

## Group Project Phase 3

For Phase 3, you will be adding more tests to your system as well as a new feature. By the end of this phase, the project should be in a presentable state. All tests should pass, the program should run, and it should be easy to compile and test.

### Task 1: Mock Testing

Write a Graphics2DMock class that can be swapped in to the render methods of the xxView classes. The class should be able to:

- Determine if a particular method was called, or not.
- Determine if a particular method was called with specific arguments.

Be sure your tests offer good code coverage and thoroughly test the xxView classes.

### Task 2: New Feature

Add a new feature, which can be ONE of the following:

Boss/End of Level: Implement a boss at the end of the level. The boss must:

- Move around the screen via algorithmic or predetermined movement
- Be at least 3x3 tiles in dimension
- Contain one swinging arm, that kills the player on impact.
- Contain 3 “points of weakness” that when shot inflict damage.
- Fire bullets at the player
- Have a large amount of health. When low on health, the behavior must change in some way (faster movement, more bullets, bigger arm, etc.)

After the boss is defeated, load a different level. This level can be basic and just a proof of concept that multiple levels are possible.

OR

Level Scrolling: Implement directional level scrolling and secret areas. Requirements:

- The level must scroll right, left, up, and down at least once per level.
- All collisions must work.
- Implement at least 1 secret area. The secret area is only visible if the player is at a certain place at a certain time (see original game).

For either feature, they must be complete with unit tests. You do not have to use any mock objects; just test public methods and their side effects.

If you choose to implement both features, and both are implemented well, an additional 50 points will be awarded as a bonus.

### Deliverables

- Submit to blackboard your meeting agendas and minutes
- Submit to blackboard a Microsoft Project file OR make use of the SourceForge ticket system
- Your repository should have a Graphics2DMock class.

- The test and code should run on my machine via your build file (please double check and test this thoroughly). I'll be looking for passing tests and a runnable product.
- As always, tests should be clean, concise, yet offer good coverage.

This file is subject to change.