Introduction

“**Computer programming** (often shortened to **programming** or **coding**) is the process of [designing](http://en.wikipedia.org/wiki/Software_design), writing, [testing](http://en.wikipedia.org/wiki/Software_testing), [debugging](http://en.wikipedia.org/wiki/Debugging), and maintaining the [source code](http://en.wikipedia.org/wiki/Source_code) of [computer programs](http://en.wikipedia.org/wiki/Computer_program).”  
-Wikipedia page on Computer Programming

The beauty of programming lays in the different steps within programming. It is one of my favorite things because I can be creative, and still produce something interactive which is interesting and fun for users. The concept of trial and error is used much in the world of programming. To test and test the code you wrote, and fixing any obstacle before moving on to writing the next block of code. This is what truly interests me in programming; a problem will come up, and I have to solve it. When solved another problem will come up and require solving as well. This will continue until you have a product free of any problems, ready to be shown to out standers, which in their turn will encounter many new problem which you had overseen. A never-ending line of problems, all ready to be fixed.

Why I chose the subject of programming for my final paper, is because I always had a particular interest in instead of using something interactive, creating something interactive and shaping it to my will. I began when I was 14 years old and found out that you could connect a Wii-Remote with your PC through a Bluetooth connection and that you were able to write scripts that uses the input of this Wii-Remote. After learning the basics of programming like variables and ‘if-statements’ I went up a level to creating interactive flash-games. After trying this I finally found the perfect way to live up to my belongings with the XNA-Framework by Microsoft. This gave people the opportunity to create full-scale games for Xbox360 and PC’s.

Today I have been programming games for PC and Xbox for about two years, and I have gained much experience. The thing is that I never took the time to create a game of such a size that it would be able to interest people for a longer period. Now when having to choose a subject for my paper I found the process of creating a game a perfect option. I can create something fun for me and others, something to be proud of, and having fun while doing work for school which requires much time. The level of mathematics and physics used in programming makes this a suitable subject in my opinion.

The thing I want to get to know out of this paper is; what is the best way to make and publish a game? When I tried creating a game on a larger scale together with a friend of mine, I had to plan and think carefully about how to attack the problems and create the things I want. How do the professionals work on this, do they use humongous whiteboards in small offices with all kinds of scribbling on it, or do they just note down the ideas they come up with so they can use them later if they like to? I have a little experience creating a game on larger scale, but I want to expand my horizon to develop myself further into the world of programming.

In the big break this year I had some free time on my hands, and on rainy days I sat behind my computer and tried to work out some things I wanted to get done. Eventually I came up with a game where 2 players have to compete with each other to drive as fast as they can into the car of the other player. The concept sounds simple but the programming behind it took me 2 weeks. I have written an algorithm based on the Riemann-Som to check for collisions for example. This is what I like about programming, having a difficult problem, and solving it all by myself so the game works like a charm. I want to re-create this game from scrap, and bringing it up to a level where it is suitable for publishing on such things as Xbox Marketplace ready for sale.

Let’s start!