Lab #2

TU850/1 - Creative Coding

*Your working lab has to be shown to (and signed off by) the lab demonstrator between 12 noon and 2pm on Monday 10th of February, in CQ-233/CQ-236.*

**QUESTION 1**

**Instructions:**

If ChatGPT is working (or any other LLM of your choice), please ask it to do the following:

* Ask it to generate code in Python using Turtle to draw the flag of Ireland with a gold border (and make sure the border covers all 4 sides)
* Ask it to generate code in Python using Turtle to draw the flag of Jamaica
* Ask it to generate code in Python using Turtle to draw the flag of Canada

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| Ireland | Jamaica | Canada |

**Submission:**

Do a screengrab of the resultant flags, as well as the code, and paste it all onto your Template document.

**QUESTION 2**

**Instructions:** Run the following code which **recursively** draws circles:

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| **A green turtle with a black background  AI-generated content may be incorrect.** | **Python with Turtle** |
| # A program to draw concentric circles import turtle  def draw\_circle(radius, remaining\_circles):   if remaining\_circles != 0:  # THEN  turtle.penup()  turtle.goto(0, -radius)  turtle.pendown()  turtle.circle(radius)  draw\_circle(radius + 20, remaining\_circles - 1)  else:  return  # EndIf;  # END draw\_circle.  # MAIN PROGRAM  turtle.speed(0) draw\_circle(20, 10) turtle.hideturtle() turtle.done()  # END MAIN. | |

You should get this:

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| **HINTS** |
| A red circle with text  AI-generated content may be incorrect. |

Please change the number of circles to 80, and the difference between each successive circle to 2 instead of 20. You should get the following:

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| A circular black and white pattern  AI-generated content may be incorrect. |

**Submission:**

Do a screengrab of the resultant images, as well as the code, and paste it all onto your Template document.

**QUESTION 3**

**Instructions:**

Explain the term aliasing in the context of image synthesis.

**Submission:**

* Please submit your definition into the Template Document.

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| Search in Brightspace for the following module: “**Creative Coding CMPU1042: 2024-25**” and please enroll. |
| e-mail me a completed solution to each of the above programs in your Template document. Send it to [Damian.X.Gordon@tudublin.ie](mailto:Damian.X.Gordon@tudublin.ie) with subject heading “DT850 CC Lab #2”, and put it in Brightspace as well. |