Follow the instructions below

Add your finished code to your GitHub repo for this project

Step 1: Create a new module named `shapes.py`

- Add the code shown to your new module

```python
# External module containing functions for drawing various shapes
# shapes.py

import pygame

def draw_circle(screen, shape):
    pygame.draw.circle(screen, shape['color'], shape['position'], shape['radius'])

def draw_rect(screen, shape):
    pygame.draw.rect(screen, shape['color'], (shape['position'][0], shape['position'][1], shape['width'],
    shape['height']))

def draw_line(screen, shape):
    pygame.draw.line(screen, shape['color'], shape['start_pos'], shape['end_pos'], shape['width'])
```

Step 2: Update the import statements in your main.py file

```python
import pygame
import sys
import config  # Import the config module
import random
import shapes  # Import the shapes module
```

Step 3: Update your main ( ) function

```python
def main():
    screen = init_game()
    clock = pygame.time.Clock()  # Initialize the clock object

    shapes_list = []  # List to hold shapes

    running = True
```

```
    running = True
    while running:
```

Step 4: Generate a random number to represent the various shapes

```
running = True
while running:
    running = handle_events()
    screen.fill(config.WHITE)  # Use color from config

    # Generate a random number to represent the various shapes
    shape_type = random.randrange(3)
```

Step 5: Create new CIRCLES and append them to the shapes_list

```
# Generate a random number to represent the various shapes
shape_type = random.randrange(3)

# Create a new shape and add it to the list
if shape_type == 0:
    # Circle: (type, color, position, radius)
    new_shape = {
        'type': 'circle',
        'color': (random.randrange(255), random.randrange(255), random.randrange(255)),
        'position': (random.randrange(config.WINDOW_WIDTH), random.randrange(config.WINDOW_HEIGHT)),
        'radius': 50
    }
```

Step 6: Create new RECTANGLES and append them to the shapes_list

```
elif shape_type == 1:
    # Rectangle: (type, color, position, width, height)
    new_shape = {
        'type': 'rectangle',
        'color': (random.randrange(255), random.randrange(255), random.randrange(255)),
        'position': (random.randrange(config.WINDOW_WIDTH - 100), random.randrange(config.WINDOW_HEIGHT - 100)),
        'width': 100,
        'height': 100
    }
elif shape_type == 2:
    # Line: (type, color, start_pos, end_pos, width)
    new_shape = {
        'type': 'line',
        'color': (random.randrange(255), random.randrange(255), random.randrange(255)),
        'start_pos': (random.randrange(config.WINDOW_WIDTH), random.randrange(config.WINDOW_HEIGHT)),
        'end_pos': (random.randrange(config.WINDOW_WIDTH), random.randrange(config.WINDOW_HEIGHT)),
        'width': 10
    }
```

Step 7: Create new LINES and append them to the shapes_list

Step 8: Use FOR loop to draw all the shapes in the shapes_list

```
elif shape_type == 2:
    # Line: (type, color, start_pos, end_pos, width)
    new_shape = {
        'type': 'line',
        'color': (random.randrange(255), random.randrange(255), random.randrange(255)),
        'start_pos': (random.randrange(config.WINDOW_WIDTH), random.randrange(config.WINDOW_HEIGHT)),
        'end_pos': (random.randrange(config.WINDOW_WIDTH), random.randrange(config.WINDOW_HEIGHT)),
        'width': 10
    }

# Add the new shape to the list
shapes_list.append(new_shape)

# Draw all shapes from the list using the appropriate function from the shapes module
for shape in shapes_list:
    if shape['type'] == 'circle':
        shapes.draw_circle(screen, shape)
    elif shape['type'] == 'rectangle':
        shapes.draw_rect(screen, shape)
    elif shape['type'] == 'line':
        shapes.draw_line(screen, shape)
```