Project Architecture Justification

The Model-View-Controller (MVC) software architecture pattern was chosen for this implementation due to its relevance to this type of project. As one of the most frequently used web development frameworks, it is industry standard for projects like the one being developed. As this project is web-based and is simply used to make calls to a database and then display the relevant data, this pattern made the most sense to use.

The separation of the application into the three components (view, model and controller) allows for the visualising and separating parts of development into these clear areas, which will reduce the likelihood of code duplication and generally keep the project codebase cleaner. By keeping the project organised, development will be very efficient, and in the case that this development would be for a client, costs would be kept as low as possible.

Using this architecture will allow the development of a simple and streamlined project, which has little computational overhead and has no unnecessary complexities. The MVC architecture, when used correctly, will not result in any unnecessary round trips to the database which means better efficiency. This should mean good performance is also available to users with a slow internet connection, which is vital for a web-application.

This architecture was chosen over the web-based architecture, which was also suggested. This is because the project will not include any kind of application server. Data query criteria are set by the user in their browser and then sent directly to the web-server to get retrieve the correct data from the database. This eliminates any need for a separate application server, which in the case of a small scale project such as this, would only hinder performance and reduce the simplicity of the implementation.