

**CS 411 Team Assignment 4 Data**  
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**Team: Discussion A3 Team 2**

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**Caching for a Tracker:**

Our website caches history of locations visited by a particular user. In addition, since our app will grab location data for buses and trains that are GPS tracked and updated on their source applications, every time the app is visited for 10 minutes, we update the locations of these means of transport in 5 second intervals (on the server side) and this data is stored in the database. Therefore, if multiple people are using the app at the same time, only 1 request to each remote source is made every 5 seconds and the users will just be getting the cache version that renews every 5 seconds instead of having to hit remote sources every time and possibly cause an information overload.

User Login Credentials (Twitter API) are stored in keys in the browser with cookies and get passed with every request. Since the user can enter his go-to home, work and favorite locations, we will take advantage of this by caching these locations for the user to check them against the current locations. If we discover that the user is taking a trip taken many times before: like to his home or workplace (or most frequently visited locations), we can call our database to get information about his trip instead of calling the API- which makes the speed faster.

Irrespective, in any situation, we would still have to use the Google API to track traffic changes and time for Taxis and walk time.

Sequence Diagram:

