

HOMEWORK SUBMISSION INSTRUCTIONS:

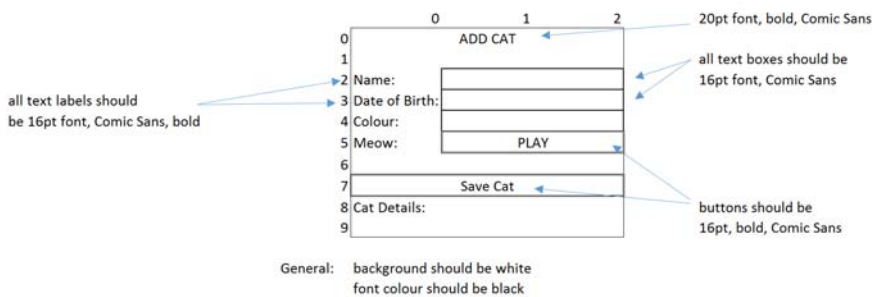
SECTION A: Code for SECTION A should be saved in a file called myCatGUI.py
SECTION B: Code for SECTION B should be saved in a file called myCoding.py

Once complete, upload to Compass: **Learning Task: Programming Tasks Week 6**

SECTION A: (15 marks total)

Question 1:

8 marks: Create a GUI application based on the following mock-up:



The numbers across the top and left represent columns and rows, respectively.

5 marks: Include the following functionality:

1. The “save” button should change the text of the button to ‘Saved!’
 - o It should display the contents of Name, Date of Birth and Colour to row 9, column 0, in a Label underneath the ‘Cat Details’ label seen in row 8.
2. The “play” button should play a sound file of a cat meowing, looped 4 times. This has been provided for you to download from Compass in the resources folder.

2 marks: appropriate and meaningful internal documentation

Commented [SD1]: This task is designed for you to demonstrate your ability to create a User Interface in Python using the widgets learned in class.

The goal for this task is for you to demonstrate:

- The ability to read and follow a mock-up
 - o Even if you disagree with a client’s choices of aesthetic elements such as font/typeface.
- The ability to use the Frame, Entry, Button and Label widgets in Python using grid placement.
- The ability to use classes and methods from third-party Python packages, such as PyGame for playing sound
- The ability to include meaningful and descriptive code comments that aid the readability of your code.

SECTION B: (5 marks)

Question 2: (2 marks)

Create a function called `fnMultiplyString`. This function should take two arguments. The first argument should be a string, the second should be an integer.

The function should return the string passed in as an argument repeated a number of times, as determined by the integer.

For example, passing the first argument of "pie" and the second argument as 3 should produce:
piepiepie

Question 3: (3 marks)

Create a method called `fnDisplayDate`. This method should print the current date and time, formatted as follows:

Wednesday, March 2, 2016, 9:54 AM

NOTE: If you are unable to print all of the above date and time format, print what you can.

Commented [SD2]: This task is designed for you to demonstrate your ability to write functions in Python.

The goal for this task is for you to demonstrate:

- The knowledge that functions require return values
- The knowledge that strings can be multiplied in Python in the same way numbers can.
- An understanding of the jargon related to programming and computer science.

oSpecifically:

- Function
- Argument
- Passed in
- Return
- Integer
- String

Commented [SD3]: This task is designed for you to demonstrate your knowledge of date and time structures in Python.

The goal for this task is for you to demonstrate:

- The ability to include native Python packages, such as 'datetime'
- The ability to format a datetime object to display elements of the date and time structures.
- The ability to find the format codes for datetime directives that you have not been explicitly shown in class.