A Lifestyle Motivator Application

The purpose of the lifestyle motivator is to help an individual maintain a healthy lifestyle. In the current setting, many users procrastinate or find excuses not to work out. In many cases, a user might want workout, but cant find the right activity or a right buddy. The lifestyle motivator application will suggest a user 1) activities to perform, and 2) buddies to perform those activities with.

There are several such applications. However, many of them rely on a centralized architecture (server) assumed to contain information about all users. Our target is to build the application in a way that respects a user's autonomy and to promote heterogeneity across users. There are several ways context can influence this application. A few examples are as follows.

- Context can be used to decide when to suggest and activity to the user. For example, suggest depending on 1) how active the user was recently 2) how is the user feeling (physical activity can be a natural boost to mood), and so on.
- Context can be used to suggest what activity to perform. For example, to suggest 1) indoor or outdoor activities depending on the weather, 2) activities depending on the facilities available nearby, and so on.
- Context can also be used to suggest a buddy. For example, 1) those who are not busy and plan to participate in an activity, 2) those who are easy to coordinate with (e.g., people near by), 3) those who are skilled at the activity, and so on.

These are not the only opportunities. You might realize additional scenarios suitable for context adaptation. If there is an additional scenario you want to incorporate, please discuss with me. However, the crux of the project is not to come up with (and consequently implement) an exhaustive list of features. Instead, your focus should be model precisely 1) *what* is that you are doing, 2) *how* you are doing that, and more importantly 3) *why* are you doing it a certain way. In the first phase of the development, you will produce system models that capture the actors, their goals and plans, and dependencies among them. The case study provides ideas to get started on this.

Note that you will implement and evolve the system in the following phases. So, try to make the modeling a worthwhile activity. A well constructed model makes the implementation and system evolution easier.