SI@UCF Java GUI
Homework Assignment: *Asteroids*

Game_Framework.java
Kyle wrote a version of Asteroids. I have left in his comments, but deleted most of his code from the update() method. If you choose, you can rename this file, **Game.java** and then try to fill in the update function so the game plays properly.

Alternatively, you can write your own asteroids from scratch.

Asteroids - Basic Code Framework
There are four classes:

Asteroids
Bullet
Player
Game

The first class manages a single asteroid object. The next class manages a single bullet object. The third class manages a single player object and the Game class has instance variables of each of the other three. It has one player object and an ArrayList of asteroids and an ArrayList of bullets.

In the game, when you hit the space bar, a new bullet is fired in the direction your spacecraft is facing. If a bullet collides with an asteroid, you get one point and the asteroid splits into two asteroids, each of half the radius of the previous. If you collide with an asteroid, you lose a life. When your lives go down to 0, the game is over. After a bullet has been "alive" for a duration of time, it disappears. All other objects wrap around the screen as we've seen in previous games.

Optional Edits
This part is really up to you. Try any enhancements that seem fun!

A screenshot of the game in progress is included on the next page.