## THE PALMER CATHOLIC ACADEMY, SUMMER 2019 Computer Science Transition, Year 11 into 12

# PLEASE NOTE YOU WILL ALSO HAVE TO DOWNLOAD THE COMUTER SCIENCE INTRODUCTION TO TKINTER PDF

### Your Task Create a 'FLASH CARD' GUI program using the TKinter library in Python. Pick a topic in computing (e.g. Computing Hardware) and create a program which has a series of 'buttons' and a 'text area'. When each button is clicked, information about that part of the topic is presented in the text area. An example is shown below. Flash Cards - Computing Hardware The CPU is responsible for... The CPU Memory I/O Devices Motherboards Storage Devices Your starting 1. Download Python 3.7.1 to your computer point 2. Tkinter (and, since Python 3.1, ttk) are included with all standard Python distributions. However if you have any issues: https://tkdocs.com/tutorial/install.html 3. Create your GUI Resources:

Attached PDF - Introduction to TKinter.pdf

#### Links to other helpful documents:

- https://engmrk.com/wp-content/uploads/2018/01/Tkinter-Cheat-Sheet.pdf
- <a href="https://dzone.com/articles/python-gui-examples-tkinter-tutorial-like-geeks">https://dzone.com/articles/python-gui-examples-tkinter-tutorial-like-geeks</a>
- https://www.tutorialspoint.com/python3/python gui programming.htm

#### Online video tutorials

- https://www.youtube.com/watch?v=whErCLh0-QU
- <a href="https://www.youtube.com/watch?v=cvBRhYeO7hc">https://www.youtube.com/watch?v=cvBRhYeO7hc</a>
- https://www.youtube.com/watch?v= ISNIrR1nZU
- https://www.youtube.com/watch?v=VMP1oQOxfM0
- <a href="https://www.youtube.com/watch?v=D8-snVfekto">https://www.youtube.com/watch?v=D8-snVfekto</a>
- https://www.youtube.com/watch?v=7MQWCtTr0zA
- https://www.youtube.com/watch?v=-tbWoZSi3LU

## How your work will be assessed

#### Grade A:

Create a simple GUI that includes:

- Buttons
- Entry boxes
- Labels
- Commands added to buttons to call functions
- Menu bar (at least 2 drop down menus) OR Menu screen/s with buttons linked to other window frames
- At least 3 other additional features (eg. Spinners/Radio Buttons/Check Boxes/changing colours)

#### Grade B:

Create a simple GUI that includes:

- Buttons
- Entry boxes
- Spinners/Radio Buttons/Check Boxes
- Labels
- Commands added to buttons to call functions
- At least 2 other additional features (eg. Spinners/Radio Buttons/Check Boxes)

#### Grade C:

Create a simple GUI that includes:

- Buttons
- Entry boxes
- Labels
- Commands added to buttons to call functions
- At least 1 other additional feature (eg. Spinners/Radio Buttons/Check Boxes)