PlanetDefense v0.2.0

CSCE3513 Team 6 Game Project – Spring2012

USER STORIES:

- As a user, in order to lose the game, I need to lose when the planet’s health is depleted
- As a user, in order to close the game, I want the ESC button to exit the game with a confirmation first
- As a user, I want an in game menu to exit the game or change options.
- As a user, I want to view an options page from the main menu
- As a user, I want to view a credits page on the main menu
- As a user, in order to increase difficulty of the game, there should be a timed cooldown mechanism for shooting lasers
- As a user playing the game, I want a stream of jet particles to come out of the back of my ship for animation purposes

PAIRING:

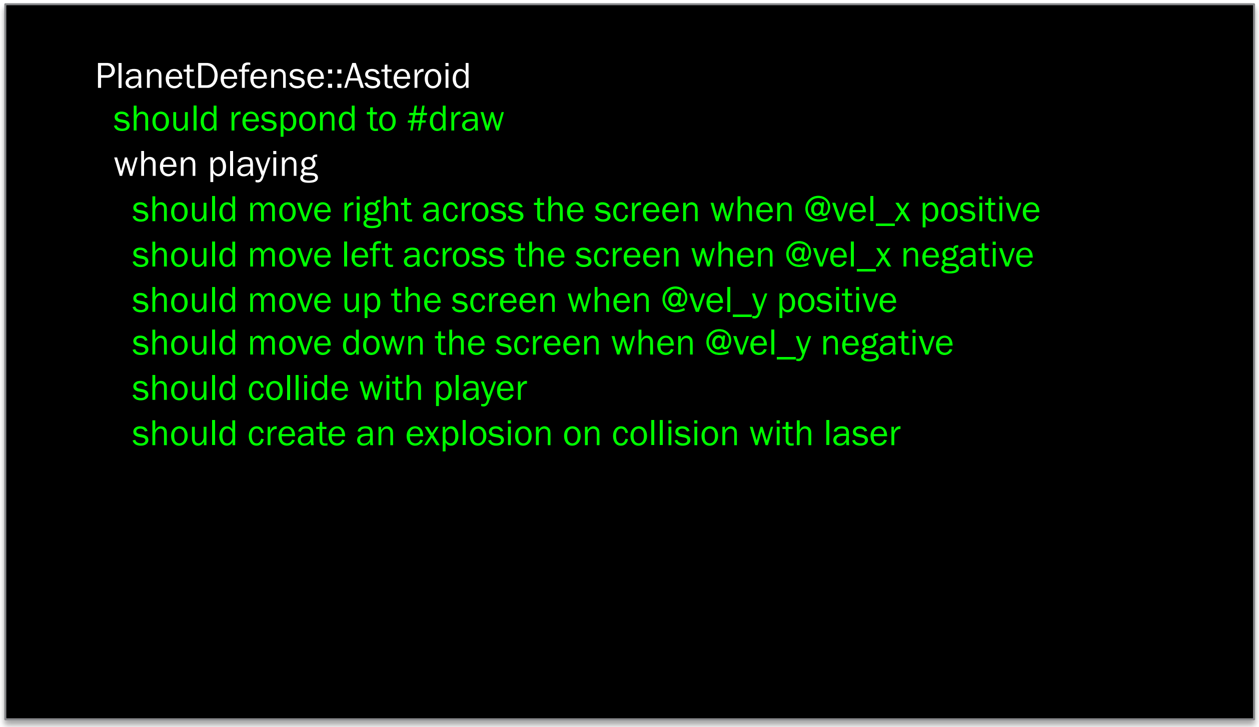
- Addam/Denton -> Initial game menus and stubs
- Michael/Bryan -> Credits menu state
- Team -> Planet Health Bar, Life images

(Remainder of tasks were done individually)

TDD-ING

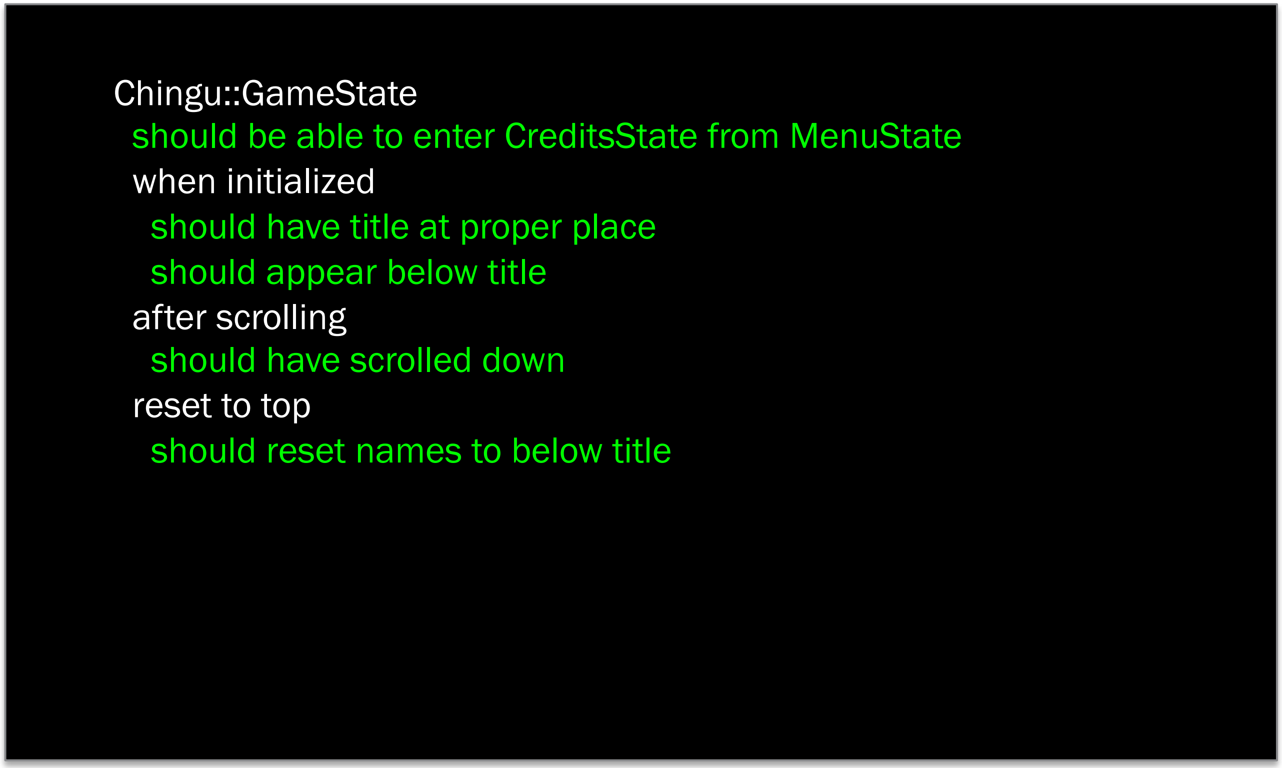
- Tests were (mostly) attempted first before implementation except for a few unique situations. (we still aren’t perfect)
  - Example: particle stream from rear of ship

UNIT TESTING – ASTEROID



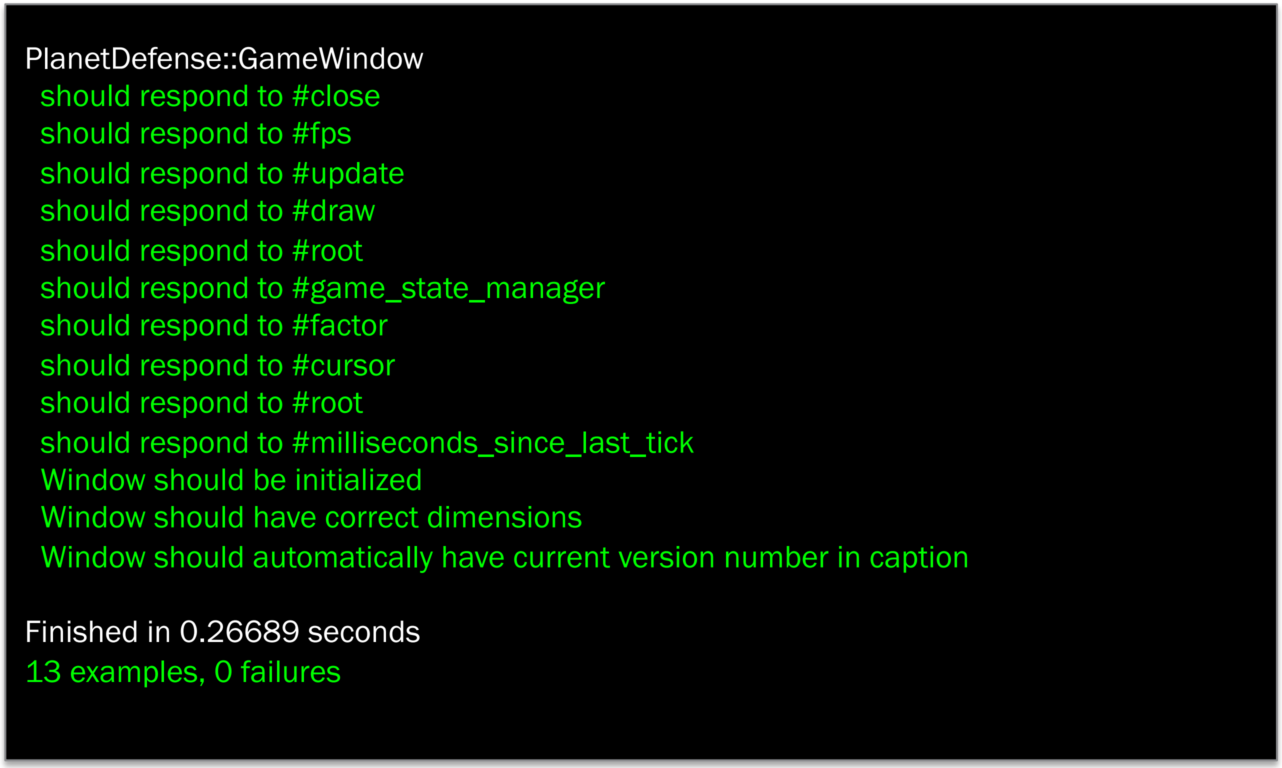
```
PlanetDefense::Asteroid
  should respond to #draw
  when playing
    should move right across the screen when @vel_x positive
    should move left across the screen when @vel_x negative
    should move up the screen when @vel_y positive
    should move down the screen when @vel_y negative
    should collide with player
    should create an explosion on collision with laser
```

UNIT TESTING – GAME STATE



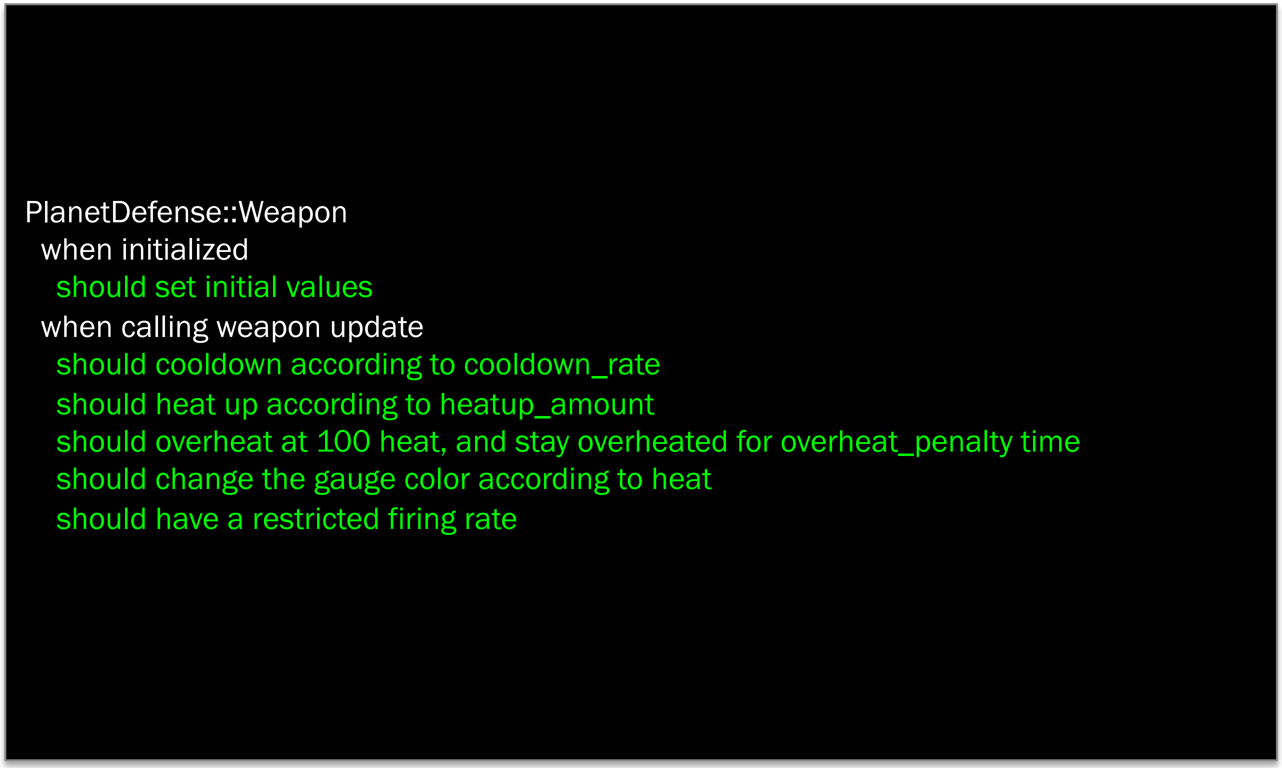
```
Chingu::GameState
  should be able to enter CreditsState from MenuState
  when initialized
    should have title at proper place
    should appear below title
  after scrolling
    should have scrolled down
  reset to top
    should reset names to below title
```

UNIT TESTING – GAME WINDOW



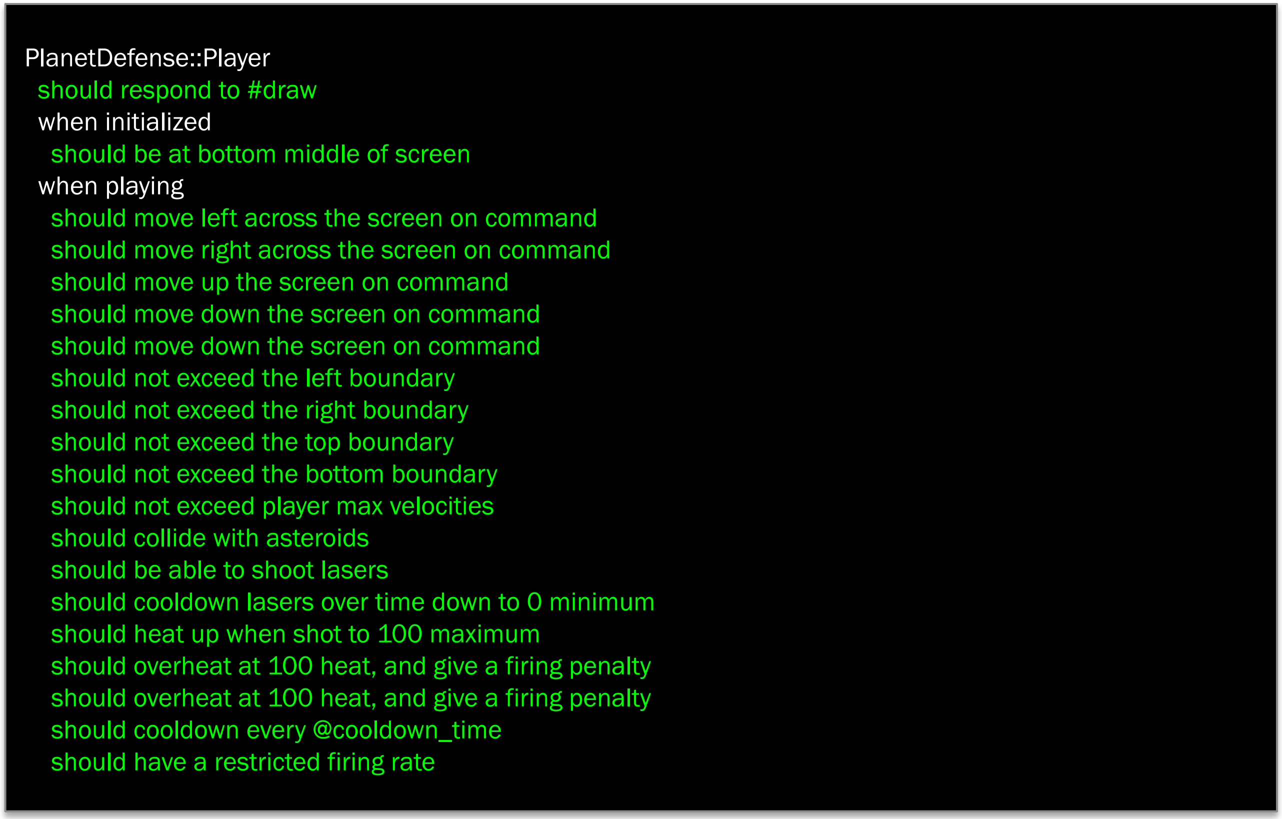
```
PlanetDefense::GameWindow
  should respond to #close
  should respond to #fps
  should respond to #update
  should respond to #draw
  should respond to #root
  should respond to #game_state_manager
  should respond to #factor
  should respond to #cursor
  should respond to #root
  should respond to #milliseconds_since_last_tick
  Window should be initialized
  Window should have correct dimensions
  Window should automatically have current version number in caption

Finished in 0.26689 seconds
13 examples, 0 failures
```

UNIT TESTING – WEAPON



```
PlanetDefense::Weapon
  when initialized
    should set initial values
  when calling weapon update
    should cooldown according to cooldown_rate
    should heat up according to heatup_amount
    should overheat at 100 heat, and stay overheated for overheat_penalty time
    should change the gauge color according to heat
    should have a restricted firing rate
```

UNIT TESTING - PLAYER



```
PlanetDefense::Player
  should respond to #draw
  when initialized
    should be at bottom middle of screen
  when playing
    should move left across the screen on command
    should move right across the screen on command
    should move up the screen on command
    should move down the screen on command
    should move down the screen on command
    should not exceed the left boundary
    should not exceed the right boundary
    should not exceed the top boundary
    should not exceed the bottom boundary
    should not exceed player max velocities
    should collide with asteroids
    should be able to shoot lasers
    should cooldown lasers over time down to 0 minimum
    should heat up when shot to 100 maximum
    should overheat at 100 heat, and give a firing penalty
    should overheat at 100 heat, and give a firing penalty
    should cooldown every @cooldown_time
    should have a restricted firing rate
```

UNIT TESTING

49 Total Tests

-Show specs on Github-

DEMO

PRELIMINARY V0.3.0 PLANNING

- As a user I want to be able to adjust the volume of sound effects and music independently
- As a user I want to be able to play multiple levels with different backgrounds
- As a user I want to receive a ‘nuke’ after reaching a certain number of points
- As a user I want my ‘nuke’ to destroy all asteroids on the screen

Questions?