HIT 137 – Assignment 2

30 Marks

Questions 1 – 5 Marks

Write a python program to draw the current year on the screen by using the turtle module. This should be done by moving the turtle around the screen, not by using any function that prints text onto the screen.

Create your own functions that draw a single numeric digit, and call those functions to create your final output. E.g.

```
def draw_two():
def draw_zero():
def draw_one():
def draw_eight():
```

The displayed date format should be: **2018**

Question 2 – 10 Marks

Write a python program with a graphical user interface that will allow a user to create a custom pizza which they wish to order. At minimum, the user should be able to choose the size of the pizza, the type of pizza sauce, and up to at least 5 different toppings from a selection of 10 or more possible pizza toppings. *Visit a pizza shop website for possible topping ideas.*

Each component of the pizza has an associated price and the total cost of the pizza should be displayed and updated as the user builds their pizza. Allow the user to reset, and start over in case they make a mistake or cannot afford the pizza.

Finally, allow the user to submit their pizza which causes a dialogue to display showing the estimated time to cook. Use a random number between 15 & 25 minutes to simulate this.

The above program must be implemented using OOPS concepts GUI. The more creative and user-friendly your application is, the more bonus marks will be awarded. But, you will not be penalised for not being user-friendly or creative.

Question 3 – 5 Marks

Write a Python program to sort a list of elements using the bubble sort algorithm.

Question 4 – Open ended question – 10 Marks

Write a GUI-based application or a game of your choice. The game or application can be of your choice and it can be anything based on what you have studied in the class. The marks will be

awarded based on the topic/game selected, creativity, how the GUI is built, logic, application of the OOPS concepts, and simplicity of the code.

Note: You cannot build a Pizza application or similar.

You **cannot** use any other module/packages/concepts that have not been discussed in the class. If you use these, you will be marked zero for this question.

Submission :

You assignment should be submit as a ZIP File containing the four (4) separate python files which are ready for execution.

https://www.essaycorp.com.au/computer-science-assignment-help