User Study Report
Gaming Supervisors

—

Jeremy Pope

Andrew Yang

Yucheng Yang

Haochen Zhang

3/30/2018

Abstract

The test users for the program Gaming Supervisor included 13 different people. Most had never played DotA 2 before. Some had experience with a similar game called League of Legends. Two have played DotA 2 before, and one is highly experienced with the game.

There were two types of feedback: feedback related to how the program looked, and feedback related to how effective the program was at helping analyze a DotA2 replay. The general feeling was the initial GUI used to set up settings prior to analysis looked acceptable, with some small suggestions for changes, and appeared to adequately explain the settings. They were not impressed with how the overlay looked, feeling it looked dated. The program was not successful in helping users with no DotA2 experience analyze the game. They did not understand what was going on, and the program failed to help them understand what was going on. However, if the user had some experience with MOBA games, they felt it would help them get better at the game if they kept using it.

Small GUI changes were made in response to the user feedback. However, issues the users had with the overlay look and the effectiveness of the program were already well understood by the Gaming Supervisor team, as they present ongoing technical challenges.

Introduction to User Interactions

Test users for the program consisted of three groups of people: people who had never played DotA 2 or any other game in the MOBA (Multiplayer Online Battle Arena) genre, people who had never played DotA but had some experience with League of Legends, a similar MOBA game, and people who have had some experience with DotA2. Five users numbered in the first group, six in the second group, and two in the third group, respectively.

Users spend about anywhere from 15 minutes to 2 hours with the program. Based on their experience level with DotA2, the basics of the game were explained to the user. Then, the purpose of the Gaming Supervisor was explained. The user was then asked to start using the software, running through the program as if the member of the Gaming Supervisor team was not there to support them. As the live feature of the Gaming Supervisor is not ready, they were asked to run a previously downloaded replay. After they had completed the initial set up, and DotA2 was running, they were asked to

continue following the instructions on the screen. Once the replay was running, the various features the Gaming Supervisor provides were identified.

After the user had seen all the features with analyzing a replay, they were asked several questions from a survey to gauge how they felt the program looked aesthetically, and how effective they thought the program was at accomplishing its goal. The answers were written down. If the Gaming Supervisor team member felt the user was not answering the question satisfactorily, the question was either reworded, or more of DotA2 or the Gaming Supervisor program was explained.

See [Appendix 1](#): User Table for specific information about reviewers.

Summary of User Feedback

Feedback was given by the users on four different areas: the look of the setup GUI, the effectiveness of the setup GUI, the look of the overlay, and the effectiveness of the overlay.

Most users felt the setup GUI looked acceptable. One user felt the buttons on the very first page of the window were too large, but was otherwise acceptable. They were otherwise unable to describe anything the felt the GUI should change aesthetically. Some users disliked the wall of text on the right side of the GUI, and would've liked to see some highlighting of text corresponding to the button being hovered over. One user requested there be a clearer title for each section of the GUI. One suggested removing the file dialog, and replacing it with a pre-populated list for users to select from.

There were some critiques about the effectiveness of the setup of GUI. One user felt the terms "Novice" and "Learning" used when the user is asked to indicate their experience level were incorrectly ordered, and a "Learning" user had less experience than a "Novice" user. This user suggested the terms "Novice", "Regular", and "Expert". No other user had this feedback, and one other user was asked if they felt this way. Another other user disagreed with this when the terms were mentioned, and felt that the terms used were fine. Additionally, one user would have liked to see a "Custom" button included for setting up the features, as well as the feature to import and export settings. One user asked more a better indication of what the replay file selection was showing, as they felt the description for each entry was a jumble of numbers. Another user suggested to include instructions on how to add replays to the designated replay folder. One user noted grammatical errors in the description of one of the pages. One user thought there should be detailed replay information showing information about the match selected on the right side of the GUI.

The overlay look had mixed feelings. A suggestion was made to add hero icons and to make the bar graphs colors similar to the hero icon. After this suggestion was implemented, a user said they felt that the bar graph colors were dull, though they were impressed when told that the graph colors represented the average pixel color of the corresponding hero picture just below the graph. A user felt the instructions overlay should have a click to close, instead of hovering for two seconds to close. One user commented that the instructions overlay looked old-fashioned. Another user did not like how the health low notification looked. Several users expressed dissatisfaction with the line graph, feeling it took up too much space for what it was presenting or didn't look good. One user noticed that the text in the hero suggestion screen included an extra inadvertent new line. Another user thought the health bar and health graph were redundant. He also thought there should be more explanation about the what the ban and pick feedback was presenting, and the hero introduction in the beginning of the game should have spell icons to make it looks more modern.

None of the users understood the purpose of the health graphs without explanation. None of the users that had never played DotA 2 understood what was happening with the analysis. They didn't understand what was happening in the game, they were unable to describe whether the feedback was effective, and they were unable to determine if the feedback would have been helpful if they were playing a live game. A user familiar with League of Legends felt the same way. One of the users asked more more written directions. Two users suggested adding a way to determine who was winning, and who was losing. However, once the functionality of each section of the overlay was explained, some users said that they feel like the program would help them learn DotA2 faster than without the program.

Team Response to User Feedback

Feedback received constituted either small fixes, large UI changes, or fundamental changes to the effectiveness of the software. Grammar and text formatting were fixed, and tickets were created for updating the overlay UI. The suggestion to automatically show available replay files to the user, rather than requiring they navigate to it themselves, was implemented. Adding hero icons to the bar graph and color coding the graph was also implemented. Instructions that guide the user to open the replay they chose once they open Dota 2 was implemented as well.

Changes to the effectiveness of the program were not made in response to user feedback because they already aligned with goals the team is in the process of working to achieve. The team is still discussing whether, in response to the user feedback that the

health line graph was not useful and did not look good, should be changed or removed. The suggestion several users had to add a means to determine who is winning and who is losing is under serious consideration, and will likely be added if the team has time to add the feature.

Conclusion and Effectiveness

Overall, the user study was of limited effectiveness. The Gaming Supervisor team felt it would be best to target users unfamiliar with DotA2, as the software is meant for new DotA 2 players. However, this proved to be a mistake, as they were unfamiliar with literally every aspect of the game, and were unable to determine if the program would be useful or not.

The user study was also of limited effectiveness due to ongoing technical challenges the Gaming Supervisor team is experiencing. The team feels the software is not quite ready, and user feedback at this time is premature.

In the future, the team will target DotA2 players who understand how to play the game, but aren't good at the game, and wish to improve. Users who has played or is familiar with MOBA games might provide more useful suggestions and advice. The feedback of these players will let the team know what our target audience wants. Additionally, the team will target experienced DotA 2 players. These users will best be able to determine what the software is doing right, what the software is doing wrong, and what expectations should be.

Appendix 1: User Table

Name	Roll	Background	Time	Meetings	Other
Jinhua Shen	User	Friend, Biology Undergrad	1 hour	Twice 3/9/18 3/28/18	Experienced in LoL, newcomer to DotA 2
Hyoyoung Park	User	Friend, Psych Undergrad	1 hour	Twice 3/9/18 3/29/18	Novice in MOBAs
Shravan Parthasarat	User	Friend, Bioengineering	1 hour	Once 3/29/18	New to MOBAs

hy		Undergrad			
Steven Deng	Reviewer	Friend, Bioengineering Undergrad	1 hour	Once 3/30/18	High elo in LoL, DotA 2, and HotS
Wei Dong	Reviewer	Friend	2 hours	Thrice 3/9/18 3/21/18 3/29/18	Experienced in DotA 2
Zheran Song	Reviewer	Friend	2 hours	Twice 3/21/18 3/29/18	Experienced in DotA 2
Jianhao Lin	Reviewer	Friend	2 hours	Twice 3/21/18 3/29/18	Experienced in DotA 2
Tim Wei	Reviewer	Friend	1 hour	Twice 2/28/18 3/23/18	Experienced in LoL, newcomer to DotA 2
Joshua Pope	User	Family, High school student	30 min.	Once 3/28/18	No experience with the genre
Kristina Pope	User	Family, Music Undergrad	15 min.	Once 3/28/18	No experience with the genre
Nathan Pope	User	Family, Engineering Undergrad	20 min.	Once 3/28/18	Familiar with LoL, but no experience with DotA 2
Emily Pope	User	Family, Junior high student	15 min.	Once 3/28/18	No experience with the genre
Kathleen Pope	User	Parent	15 min.	Once 3/28/18	No experience with the genre