Final Project Basics

Most grade 11 final projects involve a real-time game (a game things are constantly moving on the screen.) For the most part this involves simulating some game world on the computer. The most important thing to understand for this is the "main game loop." During the main part of your game the program will constantly be looping around at a fixed rate. The main game loop should look something like:

**while playing:**

**get input from user**

**move good guy**

**move bad guys**

**move other stuff**

**check interactions**

**draw everything**

**delay**

By seperating the logically different actions in the main game loop we reduce the amount of unwanted interactions. In this loop, THE ONLY PLACE THINGS ARE DRAWN IS IN "DRAW SCENE". The most common mistake in final projects is to try to follow a simple action to it's logical completion. e.g. when a shot is fired DO NOT, in the input procedure, try to follow the shot until it hits something. Instead the shot just becomes a new object in the world to be tracked.

Each time around the main game loop takes a set amount of time (e.g. 20 ms) each procedure in the loop should track what happens in that amount of time (e.g. move the good guy 5 pixels.) By having a bunch of things move a small amount makes them look like they are moving simultaneously.