```
1  import pygame
2  from pygame.locals import*
3  import os
4  import RPi.GPIO as GPIO
5
6  # set up piTFT touchscreen
7  os.putenv('SDL_VIDEODRIVER','fbcon')
8  os.putenv('SDL_FBDEV','/dev/fb0')
9  os.putenv('SDL_MOUSEDRV','TSLIB')
10 os.putenv('SDL_MOUSEDEV','/dev/input/touchscreen')
11
12 pygame.init()
13
14
15 # color set up
16 WHITE=255,255,255
17 BLACK=0,0,0
18 RED = 230,0,0
19 GREEN = 0, 200, 0
20 GREEN_START = 35,150,10
21
22 # screen setup
23 screen = pygame.display.set_mode((320,240))
24 screen.fill(BLACK)
25 my_font=pygame.font.Font(None,25)
26 my_font2=pygame.font.Font(None,20)
27 screen.fill(BLACK)
28 my_text=""
29 text_pos= [0,0]
30
31
32 # import basket image
33 basket_image=pygame.image.load("laundry_basket.png")
34 basket_image=pygame.transform.scale(basket_image, (110,110))
35
36 def basket(x,y):
37     screen.blit(basket_image,(x,y))
38
39
40 # initalize variables
41 code_running=True
42 color_selection=True
43 select=True
44 sort=False
45 start=True
```

```
46
47
48  def okbutton():
49      pygame.draw.circle(screen,GREEN_START,(260,200),25)
50      my_buttons={'OK':(260,200)}
51      for my_text,text_pos, in my_buttons.items():
52          text_surface=my_font.render(my_text,True,WHITE)
53          rect=text_surface.get_rect(center=text_pos)
54          screen.blit(text_surface,rect)
55
56  def whitebutton(white_input):
57      if white_input==True:
58          pygame.draw.rect(screen,GREEN,pygame.Rect(20,80,80,30))
59      else:
60          pygame.draw.rect(screen,RED,pygame.Rect(20,80,80,30))
61
62      for my_text,text_pos, in my_buttons.items():
63          text_surface=my_font.render("Whites",True,WHITE)
64          rect=text_surface.get_rect(center=(60,95))
65          screen.blit(text_surface,rect)
66      pygame.display.flip()
67
68  def colorbutton(color_input):
69      if color_input==True:
70          pygame.draw.rect(screen,GREEN,pygame.Rect(120,80,80,30))
71      else:
72          pygame.draw.rect(screen,RED,pygame.Rect(120,80,80,30))
73
74      for my_text,text_pos, in my_buttons.items():
75          text_surface=my_font.render("Colors",True,WHITE)
76          rect=text_surface.get_rect(center=(160,95))
77          screen.blit(text_surface,rect)
78      pygame.display.flip()
79
80  def redbutton(red_input):
81      if red_input==True:
82          pygame.draw.rect(screen,GREEN,pygame.Rect(220,80,80,30))
83      else:
84          pygame.draw.rect(screen,RED,pygame.Rect(220,80,80,30))
85
86      for my_text,text_pos, in my_buttons.items():
87          text_surface=my_font.render("Reds",True,WHITE)
88          rect=text_surface.get_rect(center=(260,95))
89          screen.blit(text_surface,rect)
90      pygame.display.flip()
```

```
 91
 92  def lightbutton(light_input):
 93      if light_input==True:
 94          pygame.draw.rect(screen,GREEN,pygame.Rect(70,130,80,30))
 95      else:
 96          pygame.draw.rect(screen,RED,pygame.Rect(70,130,80,30))
 97
 98      for my_text,text_pos, in my_buttons.items():
 99          text_surface=my_font.render("Lights",True,WHITE)
100          rect=text_surface.get_rect(center=(110,145))
101          screen.blit(text_surface,rect)
102      pygame.display.flip()
103
104  def darkbutton(dark_input):
105      if dark_input==True:
106          pygame.draw.rect(screen,GREEN,pygame.Rect(170,130,80,30))
107      else:
108          pygame.draw.rect(screen,RED,pygame.Rect(170,130,80,30))
109
110      for my_text,text_pos, in my_buttons.items():
111          text_surface=my_font.render("Darks",True,WHITE)
112          rect=text_surface.get_rect(center=(210,145))
113          screen.blit(text_surface,rect)
114      pygame.display.flip()
115
116  # main code
117  while code_running:
118
119      time.sleep(0.1)
120      color_selection = True
121      start=True
122
123      screen.fill(BLACK)
124
125      # initalize screen
126      text_surface=my_font.render("Select basket below:",True,WHITE)
127      rect=text_surface.get_rect(center=(160,30))
128      screen.blit(text_surface,rect)
129
130      basket(13,47)
131      basket(105,47)
132      basket(195,47)
133
134      pygame.draw.circle(screen,GREEN_START,(260,200),25)
135      my_buttons={'start':(260,200)}
```

```
136         for my_text,text_pos, in my_buttons.items():
137             text_surface=my_font.render(my_text,True,WHITE)
138             rect=text_surface.get_rect(center=text_pos)
139             screen.blit(text_surface,rect)
140 
141 
142         my_buttons={'Basket 1':(70,155), 'Basket 2':(160,155), 'Basket 3': (250,155)}
143         for my_text,text_pos, in my_buttons.items():
144             text_surface=my_font2.render(my_text,True,WHITE)
145             rect=text_surface.get_rect(center=text_pos)
146             screen.blit(text_surface,rect)
147 
148         pygame.display.flip()
149 
150 
151 
```