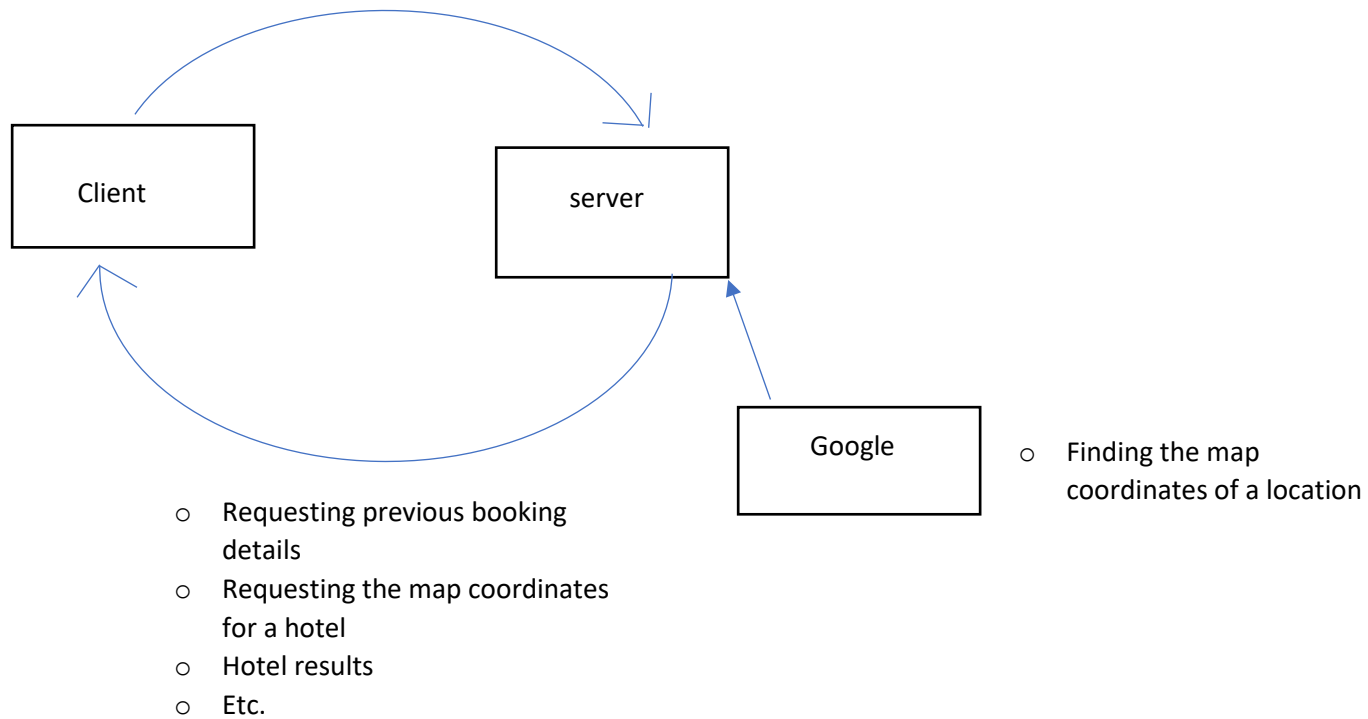# Part 3: Data Plan

Interaction between client and server and where the data comes from:	What data is sent:	How will data be sent or retrieved:	How data is stored:	What processing is needed to make the data useful:	Where will it be stored/ Does it need to be stored on the server?
Creating an account- will send data inputted by client to server, and adds this data to the database	User account details (Personal information, email address, saved payment details, ~~current bookings, previous bookings~~)	The POST method would be used to send the user's account details to the server.	In a database (organized collection of data)	Convert the data object into JSON, and send it to a server. Conversion of object to a string occurs with json.stringify().	On the server
Logging in- will send data from client to server, and the server will fetch the matching account data from a database	User login details (Username, password)	The data will be sent with the POST method and the server will receive the username.	In a database	Convert the data object into JSON, and send it to a server. Conversion of object to a string occurs with json.stringify().	Does not need to be stored on the server.
Fetching the logged in user's information	User's specific booking details, previous bookings	The matching account data will be returned to the client with the GET method.	From the database to the client	Parse the data with JSON.parse(), and the data becomes a useful JavaScript object.	Does not need to be stored on the server.
Searching for hotels	User's search term, dates	The POST method would be used to send the user's search term to the server in order to find matching hotels.	In a database	Convert the data object into JSON, and send it to a server. Conversion of object to a string occurs with json.stringify().	Does not need to be stored on the server.
Displaying hotel results from the finished search	Hotel names, brief hotel description,	The matching hotels will be returned to the client on the results	Hotels stored in the database	Parse the data with JSON.parse(), and the data	Does not need to be stored on the server.

		page with the GET method.		becomes a useful JavaScript object.	
Making a booking will send data from client to server and changes the hotel data in the database	Dates, Hotel name, client name + details	The POST method would be used to send the booking data to the server.	In a database, the hotel data in the database is changed accordingly to the booking	Convert the data object into JSON, and send it to a server. Conversion of object to a string occurs with json.stringify().	On the server
Obtaining specific hotel information Data comes from server-side (database) to the client	Hotel Cost, description, availability	The GET method will be used to retrieve the corresponding hotel specific information.	From database to the client	Parse the data with JSON.parse(), and the data becomes a useful JavaScript object.	Does not need to be store on the server.

- o Creating an account
- o Making a hotel booking
- o Entering user name and logging in
- o Creating a search

Client

server

Google

- o Finding the map coordinates of a location

- o Requesting previous booking details
- o Requesting the map coordinates for a hotel
- o Hotel results
- o Etc.

JSON structure:

{ "Booking": [

        {"username": "Tran", "check in date": "11-05-2018", "check out date":"20-05-2018","hotel name": "Hilton", "booking reference": "A1653886"}

}