(20 pts – 3 hours) Trilliiumllium 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.”

Digital Community Pensieve

The Digital Community Pensieve (DCP) takes inspiration from the memory retrieving Pensieve found in the Harry Potter series and file sharing tools such as BitTorrent. Central to the concept are multitouch screens placed at the center of Trillium dining tables. Each screen acts as an interactive, communal storage space for files. After starting the DCP mobile application, users are able to upload files on their smartphones to the DCP by physically tapping the screen with their phone (device syncing would be similar to the implementation found in the Android and iOS app, Bump). Uploaded files are "dropped" onto the interface and made accessible to all other users. Over time, unused files will fade into the abyss. The DCP supports a variety of file types and allows
users to interact with uploaded files in a manner similar to Microsoft’s Surface. Users can
download files that they find interesting by tapping as well.

When conceptualizing the DCP, I tried to take advantage of the immobile nature of the large
touchscreen displays. My first design idea was a newspaper reading device. While this design
would take advantage of an existing practice in Trillium, newspaper reading, I realized that it did
not offer many advantages over traditional newspapers or mobile E-readers. The mobility offered
by these existing artifacts affords a freedom to move that is central to this type of casual reading.
The DCP, on the other hand, uses the metaphor of a shared storage bin or public bulletin board,
artifacts useful because of their fixed, public location.

As evidenced by the popularity DC++, Cornell students, including myself, value tools that allow
them to share digital content. On mobile devices, I have found it hard to satisfy my desire to
access the digital content that my peers enjoy. This problem partly arises from the physical and
storage constraints of mobile devices that limit their functionality in this area. Furthermore, the
loud and informal environment of Trillium limits my desire to coordinate advanced computing
tasks. The DCP solves this problem by using straightforward physical mappings for all of its
functions. Even while eating lunch with one hand, I could easily grab a couple files with my phone
in the other hand. The setting of the Trillium dining area greatly increases the functionality of the
DCP. File sharing requires regular user participation, and the high traffic environment of the
Trillium would garner high levels of activity.

Beyond just file sharing, the DCP also facilitates social awareness and interaction at Cornell. At
Trillium, I often read the Cornell Daily Sun in order to learn about issues important to the Cornell
community. The DCP allows me to directly appreciate and contribute to this community. I can then
download the content interesting to me to share with friends elsewhere. The Surface-like displays
present the digital content that’s new and most important to Cornell students. By using a simple
zoom mechanism to view all files, the DCP skips the hassle of having to open and close files and
makes it easy to preview any type of content in a pinch. Furthermore, the DCP would reflect the
changing needs and values of the community. A certain group of friends may meet regularly and
fill a table with their favorite shows. Before exams, the DCP’s could be converted to depositories
for class notes for intensive lunchtime studying. As a highly adaptable design concept that relies
upon a bustling user environment, the DCP could satisfy a wide variety of needs that Trillium
patrons could have.