1 Personal Appraisal (Lim Kah Yee)

1.1 Peer assessment statement

1.1.1 Learning outcome

In this assignment, I have teamed up with Joan Hau to create the robot together which is based on Gundam's series robot(RGM-79C) together. In this assignment, Joan has provided a lot of help in doing the robot such as the projection, texture and lighting of the robot. The task that we have assigned is I was in charge of creating the model of the beam rifle, bazooka, robot's leg and robot's body while Joan incharge of creating the model of the shield, robot's arm, texture, projection and lighting of the robot. Next, we are also in charge of adding animation to all the models that incharge by ourselves. Furthermore, Joan has a very high ability in creating the robot in this assignment. The cooperation between us gets along well and we are able to finish this assignment in time.

1.1.2 Problem face and solution

Throughout this assignment, I have learned quite a lot of things. Firstly, I learned how to use the GitHub in this assignment and know how to share my code and combine my code with Joan when we have done our code. This has increased our speed in creating and combining the robot if compared to the old method that we use, this is because GitHub provides some features for use when combining the code such as merging the code, comparing the code etc. Secondly, I also learned how to apply the knowledge that I learned from this subject such as drawing the model, animation, projection, texture, lighting etc. Next, I also have learned how to create the model such as trapezium, rectangle, cover cylinder and etc.

In this assignment, we faced a lot of challenges in creating the robot. Firstly, it is very hard to create complicated 3D models such as trapezium that are required to manage 8 vertices of the shape. The solution that we have found for this problem is we need to draw the model out in a piece of paper and plan carefully about the placements of each vertex of the model before we implement it into our code.

Next, we also faced problems in doing the translation and rotation of the robot when we wanted to move the robot's part to a desired place and make animation for the robot. The solution that we have found for this problem is we need to put a push and pop matrix function into our code to prevent the translation or rotation of one part affecting another part of the code.

1.1.3 Future Enhancement

After I finish this assignment, I am looking forward to improving my modelling skills so that I am able to create more complicated 3D models that will surprise others. Next, I am also looking forward to improving my animation skills so that the 3D model is able to perform more complex animation that may be used in stimulation. Furthermore, I am also looking forward to self-learning 3D Computer Graphics Software Tools such as Blender that use OpenGL. This is because I find out that making 3D models is actually quite fun compared to other subjects that I took in this sem.