Story Time with Friends

Ocarina Technologies

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Objective

Our project, Story Time with Friends, is a social collaborative application based off of a game called Story Time. It is a game where groups of people come together to collaborate on writing a story. Our plan is for people to be able to invite friends to join a game where each person adds a few words to the story turn by turn. Our application is different than other similar social games such as Words with Friends or Draw Something, to name a couple, in the respect that we want to allow for bigger groups of people to play together; instead of just a one on one experience. Social games like this have a great impact on keeping connections with people you may have otherwise lost contact with because of life's many different directions, as well as offering the chance to make new connections across the globe.

Research/Project Plan

To make the application the most effective according to our objective, we are planning a research to discover how it should look like. On this way, we are pursuing a research question which is:

RQ: *How application policies could affect users' interest to participate in an online collaborative storytime game?*

We want to know which social/technical aspect affect players' engagement and to what extent and we are planning to ask them directly about their opinion.

In our research, we have a positivism philosophical stance and we believe studying a well-defined sample of the target population will help us to answer this question. To have more accurate results and validations, we are thinking of a mixed-method of survey research and controlled experiment as our research methodology.

We will have two structured interviews with the sampled population for data collection. The first one will be after creating a basic prototype and requesting the participants to play with it. We will ask about their general feeling about such an online collaborative game and if they are interested in using it. To minimize bias to the answers of further questions, we will ask them generally which features they believe make the game more fun. Then we will ask them more specific questions about some features we had in our minds. We will make use of the responses of this interview in defining our software requirements and features. Following Fink's advice on survey design [1], we will use specific scenarios to make the questions of the survey as concrete as possible and therefore, avoid collecting low-quality and ambiguous data.

After completing the implementation of the application, we will request the first interview participants to play with and test this app and try different game modes. As we are logging their activities and interactions with the app, so that we have some stats like how many games are played and how many words are generated by a specific person and their correlations with game modes, we are collecting data for our controlled experiment method. We will use this

data to form the questions of the second interview, as well as evaluating the application features to answer our proposed research question.

The second interview will have some general and specific questions as well, to see if their expectations are met as well as seeking their opinion about engaging and disengaging features. By comparing responses to the second interview to responses to the first one and combining the results with controlled experiment data, we will have enough evidence to evaluate the application as well as answering our research question.

Risks

The following table lists our perceived risks of the creation of our application.

No.	Risk Description	Probability	Impact	Planned Mitigation
1.	Target audience – Building a game that users don't want	Low	High	Survey our target audience in the design phase to find out what functionality and features they would be looking for in a game.
2.	Low user engagement – not many people will play our game	Medium	High	Advertise our game to family, friends, classmates, etc., by spreading the word through social media.
3.	User growth – inability to handle sudden increase in users	Medium	High	By developing the app with the ability to handle extreme masses of users.
4.	Maintenance – bugs, performance issues, etc.	Medium	Medium	Regularly test the app for any usability, performance, and security issues, and update accordingly.
5.	User experience – delivering an enjoyable game for users	Medium	High	Survey our target audience after the product launches to determine whether they are satisfied and ways we can improve.

Technical Specifications

For the technical aspect of the project described by this proposal, the following technologies have been tentatively selected for use:

- www.proto.io to assist in designing a low fidelity prototype that will be due on October 23rd.
- Github will be used for personal logging of tasks and as a repository for our code.

- www.c9.io will be our platform for development, which we will individually commit into Github
- Apache, MySQL, and PHP will be used for server-side development.
- JavaScript, HTML, and CSS will be used for client-side development.
- Cordova to compile to client-side web application into a native mobile application for Android and iOS.

Deliverables

We aim to deliver a partly-working application that will demonstrate the important components and features of the game. Our final product will allow us to successfully demonstrate the game-flow that players will experience during play. This includes the ability for players to contribute to the story on their turn, create and add other players to a game, browse and read public stories, and visualize when other players in the game are currently active.

Our first prototype will allow players to choose one tile of words from a pool of randomly given tiles of words. For example, “a funny cat”, “jumping elephants”, and “a squatting kangaroo” are examples of tiles. Players are able to submit tiles (which should be less than or equal to 5 words in length), that would be added into our database of tiles, and consequently be downvoted or upvoted by other players to determine whether they will stay in the database. From our evaluation of this prototype, the concept of having tiles of words to choose from may be replaced by a different method, such as appending words openly to the current story (with number of words limitations).

Titles of the story will be randomly generated for the author of the game. In order to assist players with the ability to relate the story to the title, a request for a different set of word tiles will always be available in the event that the given tiles are inapplicable (assuming tiles of words will be our final chosen method of appending to a story).

Two game modes are considered - public or private games. Anybody can join a public game, and stories from those would be posted publicly when it is closed. Private games will only allow players in the current game to invite other players to join. Stories in a private game can be published publicly if the author chooses that option. Players are able to view public stories through keyword searches or filters, and are given the option to “like” or “dislike” the stories. This will allow players to see “Stories of the day” or “Stories of the week” based on likes *(hotness)*, in turn motivating most players to try to get their stories to the top of the charts. This will be our compensation for not having a scoring/point based system.

Milestones

In order to ensure that the project is completed in a timely manner, systematic milestones have been put in place. These milestones set deadlines for which various parts of the project are to be completed, and are as follows:

Project Milestone	Expected Date
Written proposal	October 16, 2015
Ethics Application	October 19, 2015 (due October 21, 2015)
Finish prototype	October 23, 2015
Run user testing with prototype/interviews	October 26, 2015
Analyzing data from user testing	October 27, 2015
Finalizing project requirements	October 30, 2015
Interim oral presentation	November 4, 2015
Interim written report	November 13, 2015
Final oral presentation	December 3, 2015
Final written report	December 5, 2015

These milestones can be visualized in Figure 1.

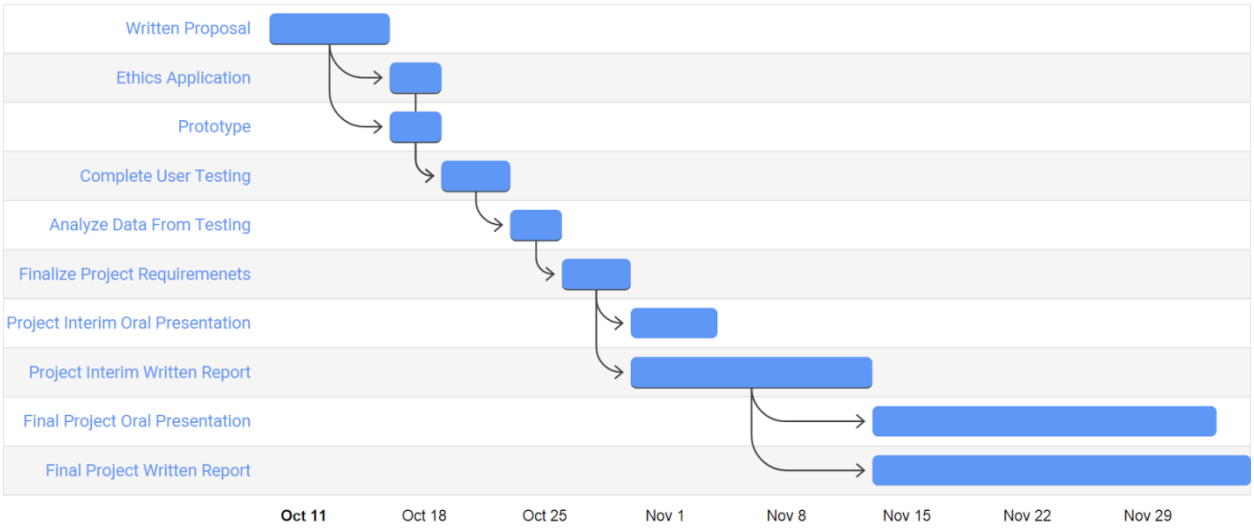

Figure 1: Gantt chart depicting project milestones

About Ocarina Technologies

Ocarina Technologies believes in creating apps that are suitable and enjoyable for everyone. Our team is composed of four undergraduate students and one graduate student from the fields of Computer Science and Software Engineering, who are completing their studies at the University of Victoria. Each individual has knowledge in various areas of the field and all share a common interest in playing and creating mobile games. The following table lists individual responsibilities, but we believe that collaborating and working together on every aspect of the project is the best way to ensure that we produce high quality work.

Project Role	Responsibilities	Assigned to
Mobile App Developer	• Responsible for programming the app • Works closely with application designer to ensure that the app meets the required features • Translates requirements into functional aspects	Shaquille Davis
Project Manager	• Manages and approves all team changes • Manages research methodologies • Documents project requirements and functional specifications • Ensures that project deliverables are on time • Reviews quality of work to ensure it meets project standards and requirements	Ali Dehghan
Business Analyst	• Prepares reports and supporting documents • Assists with the user interface design and prototypes • Validates requirements through walkthroughs or testing • Analyzes collected data	Courtnay Low
Mobile App Developer	• Responsible for programming the app • Works closely with application designer to ensure that the app meets the required features • Works on bug fixing and improving performance	Brandon Mabey
Application Designer	• Designs prototypes and interfaces of the app • Works closely with developers to explain app design and functionality • Monitors and evaluates usability • Assesses feedback from users and incorporates it back into the app	Sarah Warnock

Conclusion

We aim to make the game of Story Time a more globally social game by providing it in the form of a mobile application. We will use methods learned from CSCW to assist in our research methodologies and design.

References

[1] A. Fink. How to Ask Survey Questions. Sage Publications Inc., 1995.