Jason: Hi, Abbey, how is your program going?

Abbey: Great, but it would be even better if some of these images could move!

Jason: Kate is away. Let’s ask Phil…

Phil: Hi, guys! What can I do for you?

Jason: We want to get things moving in our program.

Phil: Ok. Well let’s start with some game terminology.

Phil: An image that moves in a game is called a sprite…

/Kate: Did you know that the term sprite is a broad term referring to a number of preternatural legendary creatures. The term is generally used in reference to elf-like creatures, including fairies, dwarves, and the likes of it, but can also signify various spiritual beings, including ghosts. /

Phil: in SwinGame a Sprite is an image with a location in the game, and some ather properties.

Abbey: How can we create a sprite for our bug image?

Phil: Well firstly you need to declare a “variable”.

Phil: A variable is a part of your program that is used to store a value.

Phil: We can use a variable to refer to our spite. Anything we do to the variable will manipulate the sprite.

Jason: Ok… We’ll give it to go!

*Tutorial part 1*

Jason: Phil, our sprite isn’t moving!

Phil: Well, in SwinGame each sprite has a “Movement” property

Phil: This defines how each sprite moves each time it’s updated.

Phil: Try setting the X movement of your sprite to 0.5

Phil: Remember to update the sprite

Abbey: We can do that…

*Tutorial Part 2……*

Abbey: Argh… It falls off the edge of the screen!

Phil: Remember, the computer is unintelligent; it does exactly what you tell it.

Phil: What you can do is use an if statement to keep the sprite on the screen. If the sprite has reached the edge of the screen, change its movement to -0.5.

Phil: This will make it move to the left.

Jason: How can we check if it has gone off the screen?

Phil: The sprite has a position, size, and movement.

Phil: The sprite has an X and Y value for its position…

Phil: …and a width and height for its size.

Phil: Its movement is accessed as Movement.X and Movement.Y.

Phil: To check it against the screen, we need to check its right edge against the screen width.

Jason: Ok… I can give it a try…

Abbey: Yeah! We can do it!

*Tutorial Part 3….*

Jason: Doh… now it goes off the left side of the screen.

Abbey: We can apply the same logic, but now with the left edge, and 0 -> the left of the screen.

Phil: That’s it.. See how you go

Phil: you could also move up and down using Movement.Y, and the height of the sprite ans the screen.