

# Social Ward

## Team

Nick Adman - Coordination

Jennifer Apacible - Usability

Launa Blaine - Design

Nick Reiter - Documentation

## Problem and Solution Overview

Teenagers in hospitals, even when not in strict isolation, lack the volume of social interaction that is vital to developing a sense of self and learning to get along with others. This can lead to severe loneliness, as many end up only having contact with family and staff. Our solution is a hospital-centered, socially-oriented game platform. Focused around fostering communication, this platform would encourage teens to interact in various mini-games, chat with each other, and hopefully be more willing to meet in person. Various game actions would tie in with real life, including allowing teens to upload pictures or express themselves. Through socialization, the teens could get upgrades to their character avatar or in-game cosmetic items, enhancing the experience. Requiring teamwork to complete certain in-game activities could also foster connections. Finally, hospital administrator could oversee the environment as well as add to the game by posting hospital events and activities for the teens to see.

## Users and Contextual Inquiry Participants

Our project deals with a societally sensitive group of primary stakeholders, namely minors.

Unfortunately, we were unable to directly interview them in the hospital due to the legal complexities involved. Instead, we turned to previous primary stakeholders as well as secondary stakeholders. As volunteers and workers at Seattle Childrens, two of our interviewees fell into the category of secondary stakeholders since they work closely with children. While they would not directly use the application, they would still interact with it, including potentially taking on some administrative roles. Our third interviewee, who experienced long-term care as a teenager, had a unique perspective on his experience.

### 1.) Rachel\*

Rachel is a clinical manager at Seattle Children's Hospital, in Seattle, Washington. She currently helps to manage and direct the Childlife Specialist Program. As an employee of Seattle Children's for 24 years, she has worked closely with sick and hospitalized children for an extensive period of time. More recently moving towards a managerial role, she now helps direct Childlife Specialists, volunteers who help children socialize in the hospital. Their goal is to support children by playing with them, talking to them, and encouraging them to interact with each other. As Rachel only had a few spare moments to chat with us, we conducted the interview over the phone, during her shift at Childrens. Because time was limited, we kept questions very general, and allowed her to direct the conversation to the topics she felt most important and relevant. She presented us with a caretaker's perspective on children's social

interactions.

2) John\*

At the age of 17, John was involved in a motorcycle accident which left him as a paraplegic. To recover from his injuries as best as possible and to learn to cope with the loss of motion in his legs, John spent three months at the Shepherd Center in Atlanta, Georgia, which focuses on the recovery of those with spinal injuries. There, he recovered alongside a group of teenagers and young adults who had been in similar accidents. By recounting his recovery journey as well as the push by hospital staff to connect the teenagers in his recovery group, he gave us valuable insight into the challenges of being social while in the hospital for an extended period of time.

3) Jeff\*

Jeff is a 19-year-old pre-med student at the University of Washington who has volunteered at Seattle Children's Hospital for six months. He interacts mostly with children ages 0 to 18, often bringing toys and games to their rooms to play with them. However, due to the hospital's volunteer policy, he is not able to see the same patient more than once in order to ensure that no child receives special treatment. Because we got in contact with this interviewee last-minute, we were not able to conduct the interview at Seattle Children's Hospital, so we talked with Jeff at a café on the UW campus.

\*Real names have been switched to protect the identity of our interviewees. If you have legitimate need to see the names, contact any of the group members to explain your case.

### **Contextual Inquiry Results**

The interviewees all expressed difficulties getting children to willingly socialize in the hospital. John said he felt that he required outside assistance to be actively social; the recent trauma he had been through would have otherwise left him wanting to be alone. Rachel mentioned that while the kid's playroom often had lots of activity and many children were playing in it, the "teen room" was often empty; teenage patients were less likely to frequent the room. She had no specific reason for this behavior other than the fact that teens in general are less likely to be open to their peers. In our interview with Jeff, this speculation was confirmed. He said that many teens chose to stay in their rooms and keep to themselves, perhaps because they found it awkward and uncomfortable to approach people that they were not acquainted with. This led us to consider changing our target age range from all children to teens age 13 - 18 to facilitate connections in a difficult age group.

Similarly, the difficulty of making and maintaining person-to-person contact was a common theme. Rachel mentioned cases of children in isolation or the intensive care unit, who may not be able to have contact at all outside of their own hospital room. John said that even though he was mobile, it was hard to know when he could visit other patients in his hospital wing. In addition, any movement in itself was difficult because he was recently paraplegic.

In terms of electronic means of communication, John said he avoided using Facebook to post

about his experiences in the hospital, but enjoyed using chat to talk to friends. In fact, he preferred this method at first to interacting in person because his new paralysis would not be part of the conversation in any way. Through an online medium, he was not any more disabled than his friends.

Another interesting point John mentioned was that in his experience, knowing something about someone made it easier to meet them. He suggested allowing users to see some information about each other to facilitate chatting and connecting. While Rachel also mentioned this, she shied away from this, not wanting to address the issues of privacy and HIPPA. She instead suggested that we utilize a very simplified profile model, including only such things as gender and age. Jeff recommended that we find a way to connect teens who are in the hospital for similar reasons, which would allow them to form intimate support groups.

One unique aspect of John's experience was the fact that his hospital was a center that specialized in his condition; he was recovering alongside peers in his own age range. He was very grateful for the interaction with the others that this required of him. John mentioned that he was not extremely social, so getting out and meeting people would have been hard, even without having the recent trauma. John's experiences demonstrated the need we had foreseen for facilitating social interaction, particularly among hospitals without the already specialized nature similar to John's.

Jeff voiced a concern that if we created an online game, children could become hooked and be even less likely to pursue real life friendships. He has encountered a boy at the hospital who was so invested in the game Candy Crush that he would not even talk to the nurses or volunteers. He also mentioned Seattle Children's Hospital's recent adoption of a program called the GetWell Network, a program with a Wii-like remote available on the television in each room. Among other things, it allows children to watch movies and play games, but not collaboratively. Since this system is very new, many details regarding its functionality are still unclear.

## Tasks

### View future hospital events (Easy)

We want to facilitate spreading the word about various hospital events. While children may not hear about them if they remain in their room, they will be able to see upcoming events through the application, and possibly to interact regarding the events (through posting of photos and such). A hospital administrator would be the perfect person to post and manage internal events to keep these up to date, and prevent abuse of the system. This task should be easy for patients to perform frequently; patients should have the ability to quickly determine what social events they may want to take part of in the future.

Other methods of hearing about events include boards around the hospital, emails, and word-of-mouth. Our application will not replace these, but will add another route of visibility to hospital events, and will hopefully increase ease access to information.

### Send a message to a friend (*Moderate*)

We envision this as one of the core tasks of the application. The goal is to foster communication; allowing chatting will assist in creating and maintaining connections. Through our contextual inquiries, we found that some patients would be more interested in messaging their friends rather than posting updates on social media. To cater to this preference, we want to allow the children to be able to communicate with each other. Already established friends can use the app to easily chat between hospital rooms. New connections can also be made through the game.

People online can see other online users and initiate a chat with them. Users should also be able to control their online visibility by either appearing as invisible or blocking others. This task should be of high frequency; we want the patients to keep in touch with each other. Long chats or frequently initiating conversations with other patients will be one of the main components of our application.

While many mediums already exist for messaging friends, this will be a closed network within the hospital, enabling them to message new people who are still within a constrained group.

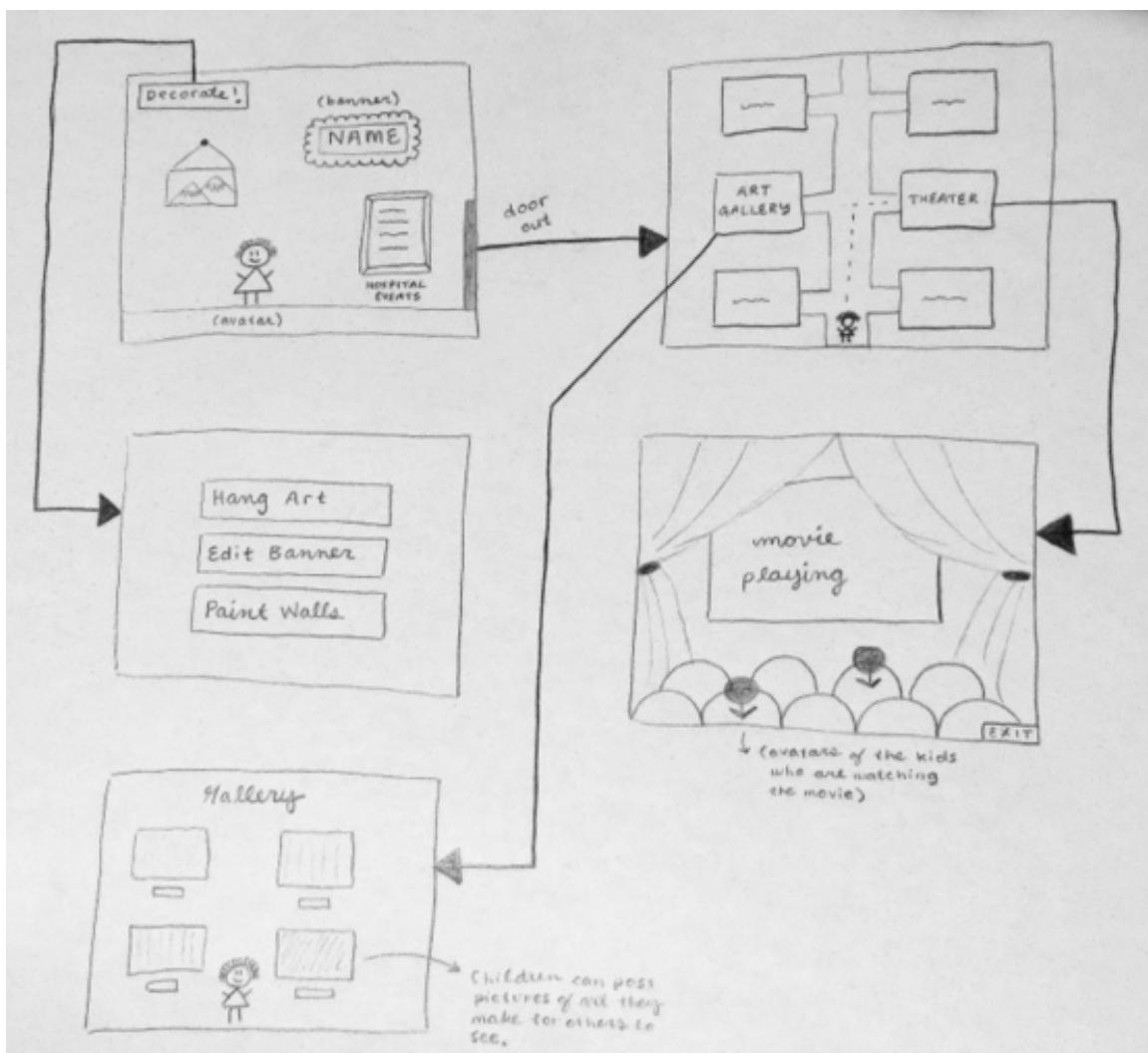
### Meet someone with similar interests (*Difficult*)

As mentioned by at least one interviewee, knowing something about another person can encourage real-life connection and interaction. We've found that people are more open to having conversations with others that they have similar interests with; it gives them an initial topic to discuss. While we want to protect patient privacy, patients should have a way to discover information about each other. To this effect, patients will be able to enter information in a profile, which will not be initially publically visible. Individual patients would be able to control the visibility of their information, potentially allowing others to see their interests. Additionally, after connecting through some mechanism similar to friending users would be able to view each other's private information (anything beyond username, and maybe a few basic details). Users will be able to initiate 'friend' requests with each other, which the other user can accept or deny.

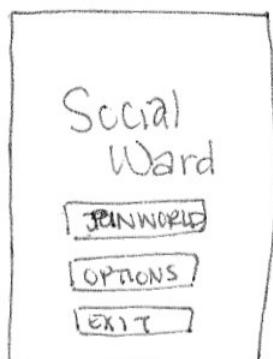
While other applications exist to encourage this in some form, none of them address the unique circumstances around being in a hospital. Our application will address these, and allow connections based on the realities unique to patients in the hospital for long periods of time.

## Sketches

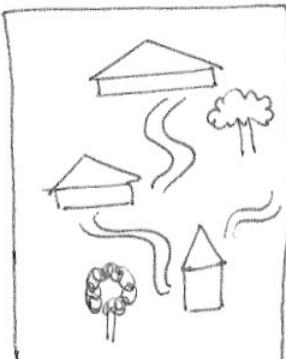
### Version 1: Web



## Version 2: Mobile



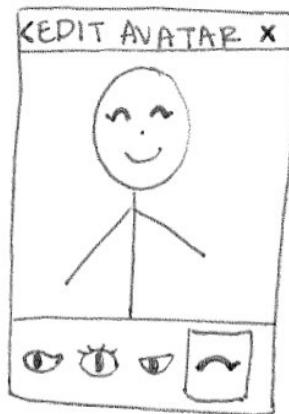
home screen



map



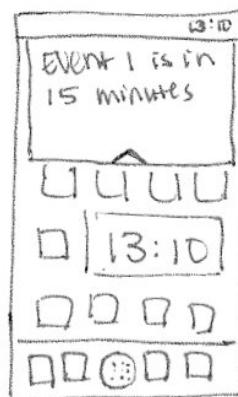
inside building



customize avatar



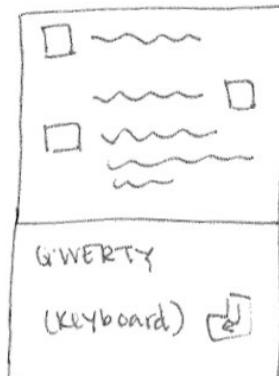
view events/rsvp



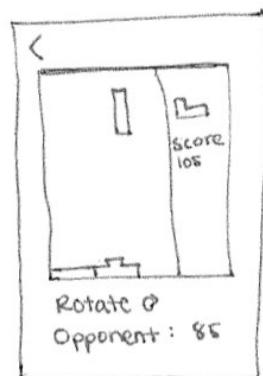
push notifications



menu for another  
avatar



chat



games

### Version 3: Web

