

## Lesson 4 App Customization

### 1. Program outcome

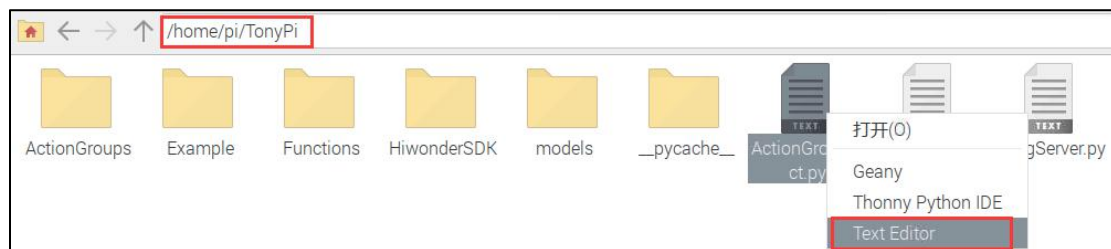
Execute the action group in the folder "Lesson 2 Action Programming" through mobile APP custom function.

### 2. Preparation

1) After connecting VNC, open the file manager of the system desktop.



2) Go to folder "/home/pi/TonyPi" path and open ActionGroupDict.py. Take the example of Text Editor:



3) Right-click or press "Ctrl+C" to copy the No. 24 action.

```
'10': 'bow',           #Bow
'11': 'squat',         #Squat
'12': 'chest',         #chest
'13': 'left_shot_fast', #Slide to Left
'14': 'right_shot_fast', #Slide to Right
'15': 'wing_chun',     #Strech the Arms
'16': 'left_uppercut', #Left Shooting
'17': 'right_uppercut', #Right Shooting
'18': 'left_kick',     #Left Kick
'17': 'right_uppercut', #Right Kick
'20': 'stand_up_front', #Stand up-front
'21': 'stand_up_back', #Stand up-back
'22': 'twist',         #Twist
'23': 'stand_slow',    #Attention
'24': 'stepping',      #Stepping
'25': 'jugong',        #Bow
}
```

4) Paste the program to a new line and set the number to 35. Name as

"weightlifting" (refer to the action group file name in  
/home/pi/TonyPi/ActionGroups)

```
#!/usr/bin/python3
# coding=utf8
#app call action group corresponding dictionary, left is app call, right is actual corresponding action
#Long press Custom button in the app to enter the input mode, and then fill in the action name and number,
the number on the left, the name can random

action_group_dict = {
    '0': 'stand',          #Attention
    '1': 'go_forward',     #Move Forward
    '2': 'back_fast',      #Move Backward
    '3': 'left_move_fast', #Turn Left
    '4': 'right_move_fast', #Turn Right
    '5': 'push_ups',       #Push Up
    '6': 'sit_ups',        #Sit-up
    '7': 'turn_left',      #Turn Left
    '8': 'turn_right',     #Turn Right
    '9': 'wave',           #Waving
    '10': 'bow',           #Bow
    '11': 'squat',         #Squat
    '12': 'chest',         #chest
    '13': 'left_shot_fast', #Slide to Left
    '14': 'right_shot_fast', #Slide to Right
    '15': 'wing_chun',     #Strech the Arms
    '16': 'left_uppercut', #Left Shooting
    '17': 'right_uppercut', #Right Shooting
    '18': 'left_kick',     #Left Kick
    '17': 'right_uppercut', #Right Kick
    '20': 'stand_up_front', #Stand up-front
    '21': 'stand_up_back', #Stand up-back
    '22': 'twist',         #Twist
    '23': 'stand_slow',    #Attention
    '24': 'stepping',      #Stepping
    '25': 'jugong',        #Bow
    '35': 'weightlifting'  #weightlifting
}
```

**Note:** Do not use the defined number and No.255. The name of the action group should be consistent with the name in the storage directory (/home/pi/TonyPi/ActionGroups).

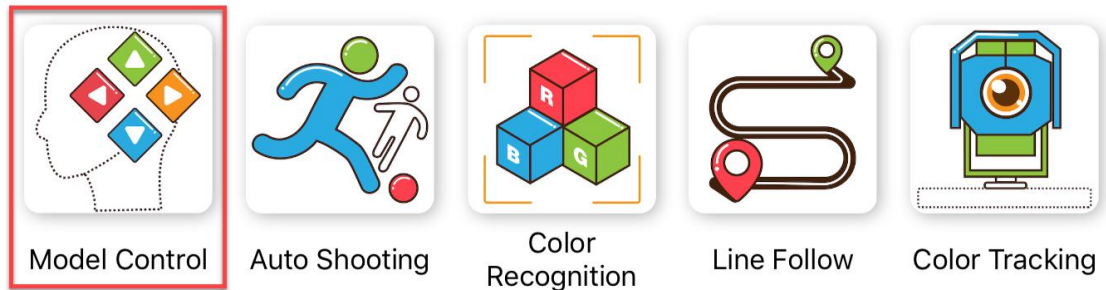
5) Press Ctrl+S to save and exit it.

6) Enter the command "**sudo reboot**" to restart the Raspberry Pi. (This step must be done)

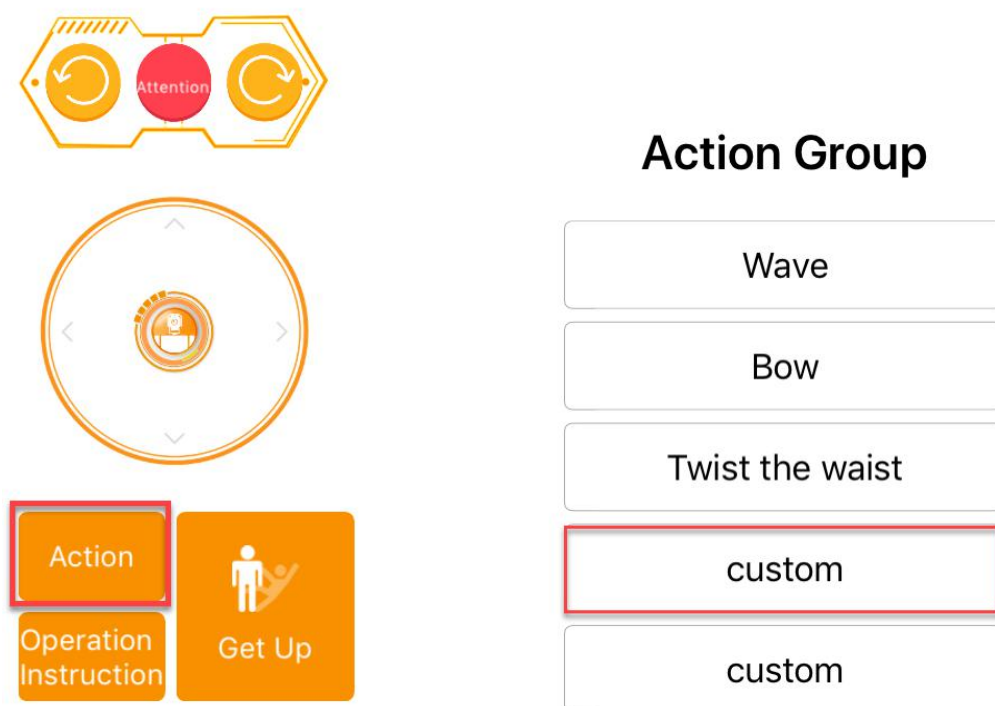
### 3. Operation Steps

1) Open mobile app and enter "Model Control".

## Mode Selection



2) Click "**action**" button, select "**custom**" in the pop-up interface, and long press to enter.



3) Enter the name and number of the saved action group in the pop-up interface. Click "ok" to save it.

Edit action

weightlifting

35

CancelOk

The action group name can be filled in arbitrarily, but the action group number must be filled in correctly, otherwise it cannot be realized.

4) After adding, click the action group name to execute it once.

## Action Group

Wave

Bow

Twist the waist

weightlifting

custom

5) If you need to modify or delete action group, please long press the action name button to modify the action group name as the default "Custom". Set the number as "255".