Rationale

I take Art, Double Maths, Physics and Computing at AS level. I really like problem solving and programming and I would like to go on and study software engineering. Recently, combining Art and Computing became a new challenge for me as I enjoy Art and would like to make something useful as well. 3D computer graphics and visual effects are used in many different fields today such as game-making and movie-making industries. I have been amazed at how computers can model 3D objects and display them in a 2D format with an accurate sense of perspective. And this is the topic I will explore in this project.

I am not a very experienced programmer although I have done some programming before in Python and Delphi as well as a simplified version of VB but I have not touched upon the aspect of 3D programming. In addition the AS/A2 Computing course does not cover computer graphics therefore it would be a great topic to explore.

As resources I intend to use books and internet tutorials which will guide me through learning the syntax of the language. I will also be asking professional programmers for help (my dad and others as well). It is hard to find a wide range of resources for this project because most of the help I will get form websites. While books maybe well written up it, they cost and it is harder to contact the author to ask for help.

For my extended project, I intend to learn a new programming language and explore the 3D graphics manipulation. I would like to create a simple interface that will enable the user to edit 3D objects on the computer’s screen, a 3D engine in short. This would take form of an artefact and I realise now it will take a long time to accomplish. I need to learn the appropriate language first, explore the libraries associated with 3D graphics and create the final product. This task should help me to develop my problem solving skills, organisation skills and will help me decide if I want to go into the field of Computer Graphics after my A-Levels. It should be fun!

The language I will probably use I will probably use is a .Net language, like C# or VB.