Room 100 Name Badge Display

Background

The Deschutes Room 100 User Group initially proposed that the room might be more welcoming if people willing to help others had a good way of making their presence known. Among the possibilities discussed was using the plasma display in that room to display some sort of directory of people currently in the room. The idea needs a lot of development, but it seems possible to develop a useful prototype in a short project.

Example Scenario

Bender Auffen enters Room 100, where five other students are already working. He has previously registered his willingness to help new users and others, particularly with Android development. As he logs onto one of the Room 100 workstations, his name badge appears on the plasma SmartBoard display, along with the badges of three other people currently present, two of which also indicate availability to help and specialty knowledge. The remaining two people in the room have not elected to display their badges.

Shortly after Bender enters, Marty Noo enters Room 100 to work on an Android programming assignment. Marty notes Bender’s name badge on the display, and chooses a workstation near Bender. A few minutes later, Marty asks Bender for help configuring the AppMaker development environment on the Room 100 workstations.
Basic Requirements

The only firm requirements (so far) are that users of Room 100 have the option of making their presence visible to other users of that room, and that they also have the option to not publicize their presence or reveal any additional information about themselves.

Advertising presence should be as simple as possible, and may be automated in any of several ways. An option of passive logging without any extra effort by the user, e.g., by recognizing the presence of a previously registered bluetooth phone, or upon logging in to a workstation, is desirable.

Room for Creativity

This is a very open-ended project. There is some room for technical innovation, particularly in the ways that comings and goings of people in the room are detected, but the main opportunities (as well as the main difficulties) are in design of the user interactions so that users of Room 100 choose to use it, enjoy using it, and create a more friendly and helpful environment in Room 100.

Main Challenges

The technical challenges in this project are modest. The larger challenge is in requirements engineering and a rapid cycle of prototyping and evaluating overall designs of the interaction. If you select this project, I will require you to take requirements engineering seriously, and to consult with the Room 100 Users Group in design and evaluation of your system.