

Documentation

This system has one class called "MyApp", and this class has a keyPress function which will catch if the user presses 'j' or presses 'k' and move highlighted backgrounds on a graphical interface accordingly; for example, if a user presses the left moving button (j) then the highlighted background will move left similarly to the right when (k) is pressed.

Within the same file but outside of the class there are 4 functions which are dedicated to directing if a user clicks the 4 buttons, these button presses (with the mouse) will perform indexing and opening of a submenu for each main menu item through use of a MyApp object. These menus are opened within the Key function described in the next paragraph.

There is a key function which captures if the user presses the space bar. This function is important and performs the same actions as the buttons when they are pressed with the mouse only it is triggered by listening for the user to press the space bar and then based on indexes react accordingly. The indexing is done still inside the main class with an object so when this button is called twice on the same main menu it allows for the user to be able to hop out of a submenu.

The flow of the program is controlled by indexing mainly. The cycling through the main and submenus is done by taking the size of the menus, that is, the number of items in them and using an index to cycle through each item. The flow through the sub menus is exactly the same. Since the indexing allows for flow in and out of menus the user controls when the program ends.

An important trait of the submenus is they do not display until a user clicks a main menu item. Once the submenu is displayed the menu and the choice chosen by the user will stay displayed.

This system was developed on a mac running Sierra operating system, when using other systems results may vary. I used python3 to compile the code and have reachar and pyaudio as dependencies. One may also need portaudio and homebrew to install these, also pip3.

For editing this system, one could complete the minute's menu. I have only displayed 20 minutes as it was just for demonstration. To complete this menu one could simply create the labels and place them inside the key function I have already added the sound files for all 60 minutes.