Small Basic Samples

Introduction

Following a request on the Small Basic forum, I have collated a selection of Small Basic sample programs.

They are not a complete reference of functionality, nor a set of games that can be run without delving into the code, but rather a somewhat random selection of examples to show how Small Basic can be used. They range from very simple demonstrations of specific features, to ideas for graphical effects and some larger game programs.

They are mostly based on a collection of programs used in connection with the Small Basic forum. Some of them are strongly based on forum member ideas, others I have played with myself or with my children. Some dealing with graphics and physics modelling.

They all run with version 0.9, but some were originally written with earlier versions. I have updated them where I spotted obvious enhancements (mainly the array changes that occurred with version 0.5). Also, they are commented to some extent and generally well structured – some more than others.

They do not cover extensions. Some of them use files; where necessary these files are included. They do not affect any files outside the directory they are copied to – but always check this for yourself before running.

Mainly, they are a set of ideas to play with and see how some common tasks can be performed.

I hope they are useful.

Short Demonstrations

buttons.sb
Example showing simple 2 button event

compare_strings.sb
Example showing lexical string comparison

event-template.sb
Example showing most event controls - can be used as a starting point for game control

keynames.sb
The Small Basic keyboard character names

localimages.sb
Display all images in and below a given directory

movekey.sb
Example showing keyboard event control for movement in a game

multiple-text-selection.sb
Example getting multiple options from an input in TextWindow - some text parsing

parse_csv.sb
Parse a csv (comma separated list) data file into any array of records and fields

progress-bar.sb
Simple graphical progress bar

random.sb
Very simple random number test

ReadKey.sb
Using the ReadKey command

recursive-dirs.sb
Example using stack to get recursively (all sub directories) jpg's and store to a file

save_game_data_to_file.sb
Simple example showing how data from a game can be stored and retrieved from a file

shellsort.sb
Example of efficient ShellSort algorithm to sort a list, comparing with BubbleSort

text-last-index-of.sb
Simple text manipulation example

timer-ticks.sb
Simple example showing Timer event

2D Graphical effects

atom-fusion.sb
Example of blobs coalescing - collision detection
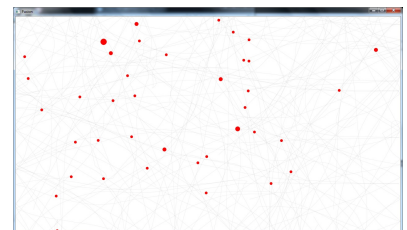
boundingbox.sb
All about move, rotation and scaling shapes and the geometry of the corners of the shape
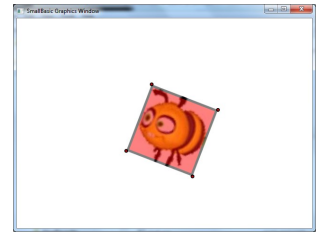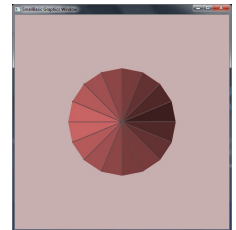

circle-reflection.sb
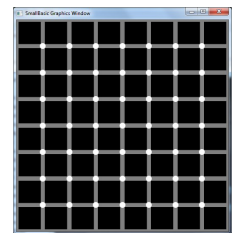*Laser light display - with reflections from a circle*
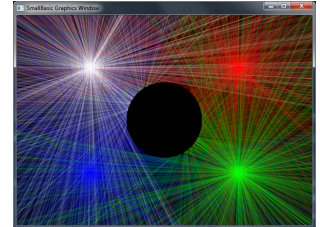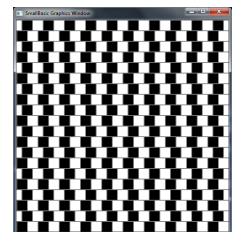

illusion1.sb
The umbrella is stationary

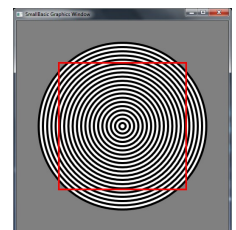## illusion2.sb
All the dots are white without dark centres

illusion3.sb
The lines are straight
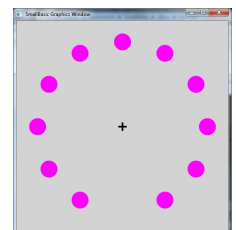

illusion4.sb
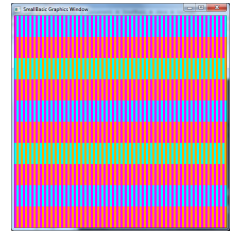*The red square lines are straight*

illusion5.sb
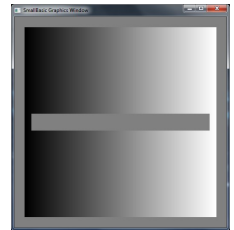*Stare at the black cross and you will see some green dots in the spaces*

illusion6.sb
The blue and green are the same colour (Cyan)

illusion7.sb
Is the thick line in centre grey?

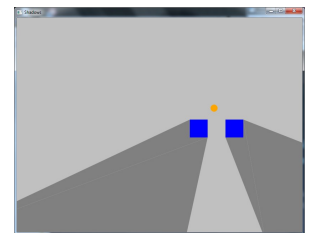## pixels.sb
Simple use of Pixels
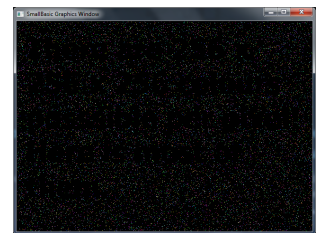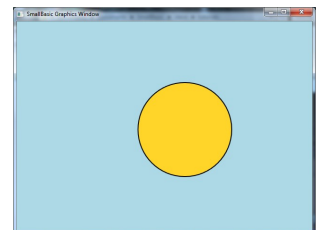

plotXY.sb
Simple Plotting example
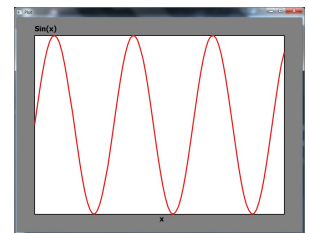
shadows.sb
Example of shadows - Based on ideas from Dudeson
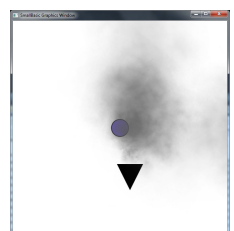

shape-skins.sb
Example to show changing an image skin - could be a moving sprite for example

smoke-emitter.sb
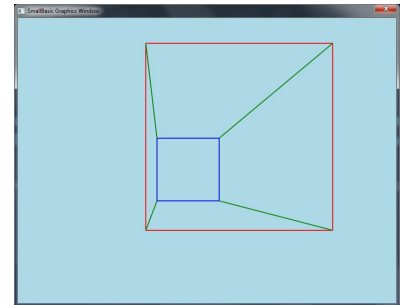*Example with ideas from Dudeson creating smoke*

zoom-rotate-move.sb
Simple example downloading an image, displaying and scaling it, then move and rotate the scaled image
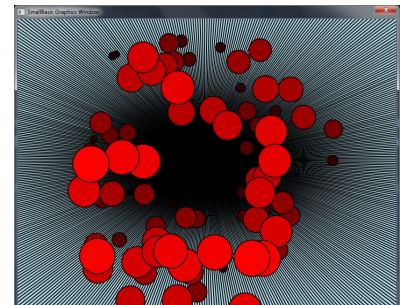

3D Graphical Examples
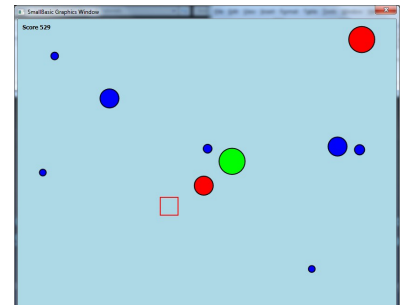
3D-perspective-1.sb
3D perspective

3D-perspective-2.sb
More 3D perspective

3D-perspective-3.sb
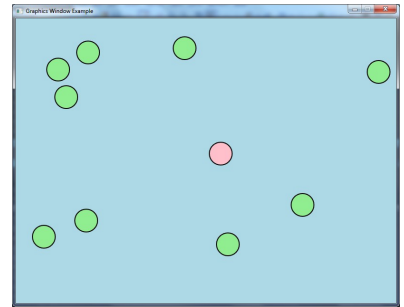*Strange game really, but shows some 3D possibilities*

Longer Demonstrations

arrays.sb
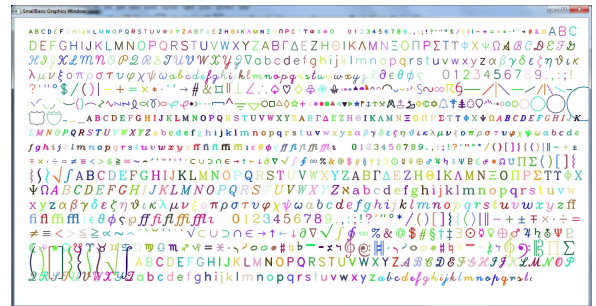*Sample program to demonstrate the use of arrays*

game-graphics.sb
Sample program to demonstrate virtually all of the Small Basic GraphicsWindow commands
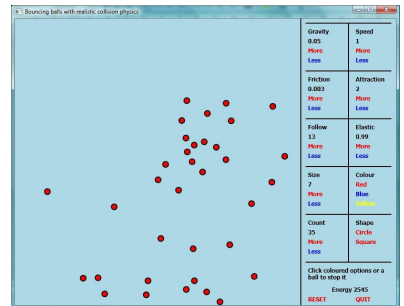
hersey-fonts.sb
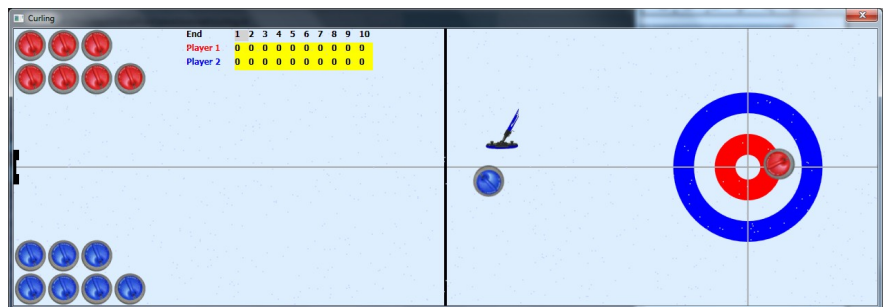*Example reading a vector font database (Hershey font) and converting it for use in SmallBasic*

Full Games

collision-physics.sb
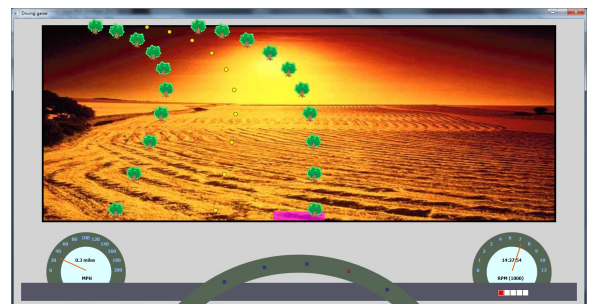*Bouncing balls with collision physics*

curling.sb
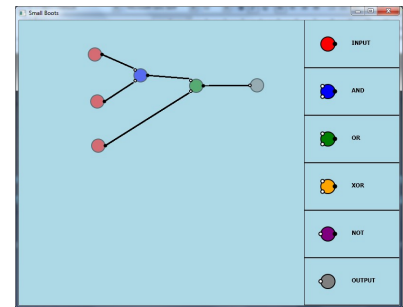*A curling program for Small Basic*
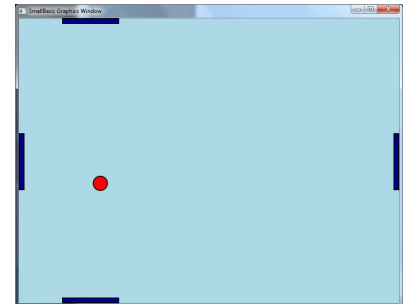
driving.sb
Car driving game

rockys-boots.sb
Rocky's boots prototype - logic gate model

super-pong.sb
Paddle game extended a bit with fireworks for winners

tictactoe.sb
TIC TAC TOE with computer player