

# **Copy Constructors & Destructors** CS 165 – Object Oriented Software Development Macbeth – Lesson 13.2 © 2017 Brigham Young University-Idaho

# Agenda

- Opening Prayer
- Spiritual Thought
- Looking Forward
- Team Activity



# **Spiritual Thought**

### **Scatter Your Crumbs**

by Alfred Crowquill (quoted by President Uchtdorf)

Amidst the freezing sleet and snow The timid robin comes; In pity drive him not away, But scatter out your crumbs.

And leave your door upon the latch
For whosoever comes;
The poorer they, more welcome give,
And scatter out your crumbs

All have to spare, none are too poor, When want with winter comes; The loaf is never all your own, Then scatter out the crumbs.

Soon winter falls upon your life,
The day of reckoning comes;
Against your sins, by high decree,
Are weighed those scattered crumbs.



# **Asteroids Minimum Requirements**

- To obtain an "A" on the Asteroid Project, you must meet the following minimum requirements:
  - The game starts with 5 large asteroids placed randomly on the board
  - Ship thrusts forward with up arrow and will rotate with left and right arrows.
  - Bullets are fired based on the direction of the ship and die after 40 frames.
  - Large rocks and Medium Rocks split (with correct angle and speed) per the project description.
     Small rocks do not split.
  - All objects wrap around the screen.
  - Descriptive comments added before each function (if implemented inline in the .h file, the comments need to be added there as well).
- To obtain bonus points, you must:
  - Meet all requirements above (including comments) if not met, then no bonus points will be given.
  - Add additional functionality to the game.
  - Summary of additional functionality must be provided in the makefile comments



# **Looking Forward**

- Last Day to Submit Any Missed Work is Wed, Dec 13th
- Final Exam Wed, Dec 13<sup>th</sup> during class (we will practice on Monday)
- Final Asteroids Project End of the day Wed, Dec 13th

