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Attendance Quiz 6
Collision Detection Algorithms

A window has the following objects:

- A rectangle with vertices:

A(2,4),B(4,2), C(8,6), and D(6,8)

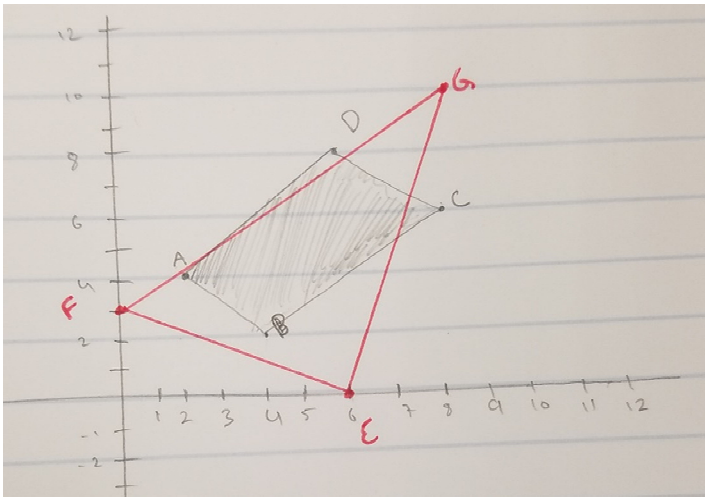
- A triangle with vertices:

E(6,0), F(0,3) and G(8,10)

(1) Determine if these two objects are overlapped using “Bounding Volumes” – You can choose Bounding Circle or Bounding Rectangle. Please show your work

- There is a clear overlap between the two objects as can be seen in the below figure. There is a visual representation of a collision. This can also be represented through bounding rectangle

- 8<3 or 0>8 →false
- 8<0 or 10<2 → false
  ➔ Implies Collision



In the **Collider** example (Module 11, Slide 25), please explain how the run method works?

The run method first declares a variable of type Iterator and moves into a while loop which will invoke the move command to the next object which can be moved. It again invokes the iterator and checks to see whether there has been a collision. If objects are colliding it will call handleCollision() so it can remove the objects in question. After it does this it will redraw the world using myContainer.repaint();