**Lab Exercise for Week 4**

Based on your experience with lab 4, we will now explore an additional zoom method, which allows the user to display a map at a particular extent.   The assignment will be to write an additional mutator method for `Map.java` to perform this function.

1) To get an idea of a zooming function which displays a map at a particular extent, analyze the `zoomIn()` method and answer the following questions:

    a. What is an `Envelope` and what can be performed with the size and location of an `Envelope`?

    b. How is an `Envelope` used to adjust the extent of the map display?

2) Write a method for the Java Bean `Map.java`.

    a. The method declaration line will look like this:

```
public void zoomToExtent(double xMin, double yMin, double xMax,
double yMax) throws Exception {}
```

    b. The four coordinates used in this method's parameter are the lower left and upper right corners of the extent in real world coordinates.

3) Optionally, you may modify the .jsp file to provide a user interface for this new method and deploy the web module to test on PGISTDEV.