

Method changed

- CheckForEntityCollision()
  - o arena.cc – line 462

New method extracted

- HandleCollision()
  - o Location defined in
    - arena.h – line 221
    - arena.cc – line 489
  - o Location called in
    - Arena.cc – line 484
      - HandleCollision() is called in the CheckForEntityCollision() method at line 484 once a collision is verified to be occurring.

HandleCollision() is a the new method extracted from CheckForEntityCollision() that serves to streamline the process of checking and handling collisions in the arena. Instead of having CheckForEntityCollision() check for an entity collision, calculate the angle at which the colliding entity should bounce, and send such information to the collision event, the method's function is simplified and made more consistent with its name because it only checks whether or not a collision has occurred. If it does, it calls the extracted HandleCollision() method, which effectively handles the collision by calculating the angle of reflection and appropriately updating the collision event that will eventually be sent to the colliding entity so it bounces off at the appropriate angle. Separately checking and handling collisions improves the structure and accessibility of the code by splitting the work between two methods so that their purpose within the simulation is clear and consistent with their respective names. CheckForEntityCollision() now has a clear purpose (i.e. check for collisions) that's different from HandleCollision() (i.e. calculate and send information regarding the collision).