Describe the final choice of the database and software platforms/languages:

We used PHP, HTML and MySQL for the following reasons.

* We used PHP, because we found it dynamic, easy to learn and manipulate. PHP can also run on both UNIX and Windows servers. It also works smoothly with HTML to display dynamic elements on the page. MySQL is interfaced very well with PHP as back-end tool. PHP also has powerful output buffering that further increases over the output flow. In general PHP is cheap, secure, fast and reliable.
* HTML is a plain text and it’s easy to learn, and edit. Its supported by most browsers across most if not all platforms. Can be used to present just about any kind of data.
* MySQL has data security that’s why it is the most secure and reliable database management system; this can greatly benefit any business especially if it involves frequent money transfers. MySQL features a distinct storage-engine framework that facilitates system administrators to configure the MySQL database server for a flawless performance. The secure processing and trusted software of MySQL combine to provide effective transactions for large volume projects. It makes maintenance, debugging and upgrades fast and easy while enhancing the end-user experience.

Describe where and how we will get the data:

* Data is constantly being added from an ongoing research project in Dr. Sima’s microbiology lab. We get it in the form of excel sheets that contain all the relevant information about each lipid, which we parse and read into MySQL for it to be inserted into the tables.

Describe the labor division among group members:

* At the beginning, we met multiple times and began working on the website and database designs. We laid down the foundations together, and then Ryan focused on inputting the data and designing the website, while Grace focused on building the database. Throughout the process we regularly met so we could check each other’s progress and link the front and back ends.

A project timeline with milestones:

* The database, complete with the input data, will be completed by November the 22nd, while the website design will be finalized by November the 30th. The website and database will be linked by December 3rd.