**Asteroids Documentation**

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**Features Implemented**

* Asteroid bouncing: Asteroids now bounce off each other when they collide, altering both trajectories and speed

**Modified Files and Methods:**

* **Asteroid.h**:
  + Added BounceWith() method declaration
  + Added GetSize() method declaration
* **Asteroid.cpp**:
  + Modified CollisionTest() to allow collisions between asteroids
  + Modified OnCollision() to handle asteroid-to-asteroid collisions
  + Added Bounce() method implementation to handle physics calculations

**Implementation Details**

**1. Collision Detection**

Modified the CollisionTest() method to allow detection of collisions between asteroids:

A computer screen shot of text

AI-generated content may be incorrect.

**2. Collision Response**

OnCollision() now detects if the collision is with another asteroid:

A screen shot of a computer program

AI-generated content may be incorrect.

**3. Physics Implementation**

The Bounce() method implements physics for the collision:

A screen shot of a computer program

AI-generated content may be incorrect.

A screenshot of a video game

AI-generated content may be incorrect.**Screenshots**

A screenshot of a video game

AI-generated content may be incorrect.

After(Asteroids don’t clip through each other)  
Asteroids bounce

Before (Asteroids would clip through each other)  
Asteroids do not bounce

**Future Work**

* Implement different scores for hitting different sized asteroids
* Implement asteroid splitting behavior when hit by bullets
* Implement spaceship collision response with asteroids