(20 pts – 3 hours) Trillllllium II! Come up with a potential application that you personally think would be interesting for the Trillium problem as a way to start the design team brainstorming. Draw a storyboard that illustrates the idea, and write a couple of paragraphs to justify why it this is an interesting design – what potential problems, values, or needs does it address, and why would people use it? Because you have not yet collected data from users, we would like you to view yourself as the user, and use your own background and needs as part of the justification for why the design is interesting. Mentioning an idea or two that you considered and decided not to pursue might be a helpful way to do this (as well as following Buxton’s idea of generating many ideas in order to increase the chances that you do the right one).

Two requirements: the application must be interactive: no information-only displays like a menu. The team manager also wants something “different, not like a food-ordering kiosk. Something people would talk about.”

One of the biggest problems with Trillium is that so many people go for lunch just as class gets out, leading to a severe overcrowding in the facility. Identifying the problem as overcrowding, I have decided that a touch-screen system can be used in Trillium to organize students to make Trillium less crowded. Based on my own experience, one of the most inconveniently crowded areas is the dining area. The tables are also used inefficiently, sometimes with one person taking up a table that could easily fit four diners. Searching or waiting for tables is problematic for students who are often pressed for time during their lunch hour. The task, then, should be to create a system that students can use to efficiently organize themselves into seating arrangements when they use the Trillium dining area.

In creating the system, a few possible options came to mind. I thought about designing a system where people would be assigned to tables at the cash register, but decided against this because some people who sit at Trillium during lunch hour don’t get their food from Trillium Dining (and therefore don’t use the cash register). I also considered a system that tells people which tables are available based on how many people they have in their party. This would be a good system, except that it may have trouble predicting where people will sit, and for how long they would sit there, so it would be hard to keep it updated. Also, it would not take care of the problem of people sitting one person at a four-person table.

The system I came up with draws upon the latter suggestion. Often when people come to Trillium for lunch, they have a definite idea of how many people they are eating with, as well as how long their lunch break is and therefore how long they will be eating for. Therefore propose a system that utilizes these facts to efficiently seat people at their tables. In my system, each seat can be considered a unit. When people come to Trillium to sit, they can “check in” at a table set up at an entrance door; they can give the number of people they are with, their student ID number, and how long they will be eating for. The system can then assign them a cluster of seats at a table in Trillium. When they arrive at these seats, a display on the table will be lit up in red, and say “RESERVED”. They will be able to get this sign to go away for the duration of their meal by typing in their ID number. That will help to ensure that people do not take other people’s reserved seats.

I like the idea of this design because it is similar to a restaurant hostess seating people at tables that fit their needs. Also, the fact that it assigns people to seats helps control for the fact that people in smaller groups may be uncomfortable glomming onto larger tables, even though there is room for them (e.g. if I were to sit alone directly next to three strangers at a table). If they are
assigned these seats, people may be less self-conscious about sitting near people. Furthermore, the “RESERVED” sign can be used to enforce the system through social pressure; people will want to check in because if they sit at a table and can’t get the red sign to go away, others will see that they’ve stolen someone else’s table. Also, people would likely use this system because finding a table is hard and touch screens are fun.

(Task-Centered User Interface Design, Chapter 1: http://hcibib.org/teuid/chap-1.html)