STOP THE INFECTIONS!!
A Serious Social Game

A Master’s Thesis by
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ABSTRACT

This thesis is a design for a game aimed at educating players about Sexually Transmitted Infections and Safe Sex practices in a non-explicit manner.

I have tried to make this game as innovative as possible, while still keeping it simple enough for novices to understand how to play with only simple directions. But just as important to me as the innovative and fun aspects are the educational ones. Players must come away from this game with a new sense of understanding, hopefully changing the way they approach the rest of their life. I spent many nights imagining the interactions, and discussing it with friends. Although I really wanted to develop the game, in the end, it fell outside of the scope of this thesis. I have created a design document, but did not actually create the game.
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First and foremost I would like to thank my parents for all the support they have given me throughout my life, especially when I told them I wanted to study video games. It is not every day that your son decides to stop studying economics to start video games, well maybe it is. They have given me nothing but love and encouragement, something that I will be eternally grateful for.

I would also like to thank my brothers and sisters, for being the most amazing family and friends any one could ask for. They put up with millions of hours of conversations about video games, something I know they must be sick of already. And more often than not, they would be just as excited about my work as I was; just as I started getting disillusioned, they always managed to bring me back.

Next is the person who got me through a lot, helping me calm down and enjoy my time, even as one of us was always freaking out about class; my girlfriend, Nanna, who did so much to help me when I needed it most. Thank you for just being there. I love you!

I would like to thank all my teachers and the faculty of the Interactive Telecommunications Program, who have managed to create a vibrant community that has slowly accepted what many thought a childish medium, video games. They have opened
my eyes to so much more than just games, letting me play with so many more topics. I have not only learned about games, but also gained new perspectives on technology, art, and life.

You cannot talk about ITP without talking about the student built community. I have to thank all the students here who have helped me when I was stuck and lost on how to continue, someone always managed to be there no matter what. It is one of the most unique, helpful, and fun communities I have ever been a part of.

And finally, New York University, a place I have called home for the last 6 years. While it may not be perfect, it is still one of the most amazing universities in the world. With incredible and approachable professors, I have always found teachers interested in my studies, and willing to help push me further.

To sum it up, THANK YOU EVERYONE!!
MARSHAL McLuhan has the famous quote of “The Medium is the Message,” which rings all too true for video games. In what other artistic medium is the admirer given so much freedom as they are fully in control? Video games allow for players to test out new ideas in a safe and controlled environment. After all, this is how people learn, by testing their ideas and beliefs to find out if they are true.

A huge problem surfaces when the game is trying to teach improper behavior. I am not saying that First-Person-Shooter (FPS) games, which are widely ridiculed as “Murder Sims”, are actually teaching players to kill. Rather I am saying that they teach players to recognize changes in their environment and act upon them. They often teach player teamwork, as many of them have co-operative modes. These games are about a different form of understanding, one that can be analyzed well by educational professionals.

My aim is to create a game that teaches players the reasoning behind concepts they have been told to be true. I am not trying to make them better at something in particular, but rather trying to educate them on the reasoning behind Safe Sex. In the end, it is the hope that after playing the game, the player will be more educated on Safe Sex practices, and able to curtail an epidemic that is continuing to sweep through the world
CONCEPT

Overview:

I am designing a new Multiplayer Co-Operative Game about Sexually Transmitted Infections that will be easily adjustable to play across multiple platforms; mainly designed for the Nintendo DS, but with plans to be tested as a web-browser based game. The focus of my thesis project will be the design of a unique mini-game, similar to many color based matching casual games, like “Bejeweled” and “Snood”. This mini-game will be a new approach to casual game design, combining different styles of casual gaming, and integrating them with the serious subject of Sexually Transmitted Infections. For my thesis project I will polish the concept of this mini-game and build simple design prototypes, featuring “screenshots” and “design diagrams”.

Rationale:

My mini-game will present players with a fun and engrossing game experience that delivers a powerful message too. The message will be there to get people interacting
with each other and talking about taboos. It will help bring a huge problem to light; that people only know about a few STIs and fail to properly protect themselves. Everyone is united to fight AIDs, while most people have forgotten to get themselves checked for anything else. And with the prevalence of gaming among today’s most susceptible age range, this would be a great way to reach the most important demographic.

With the emergence of Serious Games, also known as Persuasive Games, as a legitimate genre of gaming, it has become even more mainstream and accepted as a way to educate people. For example, IBM has looked into using games to train new employees, while the United States Army has been using Serious Games for years to train, and more recently to recruit, with their game “America’s Army.”

**Goals:**

I am creating a Serious Game that is actually fun. I am using concerns about STIs as a springboard for the game, and making every attempt to create a game that is fun but also deeply informative. The hope is to get people to look at games in a new way, and at the same time help them recognize the important aspects of STIs and Safe Sex. In the end, I have attempted to create a good game that is also filled with important information for the players. My hope is that anyone who plays the game will find it so informative.
and awakening that they recommend it to as many friends as possible. Ideally the game will grow virally, as players invite their friends to join in and play with them.

**Audience:**

The main audience for this game is high school and college students and young adults, who are still very promiscuous and think they are invincible, never realizing the importance of using protection with all their new partners. But at the same time, I want this to be readily available to people outside of this profile, as an engaging way to look at STIs and Safe Sex. For this reason, the game will not have much in terms of pornographic or intense imagery, but rather will use abstractions and symbols. For example, players will try to burst the bubbles that represent erotic points, using either a stylus on the Nintendo DS or the mouse and pointer on their personal computer. The game will have a light theme, but will also turn darker as more STIs infect the player.

I hope players will experience the game in groups, talking to friends about it or forming discussion groups, but I also hope people will play alone, trying to learn more about themselves at the same time. Ultimately, the game will be played in multiple
settings, but the initial prototype will be missing most of the social aspects involved with playing against another person, as it will be non-interactive.

**Central Idea:**

The idea for the game is based on the hope of one day porting it to the Nintendo DS, using the stylus and touch pad for controls, along with the dual screen. Players will tap or drag the stylus on the screen destroying the bubble that are touched. They can also herd bubbles together by drawing lines, which will create a “jet stream” for bubbles to get caught in. Each screen will be half filled with colored bubbles and get more filled as the game progresses, finally ending with one of the screens being completely filled. The bottom screen will contain one player’s area, and the top screen the opposing player’s area, with each players’ bubbles clustered toward the connected area of the screen; the top of the bottom screen, and bottom of the top screen.

When the game starts, bubbles will begin floating on to both players’ screens. Players will then try to herd together bubbles of the same color, while popping others to stop their screens from filling. When they pop a bubble, another bubble of the same color will begin to float up on their partner’s side. After three bubbles of the same color have been herded together, they will form a bigger bubble, giving the player more points for
popping it. The player will also herd bubbles of the same color to the area connected to the other player’s area, where these colored bubbles will hopefully meet the same colored bubbles of the other player, forming bigger bubbles and maybe even infecting the other player if that specific bubble is infected.

The players continue popping and herding bubbles until one of the screens become completely filled with bubbles. At that point, all the bubbles on both sides pop, and the mini-game has ended. Players can level up in the mini-game by having all their bubbles, and their partner’s bubbles become the bigger bubbles. At that point the screen will zoom out making the big bubbles the size of the small bubbles, allowing them to continue the game on a harder difficulty, as more bubbles will float faster. The average game should last between one and five minutes.

Each form of STI (bacterial or viral) will have its own particular icon, with each STI getting a different color from ones of the same sort. If a player is infected, a few of the bubbles will have icons that represent if the STI is a virus or bacteria. For example, all bacterial infections will have the bacterial icon; therefore Chlamydia can be red with the bacterial icon. While viral infections will have the viral icon; and therefore HIV can be red with the viral icon.
Features:

Educational Aspect of the Game

Throughout the game there will be little bits of information meant to educate the players. These bits of information will carry lots of facts about Safe Sex and STIs, including proper condom use, and a few of the ways STIs can be transmitted. As players get deeper into the game, they may begin to get infected with any of the different STIs. Each STI will have different effects, with some causing visible sores that the player will be warned about, and some may have no visible effects, with only a doctor diagnosing the infection. Players can either wait for them to disappear (unlikely), get treated (helpful, but requires the doctors help), or just try and stop them from infecting their partner by herding the infected bubbles away from their partner (but it still may infect their partner).

Very often a trip to the doctor will be required, allowing for the player to find out how they are doing. The doctor is the only one that can give them an official score or tell them if they are infected with any of the STIs. When a player goes to the doctor, they will be asked to enter their email address because the tests take 24 hours, and their results will be emailed to them. He will also give him information about safe sex and any STI the player maybe interested in. The player will also receive a warning that some STIs wont show up on a test even if they are infected. If a player believes that his character has an STI, they can show the doctor some of their symptoms, and may receive a diagnosis immediately.
When the doctor has informed a player that their character has been infected with a certain STI, they are given a little introduction to that STI and a link to a site with more information about it. They will also be able to find out about cures and how it spreads. This will be done in the “doctor’s office”, so the player understands that all the information included in this area of the game is factual. The game itself will hopefully carry all the needed information about STIs and Safe Sex so no educator will be needed to facilitate the learning, but I do hope educators will use it in their courses as a way to further facilitate discussion in class.

**Multiple Platforms**

While the next prototype will be playable on a computer, the later step is to build a large network based around it. Players will be able to play on many different devices, with many different people. They will be able to form “friend lists”, adding them to their “Black Book”, allowing them to keep track of their partners and perhaps even learn who they have done well with and who has infected them. Or they can randomly find someone at a social gathering, where they can play a quick game as a way to break the ice. They may even try going online and play with a random person who just happens to be online at the same time.
Some players will be limited to playing it in a simplified Single-Player version of the game (because of no available network connection or lack of friends), which will be similar to the mini-game, but with only one screen being filled with bubbles, as there is no partner to help them. In the end, the main design will take into consideration that the game will be playable on multiple platforms, and be more geared to using each platform in a unique way. Since the prototype will be designed for a personal computer, most of the interactions will involve using a mouse, but for the Nintendo DS the main interaction will involve tapping and dragging the stylus on the Touch Screen.

**Puzzle-play Aspect of the Game**

Each user will have a slightly different experience based on their past experiences with Safe Sex and STIs. I hope that people that have had no connection with them can learn a lot about them, while people that are afflicted, or have ever been, will appreciate what the game aims to do. Players will be playing a casual game that will have limited sexual innuendo, but still explore sexual ideas throughout the game. The game-play will involve popping bubbles before the screen fills up with them completely. When a bubble is popped, new ones will come to replace them on the other player’s side, slowly filling the screen, until one of the player fills up their side of the screen and all the bubbles burst. When playing with a friend, both players will be trying to finish together, as this will net the most amounts of points.
Players will also be able to choose whether to use protection or not before they start the game. Both players must agree on the use of it, the game will not begin until they both agree to the same thing. By using protection, players will have a thick line between them, and will produce more bubbles with each one popped. They will also not be able to truly engage in the other players bubbles, combining with their partner for more points. But when using protection they are also less likely to contract any disease from the opposing player. If a player chooses not to use protection, then they can interact with some of the bubbles on the opposing side (the bubbles that appear on their screen or are touching bubbles on their screen), and get points for any bubbles that pop in that area. This means players will get higher points for not using protection, but it also increase the odds of infection.

Players will only be able to find out their official score from the doctor, because they will get negative points if they infected others, or were infected. The point system will be based on the amount of bubbles players popped, with bonus points for popping the same colored bubble at the same time, the size of the bubble popped, and how many levels they . A long game with lots of large bubbles popped will have a higher score than a shorter one with lots of single bubbles popped. There will also be a scoring system that is decided by your partner. In this system, after you finish the game with a partner, they can give you a score of zero to five stars. This score will be averaged out, allowing for your partner to decide how good of a player you are.
Success Measures:

I will consider the project complete when there is an in-depth description of all the game play elements, along with screenshots showing off the main game-play mechanics. I hope that people who see this prototype will be intrigued enough to want to come back and play the early versions after they are built. I also hope that after playing the complete game, or even seeing the game prototype, people become more aware of Safe Sex and all the different STIs, and even as far as getting themselves fully tested. But most of all, I hope people will have fun playing the game. They should learn something during that fun, but to me, fun is the most important thing in the world.

Concept Diagram:

Included in Appendix
CONTEXT AND BACKGROUND

RESEARCH

**Serious Games**

I am creating a Serious or Persuasive Game, defined by Wikipedia as “computer and video games used as persuasion technology or educational technology. They can be similar to educational games, but are often intended for an audience outside of primary or secondary education. Serious games can be of any genre and many of them can be considered a kind of edutainment.” The game will be based around informing players about Sexually Transmitted Infections (STI) and proper safe sex techniques.

The game will follow in the footsteps of other Serious Games that aimed to educate and make players aware of different ideas and thoughts. This field is quite young, but already has one person who is regarded as a leader in the genre, Ian Bogost, founder of the independent game company *Persuasive Games*. He has designed many games ranging from the mundane of working at Kinko’s (*Disaffected*) and Coldstone Creamery (*Stone City*) to Airport Security and the crazy new enforcements (*Airport Security*). He has let you trade Bacteria Produce for the highest profits (*Bacteria Salad*), and let you change the price of oil by causing wars and natural disasters (*Oil God*). He has become a public defender for the oft
demonized and crude statement on American culture, Super Columbine Massacre RPG!

(Pictured) He has even developed games for political parties, trying to campaign in new ways (The Howard Dean for Iowa Game and Take Back Illinois). The problem I have found with each of these games is they are not very fun. While you can play them for a short amount of time and be entertained, there is no person who would seriously enjoy playing these games for hours, as many gamers do with some of the more popular games.

I plan to build on the idea of creating “Persuasive Games” in new ways, by creating games that are more fun and informing of sweeping epidemics, not just the latest news flash. The game will be aimed at educating players on the different diseases that affect all sexually active people, and also the most important ways to stay safe; using protection, being open with your partner, and mutual monogamy.

One of the most important things about my game, is that it must be fun to play. Unlike Ian Bogost’s Persuasive Games that claims “Think Games are Fun? Think Again.” My game, “Stop The Infections” will have to be fun! I want people to enjoy playing it even if any semblance of sex education is taken out. The core idea of the game must be fun; it does not just have to be educational and quite boring like many other Serious Games. For this reason I am trying to take as much inspiration from games I think of as fun, but I still want information and learning to be embedded in the concept of
the game. The aspects of the game that players learn from will work because it is part of the game, not just an after thought, added on at the last possible minute.

**Examples of Games**

**Non digital:**

One of the main concepts I plan on incorporating is the idea of matching similar objects. This is done in children’s toys, where they must put the proper blocks in the proper holes, as well as in modern card games like *Set*, where players must form sets of three with all of them having something in common and other things completely disparate. This idea allows for players to look at things in new ways, as they are forced to recognize slight differences and similarities in each of the cards. I hope to build on the idea of collecting similarities and even separating differences.
Casual Games:

The idea behind Bejeweled is simply matching objects with the same colors in to groups of three. The limitation is that players can only switch an object with one directly next to it. This forces players to search for groups of two that have a similar object near, or ways to move them together. This is similar to Snood, just done in a different way. In Snood, players must shoot balls at groups that have the same color to form groups of three or more. When that is done, all the connected balls fall off, giving the player points. I enjoy the ability to group these colors together and am playing with this idea in my game, but rather than having them just disappear, I will have them appear on their teammate/competitors screen. This will add a form of friendly competition, even though they should be working collaboratively.

Playstation Portable:

Another game that has inspired me is Loco Roco, a PSP game that seems to be meant for the system it is played on, rather than being a port from a different system, such as the Playstation 2. It uses the controls and device as intuitive to the game, using mainly the shoulder buttons for any action, which consists of tilting the level to move
around a blob as it eats flowers to get bigger and find friends, with one other button used in the rare occasion of breaking apart your blob into many little blobs. There are things I would like to have seen done with it, such as the ability to tilt the system to control it, but understand the problems that would have caused. I like the use of the system as inspiration for the game, rather than porting it just for porting sake. Although the game seems like it would gain a lot from using a simple accelerometer to control it, perhaps that will happen when it is released for the Playstation 3.

**Nintendo Dual Screen (DS):**

I believe that Nintendo continues to innovate, as large corporations spend millions battling for speed and graphics. Nintendo continues to grow as they expand the definition of play. The DS stands out as one of the most surprising hits.

With its unusual two screens, and slight upgrade over current handheld graphics, few people were sure if it would do as well as Nintendo needed. With now more than a 25 million sold, it seems to have a hit. The Touch Screen has been a simple add on for some, and a god send for others. Some have embraced the built in microphone, while others have ignored it. And
everyone loves the Wi-Fi capabilities. But more people would like to know how to use these systems, as Nintendo is very protective of their secrets.

While I don’t consider it a game, but more of a toy, I find Electroplankton to be a great inspiration. The use of the stylus on the DS was great, along with all the mini-games available. Unfortunately, I found the game to get very dull very quickly, as there is not much to do after playing with each of the “planktons”. Although it made use of the voice, only one plankton actually did anything with it. The Touch Screen was used in every one, but some times you wished for a bigger interface.

Another great DS game is Kirby’s Canvas Curse, which had a great use for the stylus right as the DS came out. It was very interesting and a great use of a new control. Rather than using the Directional Pad or any of the buttons to control the character, you draw a line and Kirby, the main character who is just a circle, uses it like a ramp, speed up, or even a wall. They even added powers that Kirby can pick up, which can be activated simply by tapping on him. This novel control system remains one of my favorite first games for the DS, and still remains one of my favorite games for the system.
More Games:

Some games are not console specific, as the coming Playstation 3 port of Loco Roco has proven. These games have done a great job proving that innovation in gaming can be used well in others. The Phoenix Wright series has done a good job of porting itself from the Gameboy Advance to the Nintendo DS. It has made the Choose-Your-Own-Adventure seem a natural fit for the DS, with the use of the touchscreen. It is a fun simple game, with an interesting subject, and quirky characters. Most people will not understand it, and think its childish, losing interest to the anime art style. But it is a fun game that you should try just to see what its about.

Puzzle Quest is a new game on the PSP and DS that seems like an obvious game of interest to me. In the game, players start off playing a classic Role-Playing-Game (RPG), choosing a character and leveling them up. The twist comes in the battles, which are just a game of Bejeweled, which players use to gain skills and abilities. Each color has a different action associated with it, such as bold may give you money, while blue may help your magic skills. It presents an interesting mix of game types, but both seem to be done with the minimum innovation, just simply the combination.
But the greatest game to probably stand out is Tetris. The original Gameboy owes much of its early success to the addictive nature of a Russian puzzle, when Alexander Pajitnov created the game. A great new innovation for the release on the DS has been the Push Mode. In this competitive set-up players build around a center block and clear multiple lines to push down on the blocks. This creates a great simple game to play with a friend, and seems to be uniquely fit to the DS (Dual Screen). I wanted to add an element of this push game with my game, adding a more playful aspect.

Popping bubbles seems to be the most simplest of life’s little pleasures, only fully available to us at our most youthful ages. After that, it remains an immature pleasure shared with the children as you present to them a wondrous event.

**STI Research**

One of my main goals is to not limit the game to educating about just HIV or just Herpes, or even just the STIs with no cures. I want players to come away from this and know that the most important thing to do if something is wrong is go see your doctor. If you catch certain STIs early enough, you can easily cure them. Some of them can turn very bad the longer you wait.
For my research into STIs, I searched extensively online, for all the information I could find, from multiple sources. If I ever found major discrepancies between multiple sites, say on the amount infected in the US, I researched it some more. From all this information procured, I created a spreadsheet, which contained pertinent information about each one. I wanted to know the name of each STI, the type of infection each is (bacterial, viral, parasitic), how long each one needs to incubate, if there is a cure, what the symptoms are, how each is transmitted, how common each is, what can prevent the spread, and even what happens if you don’t treat each one. This is table is included in the Appendix.

Once this table was created, I was able to get a great overview of all the STIs. I counted 16 STIs, and decided to not force my self to use all of them in the game. I also found that certain types are very similar, such as Chlamydia and Gonorrhea. Another interesting fact was how long many of the infections incubate, which can cause many people to be unaware that they are infected for quite a while.
**PRODUCTION**

*Pre-Production Planning*

Based on the schedule put forth, I plan to develop a viable paper prototype, along with creating some screenshots to capture the spirit of the game. I will also make a storyboard, which will allow me to show it to other people in order to help them grasp the ideas of the game more easily. My thesis paper itself will contain information about how the game is played and the underlying logic involved. My thesis presentation will make all this information easily digestible for people unwilling to read the paper.

The paper prototype will start off as a basic system, with very abstracted symbols and not much explanation available. After playing with it and testing it with users, I will be able to create a more complete version of the prototype, which can be played with less intervention by me. I will also add a rule set, so players can see clearly what the rules of the game are. The last thing will be to create simulated screen shots of how the game will look on the computer.

I also plan to research the different STIs more thoroughly, creating information about all the different STIs for my game, including symptoms, effects, transmission, incubation period, and whether or not it is curable. Based on this information, I will be able to make the diseases in the game more realistic, allowing for a bigger impact.
I will most likely be doing all of this on my own, and due to my limited programming abilities and lack of drawing skills, I will be mainly focused on the interaction of the players with the game. This will allow me to delve deeper into my field of interest, rather than getting caught up in aspects that are less important to me. Based on what I create here, I plan to develop this game into an actual online game after graduating.

**Actual Production**

The first thing I did was create a rough sketch of what I imagined would be the game. This consisted of hand drawn circles, and lines, with more circles drawn on top of it. It was definitely something only I could read, but helped organize my thoughts into something more substantial. After creating this rough and illegible sketch, I proceeded to create a paper prototype. This prototype consisted of pieces of paper cut into roughly the same size, and then colored to represent the different colors I planned on using. I then laid this out on paper, and tried playing myself, analyzing the moves and choices I made. This became the main prototype I used in testing the game. I have since created a more professional version of this prototype using heavier and colored paper.

After creating this interactive paper prototype, I began creating an image showing off the first few moves. This image was more for me to see the progression of the game after the first few moves. These images may look complicated to someone else, but to me they represented that I was going in the right direction. After consulting with Amit
Pitaru about the images, he advised me to simplify the images into less actions and more description involved in each. Have each image represent one players move, then the consequences of that move, then the other players move, and those consequences, which should be all different images. He recommended I do this in Flash, to show off the actions and movement involved. After working a while on this Flash version, I found it to be informative, but realized that not including the interaction limited how helpful it could be.

During the course of my prototyping, I also storyboarded a single player version of the game that would have constituted the Dating Sim Choose Your Own Adventure. I created a storyboard for this part of the game that involved a player starting the game to starting the bubble popping game. In the end the Dating Sim was scraped due to the realization of its unimportance and confusing nature to players.

All the prototypes can be seen in the Appendix.
THE DESIGN PROCESS

Starting Off

When I started working on the game, I knew two things; it had to be fun, and had to have some sort of educational aspect. So the first thing I did was research the subject, using Wikipedia and other Internet sources for most of the information. I looked at government sites and non-profit sites. From all these sources I was able to understand STIs and learned many important, but less known information. I knew there were more STIs than HIV and Herpes, but I did not know how many more. I knew that there were differences in the STIs, but I could not tell you any before this research. Afterwards, I was able to have very educated conversations about them, that when I finally went to a Public Health specialist, she was very surprised and said I had a good grasp on them and the Safe Sex practices I was interested in educating players in.

From this research, I created an Excel Spreadsheet, which housed all the important information about the infections. I was searching for a few main tidbits of information in each, but included lots more than I thought I needed, just in case I realized I needed that extra bit. I was able to find some very important nuggets of information, like the fact that most STIs are either Bacterial or Viral, and that while Bacterial are usually curable, the Viral are not. This allowed me to distinguish between the two STIs in a new way. I also found that many of them have quite long incubation periods,
ranging from days to weeks, sometimes even taking months. All this information became integral to my game design process.

The Game

I knew right away that I did not want this to even seem perverted to anyone, therefore I refused to have any nudity. At some point I even thought of never mentioning sex, but decided that doing so would limit the educational ability of the game. I still remain on the fence about allowing images of infected parts included in the game, but that would have to be decided at a later point.

For the game to truly be like sex, it must be a two-player game. It should also be able to be played by yourself, but more in a masturbatory way. But more important than the single player version is the ability to have the game played with or without some form of protection. I have thought about how to make it very sensual, or even sexual, without being over the top, but ended up thinking that it might be too controversial like that. I therefore settled on what I think to be an elegant solution, having players pop bubbles.

The idea for using bubbles came from what I thought to be a universal love of popping bubbles. Just remember back to the time of bubble wrap or as a kid when someone would blow bubbles. The memories still bring a smile to my face. It also can be useful, because when you pop a bubble, it burst, and releasing what was locked inside. I thought I could use bubbles to also give this light feeling, requiring players to be extra
I became very invested in this idea, and felt that it conveyed a lot of what I wanted.

The basic idea of the game is quite simple: Herd bubbles of the same color together by dragging the stylus on the screen, creating a sort of jet stream for the bubble to get caught in, and then drag over the bubble to pop it. The entire time you are doing this, more bubbles will float on your screen, filling it with bubbles. On the other screen, will be your partner’s area, where he will be doing the same thing. Every time you pop a bubble, that color bubble will appear on your partner’s screen, allowing you to dictate the colors he will play with. The game ends when one or both players fill their screen with bubbles, and all the bubbles pop.

**Protection**

If both players decide to not use protection, at the top of each of their screens will be a slightly grayed out area. This grey area is where both players can pop and herd bubbles together, gaining more points for bubbles popped in this area than in their own area. But, here is also where players can infect each other, creating a sense of danger in popping bubbles here. By not using protection, no player will have their screen fill with bubbles without the bubbles pushing themselves on to the other player’s side. This allows for one player to be not quite as good, and still gain a good score. The idea of not using protection means you trust your partner, and realize that it is more fun and you can
get a better score without it. But if you don’t trust your partner, you definitely want to use protection.

When you use protection, the grayed out area becomes just a grey bar at the top of the bottom screen, which continues to the bottom of the top screen. This bar represents the layer that the condom creates, separating the contact between the two participants. In the game, the bar does not allow MOST infections through, as the bubbles from both players cannot touch each other. Players can interact with each other by having both players bringing the same color bubbles next to the protection. If both players have two bubbles of the same color, just separated by the protection, they will both act as if they are three bubbles, forming into one bigger bubble.

The few infections that can still be transferred, even with use of protection, will still infect other players if they are not careful. This forces the players to still be careful in choosing a partner, even if they plan on using protection.

**Infections!!**

During the course of the game, a player can get infected, without ever knowing it. Just like in the real world, infections can show no visible signs for some time. A player will continue playing the game, without ever knowing they have been infected until it manifests itself with some of the bubbles carrying a slight discoloration.
discoloration will continue on the bubble until it becomes an icon for either a bacteria or virus.

Players can find out if they are infected earlier by going to the doctor, who will also give them their current score, and even how well they are doing compared to other players. This will be an information hub for the players, where they can also learn about all the types of STIs and even the symptoms often associated with them. But one thing that may anger many players is the false negative. Since many STIs will not appear positive on a test result for days to weeks, it is likely that someone can be told they are clean, when in fact they are infected. A player can be told they have not been infected with any STI, when in fact they have recently been infected. This is to make players aware of the false negative results, and that it is important to always wear protection, even if you think you are cleared.

When a player is infected, they can easily infect other players, unless they take their medication, which will limit the spread of the infection. To get medication, a player goes to the doctor, who will diagnose the infection, telling him all about it, and then giving him the medication. Now, during the bubble game, while some bubbles will have an infection icon, others will have a medical one. To use the medication, the player must herd the infected bubble to merge with the medical one. Doing so will help control the virus, and over time cure the bacterial infection.
Because some STIs can spread even though you may properly use condoms, they will also be in the game. HPV, Hepatitis, and Molluscum Contagiosum are examples of infections that might spread even with proper condom use. These are viral infections and will infect players if they are not careful. But there are also Crabs and Scabies which can spread through other ways, but don’t fall in to the viral and bacterial groups, as they are Parasitic. These infections will appear more as distractions in the game, destroying lots of bubbles, and making more appear faster. They will continue to roam the screen until the player is able to fully destroy them. The parasite is destroyed by rubbing the stylus repeatedly over them, which may take a while.

**The Tangent**

As I was developing the bubble game, people began to ask many questions about the game, some of which I wasn’t ready to answer. Many of these questions were very important to answering in the development of the game, others sent me searching for ways to answer them. The biggest problem came when people were questioning if this casual bubble game is enough for this to be a viable game. This sent me searching for a way to extend the game play and educational aspects beyond this simple game.

I began designing a Choose-Your-Own-Adventure game about dating, which I began calling “The Dating Sim.” This game involved designing a character, choosing their sexual history, and then trying to find a partner to play the bubble game with. Players could attempt to have many flings or try forming a viable relationship with a non-
playable-character. I worked on this for some time, devoting all my efforts into exploring the concept of using a menu-based adventure. I brainstormed ideas I wanted the player to grapple with, and how to present it in a fun way. I wanted to play with the concepts that people might grapple with in the real world, such as being honest with your partner, when to tell them if you are infected, and even stereotyping people into being infected.

After spending weeks designing this part of the game, I still felt this was the weakest part of the game. After presenting it, many people expressed this same belief, wondering what the point of the Dating Sim was, other than adding more game to it. I really began questioning the idea too, wondering if it was time to just throw it away. After presenting the idea in thesis class, I realized that it might be better for the bubble game. Frank Lantz and Stephen Totilo approached me; both saying that it seemed the game would gain an extra layer of importance if it were just a two player casual game. After discussing it with them for a few minutes, I knew what I had to do. The Dating Sim was thrown away. I have included some of my work to show some of the design process I went through, even if it didn’t make it to the final version.
USER SCENARIO 1

(Note: There are two scenarios, the first being the Dating Sim concept, the second being the stripped down version)

User

Joe is a 19 year-old college freshman who enjoys getting drunk with friends, going to frat parties, and hitting on any girl that walks by him. He is thinking of joining a frat, but can’t decide which one is best for him. He is still undecided, but is leaning towards something in the sciences or business. He has been sexually active before, with two of his High School girlfriends and two random girls in his first weeks of college.

Setting

Joe is surfing the internet, messaging friends on MySpace and Facebook and looking through some sites he likes, in his dorm room at night. His roommate is studying behind him and there is very little conversation between them, as usual. All of a sudden he gets an email from his friend telling him to play this awesome game that opened his eyes.
**Motivation**

The email is from a good High School friend, who goes to a different University, and knows what Joe likes. Joe decides to try it out, after all it’s called “Stop The Infections!!” He is not totally sure about playing a game about STIs, but likes to play other flash games on the internet. He likes sex, so how bad could it be?

**Action**

He opens the game and is presented with the option of creating a profile and character or choosing from pre-made characters. He decides to create a profile, with his own character. He is first asked to choose the sex of the character; obviously he chooses a Male one. Then he is asked about a few questions about the character’s sexual history to determine whether or not he has already been infected with an STI: The questions include 1. “Has he ever had sex?”, 2. “How often does he wear protection?”, and 3. “How many partners has he had?” He is then given a prompt recommending that he “Go See the Doctor” in the game to test whether he is already infected. Joe decides not to see a doctor right away, but rather to just get started playing the game.

Joe chooses to take his character to a bar for the first location. There he sees a blond avatar at the bar, drinking by herself. Clicking on her, he approaches her and is given choices on what to say. He decides to pay her a compliment, and then decides to bestow it upon her earrings. The female avatar begins to smile, and asks Joe’s character
to sit down next to her. He then asks what she is drinking, to order her another one. Paying her one more compliment, she tells Joe’s character that she wants to go home, and invites him along.

When they reach her place, Joe is asked whether he wants to discuss STIs with her, or not. He does not want to ruin the mood, so decides to not talk about them. She then asks him if he would mind wearing a condom. He decides “Why not?” and chooses to wear the protection. He then begins to play the sex game, which is simply popping the bubbles, but for some reason certain bubbles are discolored and cause other bubbles to get discolored. There is also a thick line going across the screen, not allowing him to pass through it.

After finishing the first level, he decides to go to the doctor, where he finds out he has a curable STI. He is then given information on the infection and its characteristics. He continues to play the game, finding many other partners, and sometimes playing without protection. After playing the game a while, and not using protection many times, he finds out he has been infected, but doesn’t know by what. He only knows what some of his symptoms are, such as “You have a pulsing sore, that is constantly oozing yellow puss.” He is then asked, “Would you like to see a picture?” He can then see a picture of the oozing sore and is told to go see the doctor to find out what exactly he has.

The doctor diagnoses his particular STI, gives him an overview of the infection and tells him what can be done, in real life as well as in the game. Some of the STIs have
cures, others only have medicine that can limit its spread, all of which can be applied
during the sex game. Joe continues playing until he gets fully infected with many
diseases and dies.

**Reaction**

After playing through the entire game in an hour, Joe decides to email his friends
this game and begins to realize the importance of wearing a condom every time he has
sex and to get himself checked ASAP!
**User Scenario 2**

**User**

Joe is a 19 year-old college freshman who enjoys getting drunk with friends, going to frat parties, and hitting on any girl that walks by him. He is thinking of joining a frat, but can’t decide which one is best for him. He is still undecided, but is leaning towards something in the sciences or business. Like most college students, he plays video games, and is considered a contender in the frat Madden Tournament. He got a Nintendo DS, but does not play it as much as his Xbox 360. He has been sexually active before, with two of his High School girlfriends and two random girls in his first weeks of college.

**Setting**

Joe is at a gaming event thrown by a gaming club. He was drawn into the Madden Tournament, but is surprised to find other games being played. He finished signing up for the tournament, when he decides to look at some of the other games.
**Motivation**

He sees a large group of students standing around, each playing with their Nintendo DS. He sees them laughing as they find a friend to play a game with. He is surprised to see a desk with a game representative in a Doctor’s uniform. Intrigued, he walks over, and asks to see what the hubbub is about. He is surprised to find out it is a serious game about Sexually Transmitted Infections.

**Action**

He remembers that he brought his DS, and pops the game in. When he starts the game, he is presented with the option of creating a profile and character or choosing from pre-made characters. He decides to create a profile, with his own character. He is first asked to choose the sex of the character; obviously he chooses a Male one. Then he is asked about a few questions about the character’s sexual history to determine whether or not he has already been infected with an STI: The questions include 1. “Has he ever had sex?”, 2. “How often does he wear protection?”, and 3. “How many partners has he had?” He is then given a prompt recommending that he “Go See the Doctor” in the game to test whether he is already infected. Joe decides not to see a doctor right away, but rather to just get started playing the game.

Joe is told he can practice by himself, or he must find someone else to play with. He decides to find someone to play with, using it as a chance to talk to one of the girls he saw when he walked in. With a quick step, he asks the girl if she would mind playing the
game with him. Being the self-conscious girl she is, she asks when he was last tested in the game. Not wanting to life right away, he says he hasn’t gotten tested in the game. She tells him not to worry, as long as they use protection. Being eager to start the game, he accepts.

They begin to play the bubble-sex game, which Joe finds slightly hard to figure out right away; wishing he took a second to practice before beginning the game. There are bubbles like what he sees in Snood on both, the top and bottom, screen. He sees a bunch of bubbles floating on each screen towards the center, and taps one to watch it pop. He starts popping more bubbles, finally dragging the stylus along the screen, popping tons of bubbles, and altering the landscape of the screen. Bubbles start floating allover the screen, and Joe realizes he must slow down the dragging. He begins to realize that by merging three together, they form a bigger bubble.

All of a sudden, the girl says she needs some green. Unsure exactly what she means, he decides to pop one of his green bubbles. She thanks him shortly after, and realizes that the bubbles he pop, populate his partners screen, which is seen on the top screen of his DS. Within a minute of starting the game, there seem to be too many bubbles on his screen, while the girl seems to have a lot less, but all of them were big. He tries dragging the stylus again, and his few big bubbles get popped in the process. Shortly after doing this, his entire screen gets filled with bubbles, and all of them suddenly pop.
He is then asked to rate his partner, deciding to give her a 5 star rating. She thanks him, and says they should hang out sometime, before heading off to her friends.

After finishing the first game with the girl, he decides to go to the doctor. Here he is asked to enter his email address and the doctor will get back to him, or he can just come back in an hour. Returning to the doctor after playing with a few more friends, he finds out he has a curable STI and his score, which is very bad. He is then given information on the infection and its characteristics, along with a few tips on how to play. He is also told how to use antibiotics in the game, and plays the practice rounds a few times to get better.

He continues to play the game, enjoying it with many of his friends, and sometimes even playing without protection. After playing the game a while, and not using protection many times, he finds out he has been infected, but doesn’t know by whom. He sees that he a negative score, and finds out that is from infecting and being infected so many times. He begins to accumulate STIs, curing the few that are curable. The more STIs he has contracted the harder the game has gotten, making it harder to get a high score. Shortly after getting infected by too many infections, Joe is told his character has died. He is now offered the chance to create another character.
Reaction

After playing through the entire game over a week, Joe decides to tell his friends all about this game. He begins to realize the importance of wearing a condom every time he has sex, and decides to get himself checked ASAP!
USER TESTING

Phase I Testing

The first User Testing was very different from later ones. For this one I tested the idea with people involved in the game industry, constantly tweaking rules along the way to make the game better and helping myself understand it better too. I hoped to have the users understand the concept of the game, and offer many ideas on how to improve it, but due to my inability to fully articulate some of the rules, it became more of me trying to explain it than anything else. I was mainly showing of a paper prototype, which included very little information and functionality. The testers mainly tried playing with the paper prototype, but were often asking questions about strategies rather than rules.

While I was hoping to better understand the game mechanics from this test, as the testers were knowledgeable in the field of games, I was able to gain a better insight to the way people will approach the game. I learned a lot about what I should do in making changes to the game design and learned many great ideas to implement. This test took place during random times, including using a short time in the game design class with Frank Lantz, allowing me to tap an entire class for a short time. The class features lots of students who are very interested in pushing the boundaries of gaming and offered lots of constructive criticism.

Another test took place with Amit Pitaru in his Designing for Constraints class, which allowed me to talk with students who had less interest in games, allowing me to
engage more regular people. I took some personal notes, most of which remain illegible to all but me. Luckily, many of the thoughts spoken in class reaffirmed my idea, and allowed me to continue on a good course.

**Phase II Testing**

This testing will be mainly centered around finalizing the game play mechanics, and making sure they have the desired affect on players. From this I hope to learn what people who don’t study games think about the game. I will be making minor tweaks to the system, allowing the game to be more accessible to everyone. Unfortunately these testers will also be playing the paper prototype, and may get caught up on the limitations of that. I mainly hope to learn from these testers ways to clarify the game mechanics, and how to make the underlying ideas clearer. These testers will be chosen from current ITP students or friends of mine who have a basic understanding of the goals of the game.

After the test, I will give them a very short survey and ask them a few questions more directed at their particular experience. These questions will deal with how fun the game is, if they understand how to play, and how well the ideas about STIs came through. After speaking to these testers, I will make many minor tweaks, and perhaps even a few major ones, to help get a final prototype of the game ready.
**Final Testing**

Unfortunately, I will probably not have an actual computer based prototype for the final testing; so I will likely be testing with the paper prototype and screen shots of how the game will look. With this test I hope to answer any lingering questions and clarify any points that seem to not make sense to the users. I will polish the game, so the players will fully enjoy playing, and learn how the players actually play the game. I will play with a random sampling of people, not confined to ITP and close friends. These people should be within the 15-25 age range, but I will allow a few people a little older. These players will be given a set of instructions on how to play, and although I will be standing there helping them work the paper prototype, I will try to limit my interaction with them.

After the game I will give them a survey, and if I see something that I would like to talk to them about that is not on the survey, I will also talk to them. After this testing, I hope to have very few tweaks to make, and hope to just find things that need clarification. Based on this testing, I hope to have a final version ready to be played.
CONCLUSIONS

In creating a game that is both educational and fun, I constantly felt like I was trying to make something that was hot and cold at once. I did not want the educational aspects to overshadow the entire concept of the game, but at the same time it had to be completely engrossing as a game. I spent endless days and nights trying to overcome this huge hurdle, always unsure if I was hitting this sweet spot.

The biggest problem with designing a co-operative game by yourself is the lack of feedback from partners. Game design is a collaborative art form, requiring many different disciplines, and working better with partners to discuss concepts with. Valve Corporation, makers of the highly successful Half-Life and Half-Life 2, have utilized a system they refer to as the Cabal, a small group of people taking the role of what many put into one person’s position. This was born out of the need to make the game more fun -

We set up a small group of people to take every silly idea, every cool trick, everything interesting that existed in any kind of working state somewhere in the game and put them into a single prototype level. When the level started to get fun, they added more variations of the fun things. If an idea wasn’t fun, they cut it. (Birdwell)
After working on games for some time, I have found this process to work very well. When thinking about something that might be fun, at first it might be the greatest idea ever, until you start talking to someone about it, and they open your eyes to the boring nature of your idea. This is so important in game design, where the finished product is supposed to be enjoyed by many people, not just yourself.

In the end, I feel like I created a viable game design to educate players about Safe Sex practices, without forcing it down players throat, as many Serious Games seem to do. I tried to allow for player choice, having them learn from their in game experience, rather than deciding for them what to do. I found many problems along the way, and often searched for guidance from friends and teachers on how to approach them. With their help, I was able to overcome the most difficult of obstacles, and designed a Serious Game, that is hopefully fun to play.

Throughout the course of designing this game, I have realized the importance of having a strong sense of the direction you are heading to, before embarking on the production. Central ideas must be decided before anything can continue, but the final aspects of the design can only be decided through play-testing and iteration. I only wish I could have created a fully functional prototype of the basic game concept, and therefore build more around that.

Many times I thought I new exactly what I should be doing and what was needed to make this game have a greater impact, but everytime I thought I knew, I realized I did
not. There was never an exact answer to any of the questions, and I was constantly searching for that correct balance of information and fun. Although I like to think I found it, I won't know until the actual game is created.

Creating a Serious Game is much harder than creating a regular game, as you constantly have to think about what players will experience and learn from playing. It requires that you constantly analyze the choices offered in the game, making sure that they cover all the right bases and present the most pertinent information. You must also keep in mind what the player will think after playing this game; Will it change their life? How? Are they understanding the game? All these are questions that the designer must grapple with when creating a Serious Game, but remain absent when making a regular one.

In the future, I would like to continue with this game concept, hopefully creating a functional prototype. I would like to test the game, and make the necessary tweaks required for the game to be fun. The biggest hurdle to creating this game lies in the corporate nature of game development, requiring a possible return on investment. This game remains an attempt at creating a fun Serious Game, something that offers little chance for any profits to be made. In the end, it acts more like a work of art or documentary, with the Return on Investment being in the hearts and minds of those that it touched.
Due to the way I have researched this thesis, I have decided to make this Bibliography more functional, separating the items but their use in this thesis.

**Sexually Transmitted Infections**

American Social Health Association, Learn About STIs/STDs  

Centers for Disease Control and Prevention, Sexually Transmitted Diseases  


STDResource.com, New Relationship Testing  


**Games**


**Images**

I have tracked each image by what it portrays and where I got it. All have been procured digitally and freely, either by Google’s Image Search, Wikipedia, or included Clip Art.

*America’s Army* - [http://img.clubic.com/photo/00149716.jpg](http://img.clubic.com/photo/00149716.jpg)

*Bejeweled* - [http://www.terragame.com/Bejeweled/bejeweled-1.jpg](http://www.terragame.com/Bejeweled/bejeweled-1.jpg)


*Kirby’s Canvas Curse* - [http://z.about.com/d/nintendo/1/5/B/5/s26209_NDS_3.jpg](http://z.about.com/d/nintendo/1/5/B/5/s26209_NDS_3.jpg)

*Loco Roco* - [http://www.dignews.com/admin/screenshoot/loco_roco_02.jpg](http://www.dignews.com/admin/screenshoot/loco_roco_02.jpg)


*Snood* - [http://horiuchi.akira.ne.jp/img/snood-m.jpg](http://horiuchi.akira.ne.jp/img/snood-m.jpg)

*Super columbine Massacre RPG!* - [http://jeffmilner.com/2006/05/scmrpg.png](http://jeffmilner.com/2006/05/scmrpg.png)

APPENDIX

Production Schedule

Visually Based
# Sexually Transmitted Infections Research

## Excel Spreadsheet

### Table: Sexually Transmitted Infections

<table>
<thead>
<tr>
<th>Name of STD</th>
<th>Type</th>
<th>Incubation Period (days)</th>
<th>Symptoms</th>
<th>Transmission</th>
<th>New Commonly</th>
<th>Prevention</th>
<th>Effects of Non-Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>Bacterial</td>
<td>3-15 days</td>
<td>dysuria, urethral discharge, pelvic pain, abdominal pain, fatigue, fever</td>
<td>Sexually transmitted from infected person</td>
<td>Genital ulcers</td>
<td>Condom use</td>
<td>May be cured by PCV, other measures of control may be required</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>Bacterial</td>
<td>7-10 days</td>
<td>Discomfort during urination, redness, pain, swelling, discharge</td>
<td>Genital ulcers</td>
<td>Abnormal uterine bleeding, pelvic pain</td>
<td>Condom use</td>
<td>May be cured by PCV, other measures of control may be required</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>Bacterial</td>
<td>3-5 days (may be &gt;10 days)</td>
<td>Discomfort during urination, redness, pain, swelling, discharge</td>
<td>Genital ulcers</td>
<td>Abnormal uterine bleeding, pelvic pain</td>
<td>Condom use</td>
<td>May be cured by PCV, other measures of control may be required</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>Viral</td>
<td>15-50 days</td>
<td>Occasional nausea, vomiting, abdominal pain, fever, jaundice</td>
<td>Direct transmission from infected person</td>
<td>Jaundice, fatigue, nausea, vomiting, abdominal pain</td>
<td>Combination therapy with other diseases</td>
<td>May be cured by PCV, other measures of control may be required</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>Viral</td>
<td>45-150 days, average 100 days</td>
<td>Occasional nausea, vomiting, abdominal pain, fever, jaundice</td>
<td>Direct transmission from infected person</td>
<td>Jaundice, fatigue, nausea, vomiting, abdominal pain</td>
<td>Combination therapy with other diseases</td>
<td>May be cured by PCV, other measures of control may be required</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>Viral</td>
<td>2-6 weeks</td>
<td>Most often no symptoms</td>
<td>Direct transmission from infected person</td>
<td>Jaundice, fatigue, nausea, vomiting, abdominal pain</td>
<td>Combination therapy with other diseases</td>
<td>May be cured by PCV, other measures of control may be required</td>
</tr>
</tbody>
</table>

### Additional Notes:

- **HIV**: Viret, No. 2 weeks to 3 months, can be up to 6 months. Once, only getting limited information. Sexually transmitted from infected person. 42 million world-wide, about 1 in 100 infected in the U.S., most common route for transmission is sexual. Causes AIDS. Does not stop cervical cancer in some cases, can go away on own in women.
- **AIDS**: Viret, Yes. 2-3 months, but can range 1 week to 6 months. Can be treated with chemotherapy for life. Condoms, but does not protect against uncovered areas, which can transmit the virus.
- **STDs**: Viret, Yes. Usually after Chlamydia. Outbreak, burning sensation during urination, itchiness, burning, or pain when you urinate (pee), Nausea and vomiting, itching, burning, or irritation between menstrual periods, increased or changed vaginal secretions, pain during sex, fever, and chills. Women may have no or mild symptoms.

### References:

Bubble Game

First Version

Early Hand Drawn Version of Game
Second Version

First Paper Prototype

Attached to original hard copy.
Third Version

Photoshop made version of Bubble Game with 4 Simultaneous Turns.
Fourth Version

Second Paper Prototype

Attached to original hard copy.
Fifth Version

Flash Prototype – Opening Screenshot
Dating Sim

First Version

Hand Drawn Storyboard
Storyboard for ______ Game ______, page 2

Top Panel: ______

First Panel: ______

Second Panel: ______

Third Panel: ______

Fourth Panel: ______

Fifth Panel: ______

Sixth Panel: ______

Seventh Panel: ______

Eighth Panel: ______

Notes:

- Use a two-line speech bubble for dialogue.
- Bold text for emphasis.
- Use different colors for emphasis and annotations.
Second Version

Clip Art based Storyboard

Storyboard for **Stop the Infections!! Game**, page _____

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STOP THE INFECTIONS!!
A Serious Game about Sexually Transmitted Infections

Create a Character

New
Continue
Wi-Fi
Menu

Male
Female

NAME
Customize
Random

Partners:

0
100

Protection:

Never
Always

See the Doctor
Pick up a Partner
Call a Friend
Practice

---

Where to?

Book Store
Coffee Shop
Bar
Club

Approach Girl
Check out Scene
Leave

---

CHOOSE ONE TO APPROACH

---

Use Line
Compliment
Offer Drink
Ask for Number

---
Storyboard for Stop the Infections!! Game, page ____

**Conversation 1**

**Jeff:** You look hot!

**Girl:** Thank you!

**Jeff:** What's your name?

**Girl:** Saci, with an i.

**Conversation 2**

**Jeff:** Want to dance?

**Girl:** Sure!

**Jeff:** You have moves.

**Girl:** Thanks, I work out a lot.

**Conversation 3**

**Jeff:** Would you like to come over?

**Girl:** Only if you have a dog.

**Jeff:** Of course! I think he is missing me now.

**Conversation 4**

**Jeff:** Do you mind using protection?

**Girl:** I prefer it!

**Jeff:** That's perfect!