Observations

Method

The user (Stephanie Li) will be observed on a Discord voice call, sharing their screen as they play osu! over a one (1) hour period, during which notes will be taken and the time spent on each screen of the application/game will be recorded through a series of digital stopwatches. The user knows that they are being observed and has given their explicit consent to do as such. This is to maintain the ethical integrity of the data collection process.

User's machine specifications:

CPU	Intel Core i7-12700H
RAM	16 GB
GPU	NVIDIA GeForce RTX 3070 Ti Laptop GPU
Operating System	Windows 11
Storage	1 TB

Notes

Date: 25/04/25

Taken during a one (1) hour observation period.

- Audio offset is adjusted
- FPS counter is shown, user may value performance?
- User does not use any of the mapping or content creation features, only the gameplay
- Frequent use of the searching/sorting functions
- Very strong difficulty preference for Muzukashii/Oni songs
- Uses keyboard as primary input device and uses custom controls (not DFJK default)
- Frequently restarts when current score is undesirable/combo break, frequent use of the "quick retry" hotkey (rebound to R)
- Accuracy and combo are frequently looked at during gameplay

- Duration is frequently looked at on the chart selection screen
- Prefers minimal backgrounds, does not like to disable entirely but seems to adjust it depending on the chart being played (and level of focus)
- Lag spikes are a big cause of frustration despite the user having a fairly strong machine, user has to work around the issue by using OpenGL instead of DirectX
- Chart selection screen and gameplay alone took about ninety percent (90%) of the observation time, refer to Appendix for all stats

Findings and conclusions

The observed user operates on a high-performance machine with very strong specifications. The primary method of input is a keyboard, with its input bindings heavily edited from the default using the software's input rebinding capabilities. From this, it can be concluded that a future solution will likely need to support some form of input rebinding to accomodate for such users who customise their gameplay input bindings extensively.

The user does not engage with any mapping or content creation tools, and only engages with the gameplay content. This means that content creation tools are not necessary to the gameplay experience, meaning that a potential future solution could omit such functionality.

The user has a strong preference for higher difficulty songs in the Muzukashii (Hard) and Oni (Insane to Extreme) categories. It is therefore important for a future software solution to have a range of difficulties to accommodate for both beginner and advanced players.

The user makes extensive use of the searching and sorting functionalities in the chart selection screen to locate her desired song, due to the very large volume of charts the user has downloaded. For a solution with similar levels of information being shown to the user, such functionalities seem to be extremely important.

The user regularly monitors accuracy, combo, and duration during gameplay, however all gameplay elements were monitored at some point. The user also makes frequent use of the Quick Retry function after score drops or combo breaks, suggesting an emphasis and focus on perfectionism and high performance. To accomodate for these players, all of these displays must be incorporated into a potential solution, and such functionality as the Quick Retry function must be implemented for high-level, performance-oriented players.

Backgrounds are kept minimal rather than being fully disabled, and adjustments are made depending on focus needs and chart complexity. The user has made use of the software's background dim functionality to dim the background and adjust it according to their needs. This is therefore an important function for a future solution.

Despite the user's strong machine, the user experiences lag spikes, which significantly impact enjoyment and performance. To mitigate this, the user runs the

game in OpenGL mode instead of DirectX, which may imply suboptimal software compatibility or rendering issues with the existing solution.

Appendix

Time on each screen

Timed how long the user spent on each screen using a series of digital stopwatches. The time taken to stop and start each timer may add a total of two (2) minutes overhead, however the validity of the data is very unlikely to be affected by this.

Screen	Time	Percentage
Main	1m 29s	2.47%
Options	3m 45s	6.25%
Chart selection	13m 10s	22.44%
Gameplay	42m 18s	68.83%