

### **Code Integration:**

We used top-down integration with project 3 and 4. We already had the website structure built from project 3, which included the connections between pages and the locations that the website would call to give or get information from the server (which was not set up at the time). This is top level of our code.

Since we started project 4 we have been adding in the functional calls to the database and check each one as it is integrated. Each time we go to check a new call to the database we are rechecking the top most level of our code, because we navigate the website to error check each new call. Sometimes we branch our calls when they are checked as well, for example to check if login authentication is working we have to create a user to authenticate which means we end up checking the create user call multiple times. The same thing goes for testing if pulling animal data is done correctly, meaning we have to add animals first (call to add data to the database) before we can check to see if the website correctly collects animal data from the database to be displayed to the user.

If we had created the calls first and then built the pages to test them, then connected the pages last and tested the links we would have been using bottom up. This might have actually been more beneficial as we would have had more concrete database testing.