**Work in Progress Report**

**Major developments/breakthroughs (reference specific code please):**

I finally got some movement into my project in the velocity section of the physics card. The user is able to choose between four sprites (person, skateboarder, car, and rocket ship) all of which have different speeds and rates of acceleration. You are able to move them using wasd keys and then there are buttons in the tabbed pane that allow s the user to speed up or slow down the sprite’s movement.

**Major Challenges/setbacks (reference specific code please):**

The one major challenge that I had was using both a key listener and a button listener in my code. When you used the keys to move when you just open the project it would work but then as soon as you pressed a button to change the speed the key listener wouldn’t work. It was a focus issue that was fixed by having the key listener request focus every time after the button listener was used so that it would work again.

**Any modifications to your specifications/release schedule:**

I’ve fallen behind since having problems with getting a fully functional architecture and finally getting things moving on the screen. I’m hoping to be able to get the gravity section working and then get a start on the graphing calculator before the next WiP.

**Description of your scratch/test program:**

**Describe the generic concept you needed to test out:**

I was testing out moving sprites around the screen using a key listener and then also having a button listener for changing the speed of the sprite.

**Source any web site/book that helped you with that concept:**

-MoveImage

**Describe the code and the lesson that you learned from it**:

The code used a key listener to change the sprites location by adding or subtracting a dx or dy from its x or y co-ordinates. Clicking the button to change the speed either increased the nSpeed variable or decreased it depending on if you chose to speed up or slow down. I also had to have panDemo request focus back after every time the button listener was used since it would take the focus and then the key listener wouldn’t work. The main lesson I learned was about passing the focus back and forth so that all of the listeners would work in conjunction with each other.