Justification of the model

In our MVC structured application, we had a Model for each type of user and well as a general model for all users. These models had names respecting their operation such as “model\_admin” and “model\_supervisor”; which would be the models corresponding to their type of user.

In the “model\_student” model, there are functions to accomplish checking their personal information as well as seeing their usage graphs and tables. Admins, supervisors and managers can also view this information for them and will access this via the same code as from the “model\_student” model instead of repeating the same code in its own respective model. This removes code repetition and increases modularity.

Justification of other components

Other components that we used in this project were Highcharts, Bootstrap and Codeigniter. Highcharts were used because it is a very easy-to-use and intuitive way of incorporating interactive and dynamic charts in a web application.

We used Bootstrap for designing our pages. It has a great set of readymade libraries which we incorporated into our design. Also bootstrap is responsive; this means that if our web application is viewed on some other device, such as an Ipad or Iphone, bootstrap will adapt to the change.

CodeIgniter is an MVC framework that we used for this project. It has the smallest footprint for any MVC structured template. It also had extremely user-friendly features and easy-to-follow tutorials in order to accomplish our needs. It made creating our own MVC based application a breeze.