

## 1D Project Reflection

Marcus Chao Yan

1005905

Cohort 09

D. Describe one thing that you are proud of having achieved in this project. This could be a technical achievement e.g., you learnt something new, or personal achievement e.g. a difficulty that you overcame.

Going into this project, we were initially hesitant to implement a GUI given that we had no experience using the tkinter module. I decided to take up the task of learning tkinter and implementing the GUI, and I was eventually able to do so successfully.

tkinter is the first python GUI module I have learnt now, and I initially struggled in learning and implementing it. One of the main technical difficulties I faced was using buttons to update the text within the window. Initially when implementing this feature, the buttons would update the global variables, but would not change the text within the window. I realised that to resolve this issue, I would have to edit the functions created by my groupmates. I edited them to not just update the global variables, but to update the labels within the GUI using the `.config()` method.

Another issue which I initially faced was in getting the end screen to work. Whilst I was able to change text in their grid place after implementing the code, to display the end screen without closing the window, I would have to clear the widgets within the main frame of the window. To achieve this, I created a function `clearframe(frame)`, which uses a for loop to loop through the widgets within a frame and clear them using the `.destroy()` method.

In conclusion, I was able to further my knowledge through this 1D Project by learning the tkinter module. I was also able to apply knowledge taught in class such as functions and for loops to solve issues which arose after implementing the GUI.