

# Data Plan

The website will soon use AJAX and databases to accomplish asynchronous data exchanges for the website to update without refreshes and to hold any data if a refresh occurs.

For the start of the website, the user will input a hotel or place in the search field. This will then be sent to the server where a SQL query will take place to get all results that have a similarity to that search term. This data will then be inserted into the search page in the results page. Currently we have a function built to add the individual results through JQuery, it just needs to get the data from the database to then add these with the proper title, text and images. The log in/signup button will change to a button for signed in users to view the hotels they have favoured and booked.

On the search page as previously mentioned, this will grab data from the database that the user has searched for on the index page. This part of the site will also take the duration, type of room and the 'extra filters' part into account and will need to change the presented results without a refresh of the page. There is a function that handles adding the individual results that will also add the markers to the map, this will need to be adapted so that the viewpoint of the map is also changed to an average of the locations so they are all on the map. This function takes a javascript object or struct that contains the data of a hotel, so the title, description, price etc. When the data from the server is received this will need to be transferred either to this struct for the function or the function will need to be slightly modified to accept JSON or some other data type. When the user clicks on 'view rooms' on any of the given results this button will know what result was clicked and send that hotel information to the hotel view page. There will also be additional buttons in the top navBar that will be for logged in users to be able to view their favourites and bookings as well as a sign out button.

The hotel view page will have a button for users to add this hotel to favourites and also to contact that specific hotel. The add to favourites will update the login/users database and add this hotel's key/ID to their table entry. This button will change to a remove from favourites if it has been favoured by the logged in user. Once again because the duration and type of room have the ability to be modified here, the rooms will also have to change, this will have to be done without the website being refreshed through AJAX.

