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1 import turtle as t
2 from turtle import Screen, Turtle
3 s = Screen()
4 t.hideturtle()
5 s.bgcolor("beige")
6
7 completed = 0
8
9 t.penup()
10 t.goto(-50, 100)
11 t.color("black")
12 t.write("Geography Quiz Game", align='center', font=('Courier New', 40, 'bold'))
13
14 usernames_list = []
15 def username_creation(message):
16     global username
17     global username_list
18     username = s.textinput(message, "Username: ")
19     while True:
20         if username in usernames_list:
21             v = Turtle()
22             v.penup()
23             v.goto(-50, 100)
24             v.shape('square')
25             v.pencolor("beige")
26             v.fillcolor("beige")
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27         v.shapesize(40, 50)
28         break
29     else:
30         new_user = s.textinput("You don't have a pre-existing username!", "
    Create a new username: ")
31         usernames_list.append(new_user)
32         username = s.textinput("Sign In", "Username: ")
33
34 username_creation("Sign In")
35
36 score = 0
37 t.penup()
38 t.goto(-350, 325)
39 t.write(f"Score: {score}", align='left', font=('Courier New', 18, 'bold'))
40
41 def intro(x,y):
42     t.penup()
43     t.goto(x,y)
44     t.write(f'''
45     Welcome to this geography quiz game, {username}!
46
47     In this game, you will be presented with a country, and you
48     must answer with the name of it's capital city!
49
50     You may begin by choosing which continent's countries you
51     would like to be tested on.

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52
53     You will state the capital cities of 3 countries per continent.
54
55     A correct answer will earn you 1 point.
56     An incorrect answer will earn you 0 points.
57
58     For an answer to be correct, it must be spelled correctly and
59     start with a capital letter.
60
61     After you have answered all of the prompts from all of the
62     continents, you will be presented with your total score.
63     ''' , align="left", font=("Courier New", 18, "normal"))
64
65 intro(-375, -75)
66
67 def final():
68     global completed
69     if completed == 5:
70         t.penup()
71         t.goto(-150, -200)
72         t.color("black")
73         if score == 0:
74             t.write(f'''
75                 Better luck next time, {username}!
76                 You scored {score} points.''' , align='center', font=('Courier New'
, 24, 'bold'))

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77         elif score == 1:
78             t.write(f'''
79                 Better luck next time, {username}!
80                 You scored {score} point.''' , align='center', font=('Courier New'
, 24, 'bold'))
81         elif score < 6:
82             t.write(f'''
83                 Nice Try, {username}!
84                 You scored {score} points.''' , align='center', font=('Courier New
', 24, 'bold'))
85         elif score < 10:
86             t.write(f'''
87                 Good Job, {username}!
88                 You scored {score} points.''' , align='center', font=('Courier New
', 24, 'bold'))
89         elif score < 15:
90             t.write(f'''
91                 Amazing Job, {username}!
92                 You scored {score} points.''' , align='center', font=('Courier New
', 24, 'bold'))
93         else:
94             t.write(f'''
95                 You're a genius, {username}!
96                 You scored {score} points.''' , align='center', font=('Courier New
', 24, 'bold'))
97         username_creation("Sign Out")

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98
99 def north_america_questions(x,y):
100     global score
101     global completed
102     USA = s.textinput("What is the capital city of...", "USA")
103     Canada = s.textinput("What is the capital city of...", "Canada")
104     Mexico = s.textinput("What is the capital city of...", "Mexico")
105     north_america = {USA: "Washington, D.C.", Canada: "Ottawa", Mexico: "Mexico
City"}
106     for key, value in north_america.items():
107         if key == value:
108             score += 1
109             q = Turtle()
110             q.penup()
111             q.goto(-350, 325)
112             q.shape('square')
113             q.pencolor("beige")
114             q.fillcolor("beige")
115             q.shapesize(2, 10)
116             t.penup()
117             t.goto(-350, 325)
118             t.color("black")
119             t.write(f"Score: {score}", align='left', font=('Courier New', 18, '
bold'))
120     ka = Turtle()
121     ka.penup()

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122     ka.goto(-0, -100)
123     ka.shape('square')
124     ka.pencolor("beige")
125     ka.fillcolor("beige")
126     ka.shapesize(2, 30)
127     completed += 1
128     final()
129
130
131 def north_america_button(x,y):
132     global north_click
133     def na_button(x,y):
134         r = Turtle()
135         r.penup()
136         r.goto(x, y)
137         r.shape('square')
138         r.pencolor("red")
139         r.fillcolor("")
140         r.shapesize(2, 30)
141         r.onclick(north_america_questions)
142     def na_text(x,y):
143         t.penup()
144         t.goto(x, y)
145         t.color("red")
146         t.write("North America", align='center', font=('Courier New', 24, 'bold'
    ))

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147     na_text(x, y - 15)
148     na_button(x,y)
149
150 north_america_button(-0, -100)
151
152
153 def south_america_questions(x, y):
154     global score
155     global completed
156     Argentina = s.textinput("What is the capital city of...", "Argentina")
157     Peru = s.textinput("What is the capital city of...", "Peru")
158     Chile = s.textinput("What is the capital city of...", "Chile")
159     south_america = {Argentina: "Buenos Aires", Peru: "Lima", Chile: "Santiago"}
160     for key, value in south_america.items():
161         if key == value:
162             score += 1
163             z = Turtle()
164             z.penup()
165             z.goto(-350, 325)
166             z.shape('square')
167             z.pencolor("beige")
168             z.fillcolor("beige")
169             z.shapesize(2, 10)
170             t.penup()
171             t.goto(-350, 325)
172             t.color("black")

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173         t.write(f"Score: {score}", align='left', font=('Courier New', 18, '
    bold'))
174     la = Turtle()
175     la.penup()
176     la.goto(-0, -150)
177     la.shape('square')
178     la.pencolor("beige")
179     la.fillcolor("beige")
180     la.shapesize(2, 30)
181     completed += 1
182     final()
183
184 def south_america_button(x,y):
185     def sa_button(x,y):
186         c = Turtle()
187         c.penup()
188         c.goto(x, y)
189         c.shape('square')
190         c.pencolor("blue")
191         c.fillcolor("")
192         c.shapesize(2, 30)
193         c.onclick(south_america_questions)
194     def sa_text(x,y):
195         t.penup()
196         t.goto(x, y)
197         t.color("blue")

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198         t.write("South America", align='center', font=('Courier New', 24, 'bold'
199     ))
200     sa_text(x, y - 15)
201     sa_button(x,y)
202 south_america_button(-0, -150)
203
204 def asia_questions(x,y):
205     global score
206     global completed
207     China = s.textinput("What is the capital city of...", "China")
208     India = s.textinput("What is the capital city of...", "India")
209     Japan = s.textinput("What is the capital city of...", "Japan")
210     asia = {China: "Beijing", India: "New Delhi", Japan: "Tokyo"}
211     for key, value in asia.items():
212         if key == value:
213             score += 1
214             o = Turtle()
215             o.penup()
216             o.goto(-350, 325)
217             o.shape('square')
218             o.pencolor("beige")
219             o.fillcolor("beige")
220             o.shapesize(2, 10)
221             t.penup()
222             t.goto(-350, 325)

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223         t.color("black")
224         t.write(f"Score: {score}", align='left', font=('Courier New', 18, '
    bold'))
225     b = Turtle()
226     b.penup()
227     b.goto(-0, -200)
228     b.shape('square')
229     b.pencolor("beige")
230     b.fillcolor("beige")
231     b.shapesize(2, 30)
232     completed += 1
233     final()
234
235 def asia_button(x,y):
236     def a_button(x,y):
237         e = Turtle()
238         e.penup()
239         e.goto(x, y)
240         e.shape('square')
241         e.pencolor("green")
242         e.fillcolor("")
243         e.shapesize(2, 30)
244         e.onclick(asia_questions)
245     def a_text(x,y):
246         t.penup()
247         t.goto(x, y)

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248         t.color("green")
249         t.write("Asia", align='center', font=('Courier New', 24, 'bold'))
250     a_text(x, y - 15)
251     a_button(x,y)
252
253     asia_button(-0, -200)
254
255     def europe_questions(x,y):
256         global score
257         global completed
258         Italy = s.textinput("What is the capital city of...", "Italy")
259         France = s.textinput("What is the capital city of...", "France")
260         Greece = s.textinput("What is the capital city of...", "Greece")
261         europe = {Italy: "Rome", France: "Paris", Greece: "Athens"}
262         for key, value in europe.items():
263             if key == value:
264                 score += 1
265                 d = Turtle()
266                 d.penup()
267                 d.goto(-350, 325)
268                 d.shape('square')
269                 d.pencolor("beige")
270                 d.fillcolor("beige")
271                 d.shapesize(2, 10)
272                 t.penup()
273                 t.goto(-350, 325)

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274         t.color("black")
275         t.write(f"Score: {score}", align='left', font=('Courier New', 18, '
    bold'))
276     h = Turtle()
277     h.penup()
278     h.goto(-0, -250)
279     h.shape('square')
280     h.pencolor("beige")
281     h.fillcolor("beige")
282     h.shapesize(2, 30)
283     completed += 1
284     final()
285
286 def europe_button(x,y):
287     def e_button(x,y):
288         u = Turtle()
289         u.penup()
290         u.goto(x, y)
291         u.shape('square')
292         u.pencolor("purple")
293         u.fillcolor("")
294         u.shapesize(2, 30)
295         u.onclick(europe_questions)
296     def e_text(x,y):
297         t.penup()
298         t.goto(x, y)

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299         t.color("purple")
300         t.write("Europe", align='center', font=('Courier New', 24, 'bold'))
301     e_text(x, y - 15)
302     e_button(x,y)
303
304 europe_button(-0, -250)
305
306 def africa_questions(x,y):
307     global score
308     global completed
309     South_Africa = s.textinput("What is the capital city of...", "South Africa")
310     Morocco = s.textinput("What is the capital city of...", "Morocco")
311     Ghana = s.textinput("What is the capital city of...", "Ghana")
312     africa = {South_Africa: "Cape Town", Morocco: "Rabat", Ghana: "Accra"}
313     for key, value in africa.items():
314         if key == value:
315             score += 1
316             a = Turtle()
317             a.penup()
318             a.goto(-350, 325)
319             a.shape('square')
320             a.pencolor("beige")
321             a.fillcolor("beige")
322             a.shapesize(2, 10)
323             t.penup()
324             t.goto(-350, 325)

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```

325         t.color("black")
326         t.write(f"Score: {score}", align='left', font=('Courier New', 18, '
    bold'))
327     j = Turtle()
328     j.penup()
329     j.goto(-0, -300)
330     j.shape('square')
331     j.pencolor("beige")
332     j.fillcolor("beige")
333     j.shapesize(2, 30)
334     completed += 1
335     final()
336
337 def africa_button(x,y):
338     def af_button(x,y):
339         u = Turtle()
340         u.penup()
341         u.goto(x, y)
342         u.shape('square')
343         u.pencolor("orange")
344         u.fillcolor("")
345         u.shapesize(2, 30)
346         u.onclick(africa_questions)
347     def af_text(x,y):
348         t.penup()
349         t.goto(x, y)

```

```
350         t.color("orange")
351         t.write("Africa", align='center', font=('Courier New', 24, 'bold'))
352     af_text(x, y - 15)
353     af_button(x,y)
354
355 africa_button(-0, -300)
356
357 s.mainloop()
358 t.mainloop()
```