

<b>Subject</b>	Computing
<b>Teacher</b>	Mr Wright
<b>Submission date</b>	1 <sup>st</sup> lesson of the term

## Mastering a Python GUI.

When writing in a high level language you will need to develop the skills to construct a GUI (Graphical User Interface). With Python there are several GUIs available to use.

### Task 1 – GUI Research

This summer's task requires you to research 3 different GUIs for python and write a summary page comparing their advantages and disadvantages. Use a range of sources to inform your report.

### Task 2 - GUI Mastery

TKinter is Python's defacto standard GUI package. I have found some introduction lessons for you to work through so you can master the layout features and widget creation.

I have shared the presentation in our SharePoint site. Please login to your e-mail in a web browsers and select the waffle. Click on the sharepoint icon and search for A-Level Computer Science. Follow that site. In the documents section you will find a TKinter folder with the lessons in.

Alternatively you can access this folder (you will need to login) to find the lesson presentations –

<https://honitoncollegedevonsch.sharepoint.com/sites/Computer%20Science%20A%20Level/Shared%20Documents/TKinterSummer%20Task>

As you work through them keep a folder with the programme files that you create to show **you completed all the tasks**. Please use the internet to further research other sites which may offer you TKinter training materials. Sometimes you have to approach a subject in different ways before you can master it.

### Task 3 GUI Design

Now you understand how to layout a GUI and interact with a range of widgets I would like to you design and build a simple app which will require a GUI. Keep it simple but ensure you can show off a range of skills. Some ideas which may help.

- A simple conversion app.
- An ingredient/people calculator
- A customer registration to database form
- A simple quoting system EG Tiling app,

Sketch out your design using ICT (serif, word, basalimic) and annotate your sketch to explain what it does and how you will set it up.

### Task 4 GUI Implementation

Build your GUI app and implement the code. Remember this is a chance to learn and explore. I will ask you to present this to me and explain how the widgets interact with the functions to produce an outcome.

### Task 5 GUI Evaluation

Summarise your thought on your final product. No more than half a page. What worked well, what didn't.