Week 12 Commentary

Comment the design of the REST Web Service that you have designed for your site and how you have concluded that it works.

The design for the REST Web Service allows for a number for services and functions that allow data to be passed both to and from the database and the web site system. One of the functions that I have designed was the Fetch All Records, which as the name suggests retrieved all the manufacturers in the 'manufacturers' table, which is one of the database tables in this system. Once the MySQL query to select all the values in that table was written out, there then was the task of displaying this, which was achieved by utilising json_encode, which is JSON function that is part of the PHP specification. As all these functions were being stored on a file called api-cmss.php, this meant that this file and the function in question had to be called on the 'dashboard' page, via a PHP include and then calling the get_manufacturers function.

To test that this function works, I opened the manufacturers table on phpMyAdmin, showing the contents of the table, then going onto the page that included the get_manufacturers function and comparing the two pages, and their output. In this instance, the output for the manufacturers table from the REST Web Service was largely the same as the contents that was in the same table in phpMyAdmin.

There is a problem with design that I have suggested here namely there is no authentication. You really need to make sure only "accredited" users can access the REST Web Service. How would you alter the REST Web Service to ensure some level of authentication of the users of the service?

The way in which one would make the REST Web Service more secure, is to alter the users table in the database so there are two different types of users; normal users of the website, and admins, that should be able to modify the contents of the database, as opposed to the normal users of the site, who should not have this authority. Either that, or making a separate table in the database entirely, which would also only be for administrators of the website.

Regarding how this would be implemented in terms of the website, there REST Web Service would have to only be viewable and only functioning when someone with an administrator's credentials have logged in to the system, and this would be stored in the session, until they log out. By doing this, normal users would be unable to make changes/deletions to the database, which is vital because there is no reason for a typical user of a site like this to make such changes. After either level of user has logged into the site, depending on if they are an administrator or not, they would then be automatically redirected to a 'dashboard' page, in which they could then modify the contents of the database, using the REST Web Service.