# Key Algorithms

## toJSON()

TODO ADD SOURCE CODE

Most classes will have a toJSON method that will take the contents of the object and convert them into a representative JSON string that can be interpreted by the server and added to the database, when it comes to the sending of files we shall, in the JSON attach a filepath and when we are sending the information to the server using HTTP Post the files that we are sending will be sent as an attachment to a MIME message

## The Generation of MIME messages

In Android the sending of information via HTTP Post is rather simple, we create an object known as a HttpPost object, with a url attached to it, we then add all associated information necessary and send it to the url previously attached

## Keeping track of locations

To keep track of the rout the user is taking we are going to genereate a location every XXXm determined by a persistant algorithm checking the difference in the long/latt and calculating if the difference equates to the prescribed differecene for adding a location, if the user adds a location within XX seconds of the app generating one the app generated one will be removed to reduce on data transfer for the user Locations have a timestamp.

## Location management

Locations will be stored in a linked list, we will have the option to add/delete/modify any given location using a simple Linked List type WILL LEA check this please