## Criterion E: Evaluation

## **Meeting the Criteria for Success**

- 1. Application can display a molecule on the screen that has the correct proportions
  - a. Can display a molecule on the screen that has the correct proportions with the label
- 2. Application can display all 4 molecules on the screen with a drag and drop
  - a. Application can display all types of molecules onto the screen with a drag and drop that the user can control
- 3. Application can rotate the camera and zoom in and out
  - a. The camera can zoom in and out along with rotation and movement
- 4. Application can animate 2 molecules to the correct location
  - a. When two molecules are placed onto the screen, the molecules move to the correct location and stay there after
- 5. Application can describe the bond that was formed between any 2 combinations of the molecules
  - a. All combinations of molecules can be described

## Feedback from Client:

The client enjoyed working with the product and is now talking to the district to get permission to install java on his computer so he can run my executable. He enjoys the fact that it was done by a past student as well as the fact that he can manipulate the molecules at will. The controls he had to get used to as they were different from other applications that he used, but he was overall very happy with the results.

## Improvements in the Future:

Some improvements that I could add on in the future is that I could first create more molecules. This program only has 2 currently and adding more molecules would not hurt. This however, might cause some issues with the current code as it might introduce different types of intermolecular forces that I have not programmed in. In the future, I should work on adding more molecules.

Another improvement for the future is that I should expand the use to more than 2 molecules. Currently, the program only works with 2 molecules as when there are more than 2 molecules involved, the areas of attachment get greater and the combinations also increase. The main problem that I ran into when adding more than one molecule was that there were too many attachment sites and each attachment site had a different force associated with it.