Sven Jatzlau
Tilman Michaeli
Stefan Seegerer

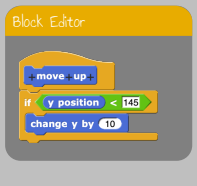
Create model

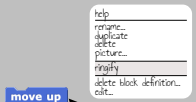
0

SnAIp Artificial Intelligence in Snap!

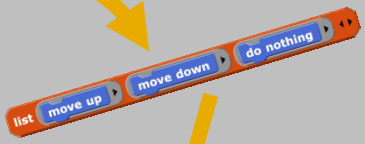
Create model

Consider possible actions





Right-click > ringify



Create model

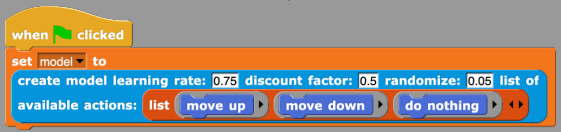
Save model

Create a new variable

Name it

Save model in the variable

Include in program



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Detect state

1

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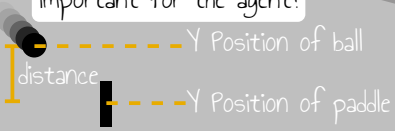
Detect state

Detect current state

Which information is important for the agent?



Hints

More states means longer training time.

instead of

Often small amounts of information are enough

Combine values to ranges

Include in program

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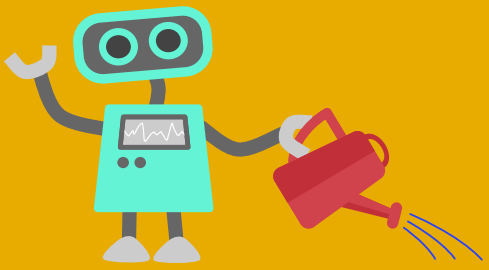
Select & execute action



2

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Select & execute action

Determine best action

State from card 2

Model from card 1

Variable contains best action, e.g.

Execute best action

The variable reports a block. Thus, it can be executed.

Include in program

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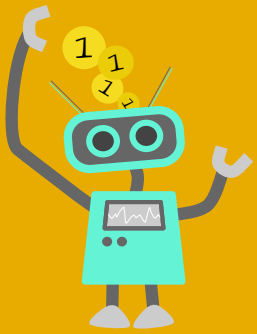
Receive reward



3

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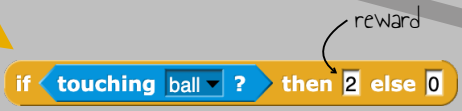
Receive reward

Calculate reward

When should we reward the agent, when should we punish it?

Instead of using 

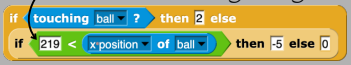
you can create your own block.



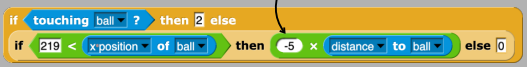
Hints

Nest conditions

Ball touches right edge



Punishment depending on distance to ball



Dynamically determine rewards and punishments

Include in program

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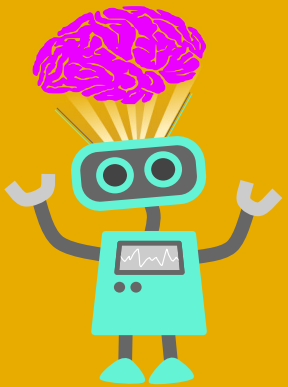
Learn

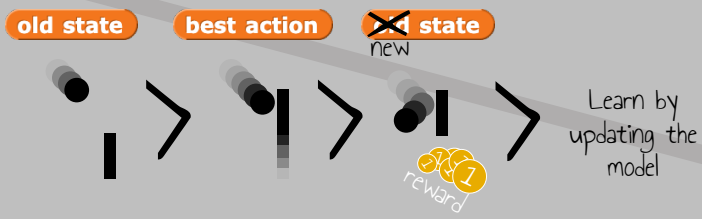


4

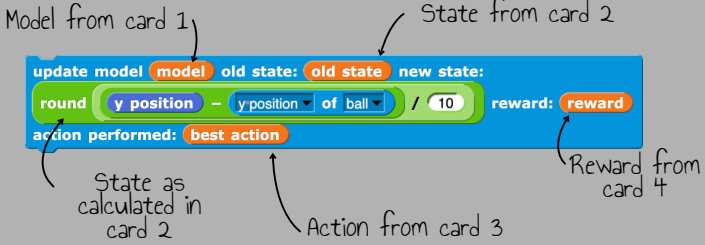
SnAIp Artificial Intelligence in Snap!

Learn

Process information



Update model



Include in program