

Algorithm For Creating Free Time

Inputs: Database to hold the calendar information of the users

Output: Allocated free time within a user's requested time frame

1. Link with the database to grab the user's calendar from Google.
2. Put into a temporary data structure to hold the users calendar
3. Compare certain times within a users time frame to another user's time frame.
 1. Find a common time frame in which both (or more) are okay with.
 2. Start the initial comparison
 1. If a user 1 and user 2 do not have a free time available
 1. Notify the user that there are no available times to meet up and look into other possible times (if available)
 2. If user 1 agrees with the time but user 2 does not (or vice versa)
 1. Notify the other users that the user who rejected the time frame has declined and attempt to find other times available that will satisfy both users
 3. Store the allocated free times within a data structure to either send back to the server or do local computations on the device to display to the user
4. Repeat Step 3 until all users have been satisfied
 1. If all users cannot make a meeting/event look at other options to what the threshold is to be considered "free" for all users
 1. "Free" meaning should 3 out of the 4 users be available for a time slot but the 4th person cannot make it, is this considered to be "free" or okay?
5. Algorithm Terminates