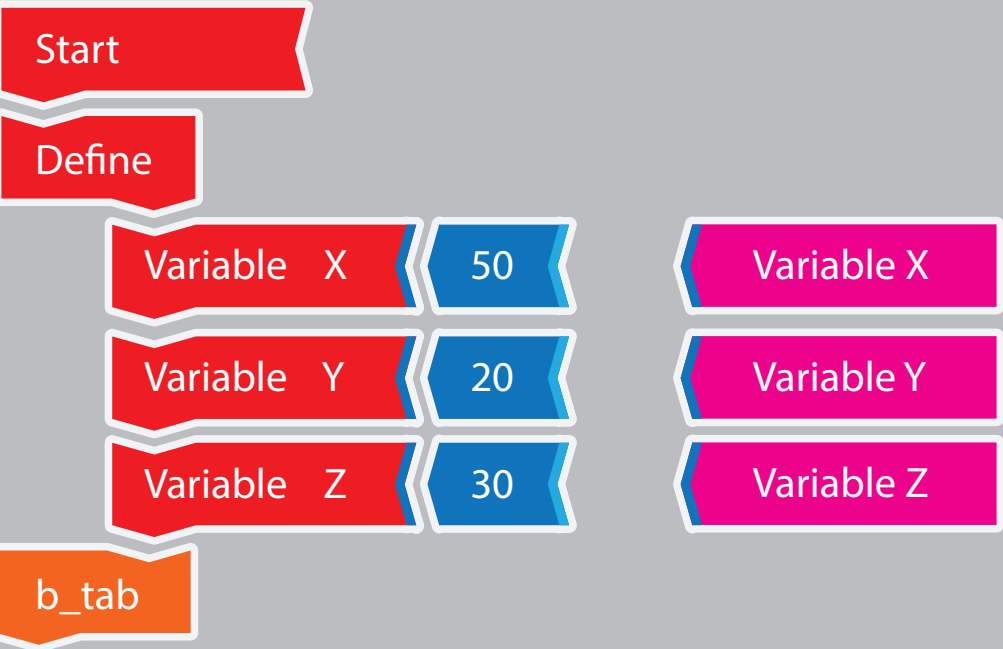


<Start>	::=	Start <variables><statements>
<variables>	::=	(<variable>)*
<variable>	::=	[a..z] +
<action-stat>	::=	<go-forwards-stat> <turn-stat>
<go-forwards-stat>	::=	drive forwards speed % <num-expression>
<turn-stat>	::=	turn <direction> speed % <num-expression>
<control-stat>	::=	<if-stat> <repeat-stat>
<if-stat>	::=	if <logic-expression> do <statements> <else-stat>
<else-stat>	::=	else <statements> ε
<repeat-stat>	::=	repeat indefinitely do <statements>
<num-expression>	::=	<num-value> <num-operator> <num-value>
<num-operator>	::=	add min times div pow
<num-value>	::=	integer <sensor-data> <variable>
## <logic-expression>	::=	<logic-value> <bool-operator> <logic-value>
## <bool-operator>	::=	and or
<num-logic-exp>	::=	<num-value> <num-comparison> <num-value>
<num-comparison>	::=	equals not equals less than leq more than meq
## <logic-value>	::=	<sensor-data> <variable> true false
<num-sensor-data>	::=	<get-ultrasonic>
<get-ultrasonic>	::=	get distance cm ultrasonic sensor

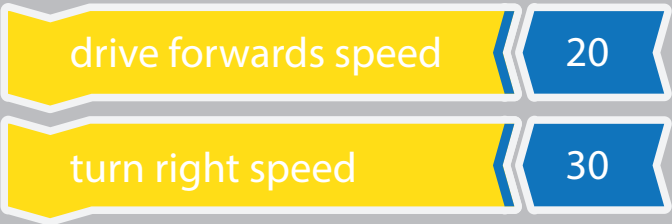
Helper blocks



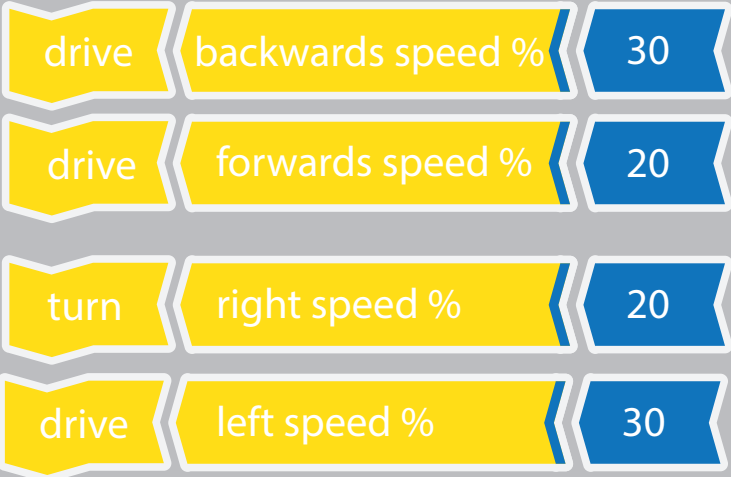
Start - Variables



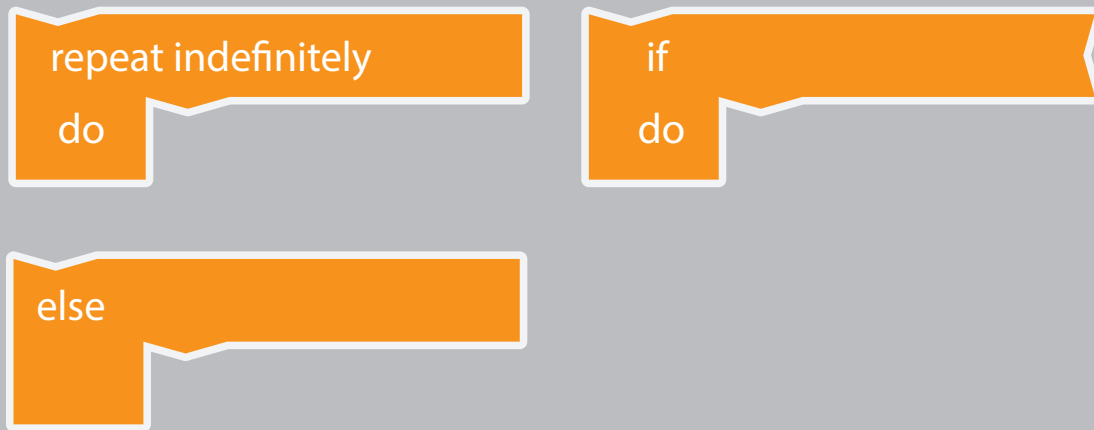
Direction



Initially the <direction> was fixed to <right> (same as forwards) for development purposes.



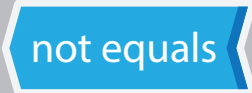
Control blocks



Numerical - logic expressions

num   

num-comparison



i use the above blocks over this  for Tesseract reasons.

Complex Example

