<u>**Introduction**</u>

The current state of the web app can be seen in the prototype at http://shsully.pythonanywhere.com/

For a room of given dimensions, the user enters up to 4 different types of noise levels. The user then enters details of each significant element of the facade (windows, door e.t.c.) and searches for the elements based on a given area, quantity or "equivalent free area" for vents.

Based on this input , the web app queries the "ElementSRI" database and returns the elements along with the calculated noise level within the room with the inclusion of that element. The user repeatedly adds and deletes elements until they have a representation of the rooms elements. The internal noise levels for each of the (up to) 4 metrics are shown at the top right of the screen.

I used the Flask web app development framework and I think the "back end" of the web app is more or less complete except the database maintenance (C7 below).

I would like the following carried out please.

A) Code review

A1) Carry out code review of work to date and send me the comments. If required, I will carry out necessary updates prior to proceeding.

B) The search screens

B1) The UI should be redesigned so it looks good and will be easy to maintain and use.

B2) Each field should have a help facility that I can customize (e.g. mouseover or hint)

B3) Currently the room details and search details are on 2 pages. Can they be designed so that they are on one page? There should be scope for the addition of fields in the future.

B4) I am using jinja and vbscript to update the quantity field once the element type is selected. Is there a better way of doing this? In the future other fields, including the metric fields, may be added which I will need to customise at run-time.

B5) I would like cells on the search to colourise when they exceed a fixed criterion value.

C) Web App

C1) The entry page to the website should host the entry of the room/search details. There should be navbar links to the pages described below in C2 – C8.

C2) "About" page.This will contain the following text.

"OpenWindows is a web application whose purpose is to help in the specification of glazing and ventilation for residences in England and Wales. Based on noise levels outside a dwelling and the elements of the façade, it calculates the internal noise levels. It then compares those levels them to

guideline levels in Professional Planning and Guidance (ProPG).   It is intended to be used by design teams, local authorities and specifiers of glazing and ventilation. "

C3) A "Contact" link. This should take the user to a page containing the following text.

The applications is run and hosted by Sulltech ltd. Email contact only info@sulltech.co.uk. I would be delighted to know of any suggestions you have for upgrading the product.

C4) "Download" link. This should be active once at least one element has been selected. It creates an excel spreadsheet to download. The contents of the spreadsheet are set to the values of the selected elements.

The functionality for "Download" is already implemented in the prototype via a HTML submit button.

C5) "Share" link. This takes the user to a page where they are prompted to share via email, twitter, linkedin or clip e.t.c. Ck

The functionality for the creation of the URL string is already implemented in the prototype via a HTML submit button.

C6) A Log-in or sign-up page depending on the user status. There will be 3 types of registered users.

> Type 1) Registered Users - The only difference between registered users and anyone using the site is that the Share, Download and Database abilities are not allowed.

> Type 2) Suppliers - These users will be suppliers of glazing and ventilation who wish to maintain their own products in addition to the above. They will be assigned a supplier code which is unique to their organization when they register.

> Type 3) Administrator

C7) Database

This will link to the ElementSRI database for registered users.

> Type 1 registered users will have the ability to view all of the database.

> Type 2 registered users will have the ability to add/mod/delete Elements for their own supplier code.

> Type 3 (admin) will have full access to the database.

C8) Donate

A link to a donate page where users can contribute to the further development of the site.

D) General

D1) The web app should comply with all of the current requirements for such sites (cookies e.t.c.).