### Chapter 1 Solutions

#### Part 2

Answer the following questions:

1. Which line does contain the code that tells a computer to draw text on the screen?

*Answer:* Line 21

1. Which line does contain the code that tell a computer to draw a rectangle on the screen?

*Answer:* Line 18

1. Where (line number) does the game loop starts and ends?

*Answer:* Start – line 13, End – line 27

*2) Changing the text*

1. Change the text "Hello World!" to any other text, for example "Hello Your Name!"

*Before:*

'Draws text "Hello World"

Text.DrawText("Hello World!", Color.Aqua, GameFont("ArialLarge"), 50, 50) *After:*

'Draws text "Hello World"

Text.DrawText("Hello Your Name!", Color.Aqua, GameFont("ArialLarge"),50, 50)

*3) Changing the color.*

1. Change the color of the text, i.e. change to Color.GreenYellow.

*Before:*  Text.DrawText("Hello World!", Color.Aqua, GameFont("ArialLarge"), 50, 50) *After:* Text.DrawText("Hello World!", Color.GreenYellow, GameFont("ArialLarge"), 50, 50)

1. Change the color of the rectangle, i.e. change it to Color.Blue.

*Before:* Graphics.FillRectangle(Color.Red, 20, 150, 500, 50)

*After:* Graphics.FillRectangle(Color.Blue, 20, 150, 500, 50)

1. Change the background color, i.e. Swingame.Graphics.ClearScreen(Color.LightBlue).

Before:

'Clears the Screen to Black

SwinGame.Graphics.ClearScreen()

After:

'Clears the Screen to Black

SwinGame.Graphics.ClearScreen(Color.LightBlue)

#### Part 3

*1) Changing Location of the elements*

1. Change the location of the text, i.e. to put it in the middle of the screen assign X to 100 and Y to 150.

*Before:*

Text.DrawText("Hello World!", Color.Aqua, GameFont("ArialLarge"), 50, 50)

*After:*

Text.DrawText("Hello World!", Color.Aqua, GameFont("ArialLarge"), 100, 150)

1. Change the location of the rectangle, i.e. to put in under the text assign X = 100, Y = 250.

*Before:* Graphics.FillRectangle(Color.Red, 20, 150, 500, 50)

*After:* Graphics.FillRectangle(Color.Red, 100, 250, 500, 50)

*2) Changing size of the rectangle*

1. Change width and height of the rectangle, i.e. width = 630, height = 20.

*Before:* Graphics.FillRectangle(Color.Red, 20, 150, 500, 50)

*After:* Graphics.FillRectangle(Color.Red, 20, 150, 630, 20)

*Solution for Extra Exercise:*

'Draw yellow circle on the screen – “face”.

Graphics.FillEllipseOnScreen(Color.Yellow, 100, 250, 100, 100)

'Draw eyes – two black circles inside the yellow circle

Graphics.FillEllipseOnScreen(Color.Black, 125, 280, 15, 15)

Graphics.FillEllipseOnScreen(Color.Black, 160, 280, 15, 15)

'Draw “smile” on the screen.

Graphics.DrawLineOnScreen(Color.Black, 130, 310, 150, 330)

Graphics.DrawLineOnScreen(Color.Black, 170, 310, 150, 330)