15-237 Term Project Colosseum Nathan Hamal, Zach Matarasso, Dylan Mikus

Competitive Analysis

Feature Set

- 1. text chat: text chat communication between contestants and between spectators
- 2. video chat: video chat between contestants
- 3. voting: spectators can vote on which competitor they think is winning or on their preferred competitor
- 4. competition / game dev platform: we may allow for Javascript to be embedded or
- 5. demographic information submitted with voting
- 6. ranking system for contestants
- 7. team contests

Competitors

Omegle

www.omegle.com

This app randomly pairs you with an anonymous stranger to chat with. It has video chat functionality as well as plain text chat. It is generally used as a time waster, to broadcast their games to fans. If you are in the audience, you can talk in a chatroom about what is being streamed, and these chats are usually pretty fun and sometimes create original content. In a similar vein, our program will allow competitors to broadcast their competition to a group of spectators. We are hoping to support video-chat.

Features supported:

- 1. text chat: randomly paired up with another user in text chat. Colosseum will allow users to join any hosted rooms where people can chat and compete, but Colosseum places substantially less emphasis on randomly pairing up people.
- 2. video chat: randomly paired up with another user in video chat. Colosseum will also support video streaming
- 3. chat by common interest: users can specify interests and then they are paired up in chat with people who have entered similar interests. This is somewhat analogous to our concept of separate colosseums where each colosseum is for a different competition and users join competitions they are interested in

4chan (or any other anonymous forum) www.4chan.org

4chan is the icon for internet anonymity, and serves as a place for conversations that typically wouldn't take place under normal situations. It has tons of issues with legality, appropriateness, moderation, and repetitiveness, but it remains a internet destination despite its

problems. The shared parallel between our application and 4chan is that both highlight anonymity. With Colosseum, users can make accounts for a persistent online persona, but they need not identify themselves.

Features supported:

- 1. text chat
- 2. image board discussion: photo uploading with posts. Colosseum does not seek to replicate this feature. It is not an image sharing site.
- distinct boards based on interest, but there are a finite amount. Users cannot create
 more boards. Again, separate colosseums are analogous to this. Colosseum is not a
 forum though, but a platform for competition and debate

reddit

www.reddit.com

Reddit is the main inspiration for community curated content, which relates to our app in the sense that we also want to allow the audience to affect the ranking of performances. Reddit has persistent identities with points associated to those identities, which is something we may replicate for players as well.

Features supported:

- 1. Subreddits: distinct "boards" based around topics. Users can create these
- Voting system: encompasses both links / content posted and comments on said content. The voting system, along with demographic gathering, is a main feature of Colosseum
- 3. Post items to subreddits that can then be voted either "up" or "down" based on whether the user liked or disliked the content
- 4. Comments on submitted items: this is almost like text chat. Users can upvote and downvote comments as well

Speedruns Live

www.speedrunslive.com

Speedruns Live is a website that wraps around Twitch.tv and allows multiple people to stream at a time. It is used for "speed-running" video games, which is a time-trial race to complete a video game. So, Speedruns Live broadcasts a stream for each competitor, and users can watch and chat, discussing the run. This is similar to our plan in that it allows competitors and spectators, tracks user profiles (including wins, run times, rank, etc.), and allows spectators. We aim to make our application more general and to include the ability for spectators to vote on a predicted winner or judge the winner by voting. Additionally, we may add some team features.

Features supported:

 video chat for competitors: multiple videos can be streamed at a time when people are racing. Colosseum will support singular and multiple video streams for competitors

- 2. spectator text chat for each stream
- user profiles with race statistics. For competitions, we intend to provide statistics about win rates and ranking. We also will allow users to give demographic information about themselves

Starcraft 2 Peep Mode Maps

http://www.peepmode.com

These maps provide a King of the Hill style competition where players will compete 1v1 in Starcraft while a group of up to about 10 people can watch and chat with each other. Observing players can bet points on the outcome of the match, and players can earn points by winning. Users can spend these points for new avatars and cosmetic upgrades. Instead of streaming multiple displays for each participant, Peep Mode interfaces with the Starcraft GUI to allow users to interact directly and only offers one display. We plan on allowing a King of the Hill style competition where players swap in when someone loses. We consider Starcraft 2 Peep Mode a subset of the domain our product seeks to cover. We would allow streaming of videos, where people could stream games they are playing, but our software could also be used to watch debates or to moderate officer elections for clubs, etc.

Features supported:

- 1. Starcraft 2 game competition
- 2. Round Robin / King of the Hill gameplay matchups: 1v1 competition, loser subs out for a spectator. In Colosseum, we plan to support king of the hill functionality, as well as allowing some other rule definitions (see CNN feature set below)
- 3. spectator chat
- 4. spectator betting system
- 5. player profiles with avatars and cosmetic upgrades using currency from betting system. We do not plan to support any cosmetic features. We don't believe that cosmetic features would be a point of interest for our users.

CNN Presidential Debate

http://youtu.be/4BTk2bKJ6uI?t=29m3s

When debates are broadcast live on CNN they give the audience dials to turn up or down and express their level of satisfaction with what the candidates are saying. Each candidate gets their own side of the screen and the aggregate ratings are compiled and shown underneath. This is similar to our product because it allows for two people to square off using language while people decide who they like better in real time. One of the main differences is that they don't decide a winner immediately, and that our platform would be open to anyone to discuss whatever they liked. Perhaps more importantly, our product would not require any of the participants to be in the same location. This would allow for a larger sample size to express their opinions on the debate, and would also give the opportunity for more frequent debates because of the elimination of travel expense and limitations of venue selection. Since it is an open platform for hosting competitions or debates, anyone could set it up without having to coordinate with a host or other organization, and then all that they must do is promote the debate.

Features supported:

- 1. debater (competitor) video streaming with multiple streams and singular streams
- 2. tracking of speaking time with human moderators that determine who can speak when and for how long. In Colosseum, we want to allow the application to automatically allot speaking times for each candidate and to toggle between those candidates. When a candidate's turn is not up, their video stream will either be muted or frozen temporarily.
- 3. Live-updated candidate rankings from spectators along with demographic information from spectators

<u>Uniqueness and Project Viability</u>

Our project seems relatively original when considered as a whole, but when each specific part is combined, it fills a gap that does not exist in current products.

Many of the competitors offer similar services, but each has only a single facet of what our final product will be. Communication via a chatroom or webcam is obviously not new, and neither is competing in any contest through the internet. Our product combines both these things and offers a new experience that ties everything together. If you like playing, you can play, and if you just want to watch that's okay too. Everyone can get involved. We hope to create a general platform for spectator competitions and to allow the spectators to have some unified interaction with the competitors, through means of chat and voting. For these reasons our product differs and is not simply a replicant of a service.

If it turns out that a generalized platform is too difficult to implement, then we could go the route of tailoring our platform for text or video debates and then add more features for gathering of demographic information. This is a feature that ones sees during presidential debates, but there is not a generalized interactive platform for such a thing. We could show a trend chart that corresponds to time-stamped text or video segments. This could be used for debates with larger viewing audiences, or as a means of judging election speeches for clubs and smaller organizations.