## Update 4

## Patrick Regan

## December 3, 2014

By W14, the following updates have occurred:

• The main program was created (for bromomethane). The program shows two molecules, one of which can move toward and away from the other molecule using the left and right arrow keys. As the molecule moves, an arrow shows the relative potential energy by changing the magnitude of an arrow as well as the direction (positive or negative y-axis for positive and negative energy values). Also as the molecule moves, a graph shows the calculated energy of the bond as the molecules get closer and further apart. At the distance the molecules are presently at, pressing the "e" key gives the energy value at that distance.

Future plans include the following:

- I need to make the same program but with methane molecules and possibly combine the two different molecules all into the same program.
- Documentation of the project and program needs to begin.
- The seminar presentation needs to be updated.
- I want to create .gif files of the rotating molecules created in molecules.py.
- The website needs to be updated.