

# Digikick “SWC-Blocking” Mode

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CBPrice Jan 2020

This is a simplified engine mode specifically designed for aged-folk. It removes the complexity of synchronizing actor behaviour, and it makes the language of coding closer to natural English. Here are the features of this new mode:

- The engine runs in a pure sequential mode. Each action follows from the previous action in a strict sequence. There is no need to make actors rest, to synchronize with others. This is designed to greatly simplify the process of programming.
- Using “locators” and not Cartesian coordinates. Locators are single letters (“a”, “b”...) which appear on the canvas when the command **showLocators()**; is used. Much easier than Cartesian coordinates.
- Move-To methods can either
  - move-to actors
  - move-to locators
- Rationalized use of the English language
  - methods are all in the indicative mood, and not the imperative mood, e.g., **george.movesto(theTable)**;
  - Object names are preceded by “the”, e.g., **theTable**, **theRedSofa** This makes linguistic sense since only one of each object-type can be added.
  - Scenery names are preceded by “a”, e.g., **aTree**, **aStar** which again makes linguistic sense since multiple objects of each type can be added

## Example Code

The following files are contained in the January 2020 release. The “100” series are some developed (almost complete) examples. The “200” series are intended to be more instructional. These resources will be extended.

101	A “Tom and Jerry” cat-and-mouse story
102	Abduction while camping
103	George and Mabel deal with a stray cat ...
104	
105	The “Photo Album” story
106	Andy helps Mabel move some furniture, but ...
107	A UFO takes George and Mabel on a trip down memory lane
200	Demonstration of all methods
201	Exploring <b>picksup</b> and <b>putsdown</b>
202	Solutions to instructional approach
203	How to change scenes
204	How to add your own actor

### Adding assets

<code>add(asset,locator)</code>	<code>add(theTV,k);</code> <code>add(mabel,s);</code>	Use this to add scenery and actors onto the canvas
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### Movement

<code>actor.movesto(actor);</code>	<code>mabel.movesto(theTV);</code>	Moves to another actor
<code>actor.movesto(locator);</code>	<code>mabel.movesto(a);</code>	Moves to a location letter
<code>actor.movesto3D(actor);</code>	<code>andy.movesto3D(theSaucer);</code>	Moves to another actor with perspective
<code>actor.movesto3D(locator);</code>	<code>andy.movesto3D(d);</code>	Moves to another location letter with perspective
<code>actor.rests();</code>	<code>mabel.rests();</code>	Rests
<code>actor.rests(number);</code>	<code>mabel.rests(3);</code>	Rests for a number of time units.
<code>actor.jumps(height);</code>	<code>george.jumps(40);</code>	Jumps a certain height
<code>actor.twirls(speed);</code>	<code>mabel.twirls(5);</code>	Does a twirl with a given speed

### Appearance

<code>actor.appearsLike("fname");</code>	<code>andy.appearsLike("mouse");</code>	Changes the appearance to any <b>.png</b>
<code>actor.hides();</code>	<code>andy.hides();</code>	Temporarily hides (can still move)
<code>actor.shows();</code>	<code>andy.shows();</code>	Reappears
<code>actor.flipsV();</code>	<code>andy.flipsV();</code>	Flip vertically. Useful for hand-stands
<code>actor.flipsH();</code>	<code>andy.flipsH();</code>	About face. Change direction before moving
<code>actor.shrinksH(number);</code>	<code>andy.shrinks(0.5);</code>	Horizontal shrink (or grow if number is > 1)
<code>actor.shrinksHV(number, number);</code>	<code>andy.shrinks(0.25,0.5);</code>	Shrink or grow in two directions

### Speech

<code>actor.speaks("Some text ");</code>	<code>andy.speaks("Hi Mabel");</code>
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### Possession

<code>actor.picksup(other actor);</code>	<code>andy.picksup(theTV);</code>	Can pick up (and carry) other actors. Works for several actors.
<code>actor.puttdown(other actor);</code>	<code>andy.puttdown(theTV);</code>	

### Setting the Actor's behaviour

<code>actor.setExecTime(number);</code>	<code>andy.setExecTime(0.5);</code>	Sets time for each action. e.g.,
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### Global Commands

<code>setScene("fname");</code>	<code>setScene("Anneke");</code>	Change the background image <b>.jpg</b> file.
<code>showLocators();</code>	<code>showLocators();</code>	To hide locators do this <code>//showLocators();</code>