(20 pts – 3 hours) Trilllllllum 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 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.”

ZooBox is a casual multiplayer game that allows users to socialize while subtly promoting environmental consciousness. Players gather around a Microsoft Surface-like device and have lighthearted interactions with cartoon animals. Animals persist between sessions, and are linked to a specific user. As more trash is thrown away at Trillium, the animals’ initially opulent and green pasture would be overtaken by a landfill of sorrow and despair. Now.

Other alternatives considered include a multiplayer Falling Sand style game, and a smart beer pong table. However, the first issue is less personally interesting to me than cute animals, and the second has legal and health issues.

The animals are rendered in the same cartoony artistic style as Wii Mii or Xbox Live avatars:

Players interact with a top-down view of the game world.

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8 “ZooBox” is a portmanteau of “Zoo” and “Sandbox”. A better name could probably be found.
The game provides amusing background entertainment, instead of requiring the player’s full attention. (Instead of someone playing with their food or shredding napkins during a conversation, they could play with animals.) ZooBox would encourage socialization by giving people something to talk about and interact with, not hamper socialization by taking up their full attention. To keep the cognitive load low, ZooBox favors open-ended, player designed goals, rather than tasks explicitly dictated by the game. Players might decide to see how many animals they can corral into a small location, or build mazes to see if animals can find their way through, or see how much grass they can convince their cow to eat. The game would not award points for performing certain tasks, as this could cause players to focus so much on the game that they miss out on socialization.

Perhaps people who only know each other through mutual friends can bond over a shared experience playing with the game.

The game should not be stressful or straining to play – it should be an amusing diversion from a busy day of prelims and problem sets, not yet another item on a task list. To this end, ZooBox would deliberately avoid Farmville-style incentives for playing the game at specific times.

Interaction with ZooBox would be as natural as possible. Because Surface has the ability to see what is placed upon it, players could “log in” by playing their CU ID card on the table, and create environments for animals to run around in by putting down objects. An upside down cup could trap a critter, or a collection of utensils could make a maze for it. Tapping on the Surface would open a context menu where the player could create a new animal or drop something else into the world, like bait. Tapping an animal would open a context menu allowing the player to edit the animal’s attributes. Dragging an animal would move it around the world.

Surface’s affordance for multi-user interaction makes the game easily social. Instead of each player having their own screen, everyone would interact with the same view of the game world. There’s nothing to stop someone from reaching across the table to play with their friend’s animals, or helping the friend next to them figure out what color fur they want.

Because the game is so casual, concerns about editing other player’s animals can be largely ignored – presumably, social norms will prevent malicious behavior, and if someone is a griefer, they can’t destroy anything that can’t be recreated with a few taps.

When a player is done, she can take her ID card. When she returns, she can place her ID card on the table, and her animals from the last session will return.

Weight sensors under Trillium trash, recycling and compost cans would detect how much refuse has been created that day. As more refuse is thrown away, the animals will find that their previously warm meadow of joy is encroached upon by a landfill spewing toxic chemicals. This helps players visualize the impact of their actions, rather than letting garbage cans be a black hole. Tapping on the in-game garbage would pop up advice on how to reduce waste.
Mockups

Animal in a maze of spears, placed by the player.

Animal trapped in a cup (are yellow cups transporting them?)

Dor-bait
Dead-free
New animal

I really like this!
Encouraging environmental awareness.

Mike is attached to his seahorse porpoise.

This makes Mike sad.

Mike thinks about the environment.

Worried Mike pours trash.

The porpoise is sad because its habitat has been turned into trash.

This makes Mike sad.

Mike looks twice next time he throws something away.
Encouraging bonding and socialization for both.

Tim and Nicole, previously unfamiliar with each other, bond over the shared experience of making animals.

Tim is looking for somewhere to eat in Tillman.

Lee sees Lee and Nicole playing Zoopax. Tim doesn't know Nicole.

He sees Lee and Nicole. (

They play together.

For now.