# SDD Transcript – Projectile Motion Stage 1 Presentation

The issue that my program intends to solve is that physics students require an easier method to solve projectile problems, as some people may need aid to develop this skill. Visual aid of the projectile’s path in the problem given and the answers to the projectile motion problems can allow physics students to check their answers and develop a skill in solving these problems. The program will take variables relating to projectile motion and will output variables that can be calculated from the variables given, and show the path of the projectile on a graph. The height of the projectile at a point of time will be used to create a graph of the projectile’s motion, as many dots placed on the graph can create a curve. This method is required as Visual Basic 6 does not have a graphing function.

The time frame for the project is to be over a 6-month period, and the implementation of the program is estimated to be completed over a 1 and a half month to 2 months period. The issues with the program is that Visual Basic 6 does not have a graphing function and so a smooth curve cannot be created. Dots can be used instead to replicate a curve on the graph. When this program is completed, physics students can more easily complete projectile problems and have an aid in solving these problems, and so can develop a skill in solving projectile motion problems by using the program. The requirements include a developer to plan and create the program, and a Windows computer to run the program. The program will be designed to run on Windows, and there are no costs involved in the development of the program.

The program will most likely take 1-2 months to create, as shown on the Gantt chart earlier, and Visual Basic 6 must be used to create the program as the developer of the program is experienced in programming in Visual Basic 6. The graph may be left out of the program if time restrictions force this to occur, as the main purpose of the program is to solve projectile motion problems, and the graph only helps achieve this purpose.

The social and ethical issues in this program include malware as a possible issue. The program will be scanned by an antivirus program before it is released to the target market, being physics students. Intellectual property is not an issue that must be considered by the developer, as the program will be owned by the Department of Education of NSW. The program will be developed to the highest quality possible in the time frame given, and all bugs and issues that are found will be fixed. Industry standards will be used in the development of the user interface to ensure consistency, so that users will find the program easy to use and no ergonomics issues will be found. The graph of the projectile’s path will follow science standards, with the dependent variable on the y axis and independent variable on the x axis. And of course, no information will be kept on a database to stop any privacy issues to arise.