CS-Group-12

Web GUI Design Document

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This document has been put together to address the lacking amount of writing we currently have concerning the overall GUI of the website, concerning; the way in which data will be displayed & the graphical components surrounding them. I hope this design documents will fill any holes we currently have surrounding this issue.

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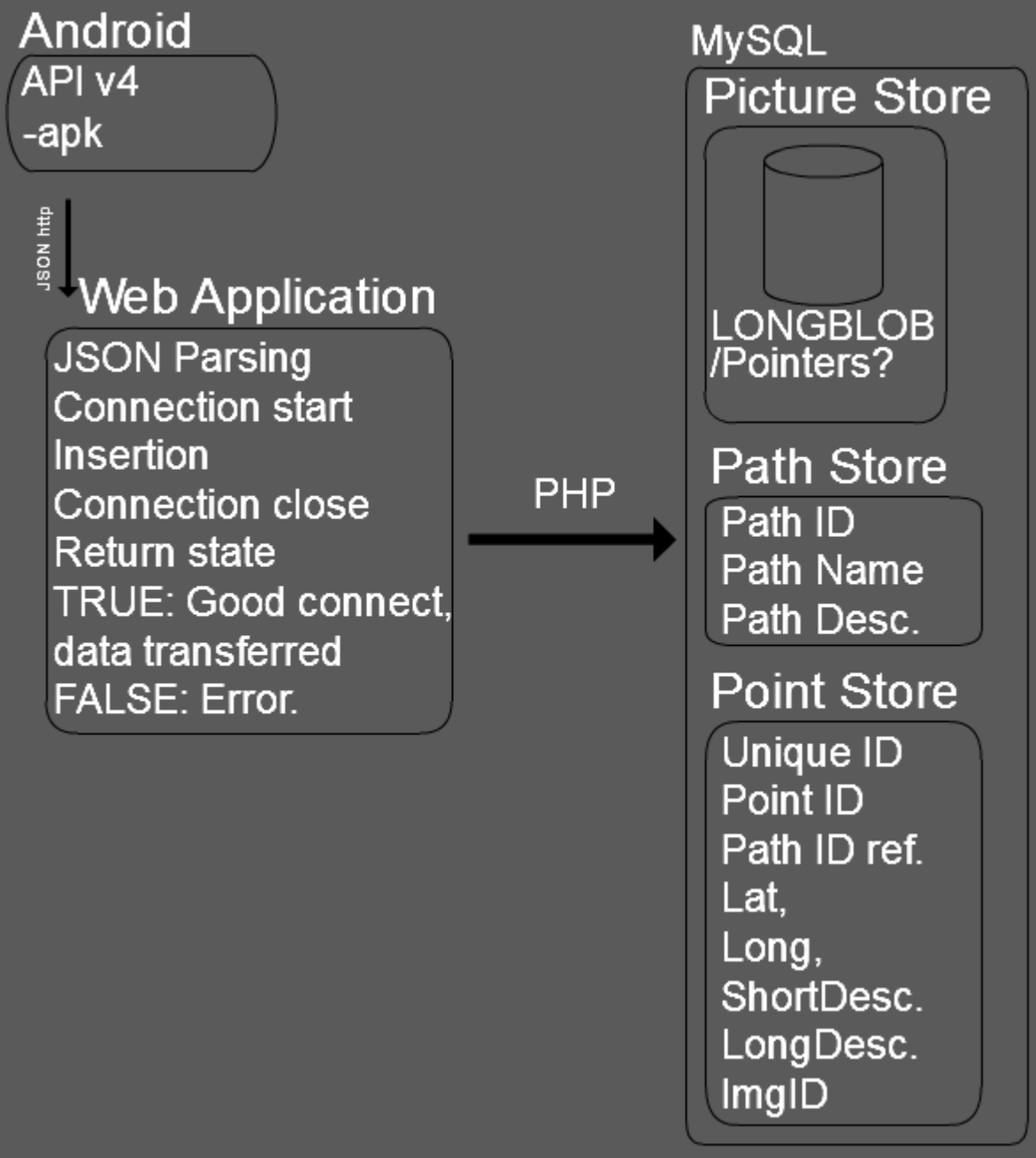
Deployment

During the meeting on Thursday it was discussed that we must include a diagram including the components, the communications between, and the uses of each diagram. Here I have bundled all of this into a single usable location to be referred to.



Android is the start point and is very basic due to limited knowledge. However, from android the Web Application will receive information over http in a JSON form. The web application must parse the JSON data into separate sections, most likely divided into variables and then open a connection to our database. These variables will be inserted into their appropriate tables and fields and the connection will be

checked for stability, returning a TRUE or FALSE statement should the transfer of data prove successful or otherwise. From the web application the data will be passed via PHP into the appropriate tables as of currently there are three concerning paths. The first being the path itself, only containing the path's ID, name of the path and description of the path. The second table concerns points along the path. It contains a unique reference to the point within the table. The Point's own ID which dictates the order in the path in which the point occurs, a reference to the path that the point itself belongs to, the position (lat,long) of the point, a short description of 200 chars of what the point is. A longer description of 1000 chars as to the point as well, and finally a pointer to the image associated with the point.

Display Requirements

Whilst no conclusive solution has been reached yet, currently there is a demand for a specific structure of data being displayed on the map API. At present it is possible to read in values to the map and have them displayed at points according to latitude and longitude values. It is also possible to have customised pointers for such a purpose and this has already been achieved, however what we are currently looking into is a way of displaying more data surrounding points on the map using a hover over function.

 Here is the current map marker we have for our prototype design, this icon should be sufficient to carry out the task until such a time as images from the database can be retrieved and displayed within the box which may prove challenging, or impossible given the fact that the marker is simply an image. It is not scripted and does not contain any specific scripts to display different images based on location.

This is the proposed idea behind the mouse hover mechanism. At any point displayed on the map, upon hovering being started a box will appear containing the relevant image file on the left for the location, and the short description of the point appearing on the right above the long description.

As of now it seems impossible to change the icon for the pointer according to location so it may have to be that we use a universal icon across the map. It has been suggested that we link points up into a path using either the google maps API to draw along road lines or using a series of waypoints to draw a path along, however that may rack up a hefty amount of data usage in a table not yet created to store many waypoints for that purpose. Hover values have yet to be added as I have yet to identify the mechanism behind it, and have yet to discover how to incorporate

PHP variables into a javascript function. This will be addressed at some point this week beginning 01/12/2013 (1st December 2013) provided other assignments don't run me up the wall.