Zoom Eternal Playtest Analysis

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October 14, 2020

I. Overview

At the highest level, our playtests and analysis seek the elusive answer to the question, "Is our game fun?" While there are many ways to answer this question, our playtests seek to analyze the initial reaction of users to our application: how do they interpret the rules and explore the game space? What are their initial reactions? What can they figure out by interacting with the application? Do they understand the instructions provided, if any? Where does communication need to become more effective for the player? etc. Further, it provides an initial observation point upon which we can expand our game and return to iteratively to progressively enhance the game.

II. Key Design Questions

We wish to determine if the game functions in the way in which we intend, that the internal system is complete and free of bugs or loopholes, that the gameplay is balanced, and that the game is overall interesting and fun to play. Through an iterative process, we are able to fix and mitigate problems, then repeat tests in order to determine if the solution is effective and contributes positively to the overall quality. By forming these questions early and testing the results, we can ensure that the development of the game is progressing in a unified and effective direction. The playtesting brings any issues of which the game designer is unaware by showing how a new user interprets the rules and properties of the game. In many scenarios, the game designer may be completely unaware of an issue until he sees a playtester attempt an action which he did not expect.

For our game, we wish to answer design questions specific to our application:

Background

- Is the player casual or experienced?
- If so, which types of game do they prefer? This helps us identify the types of users that are interacting with our game, and the nature of their interests and skill-levelsf.

Overall

- What was the player's first impression?
- How quickly did the player understand the objective? Did they understand the objective at all? Were there parts of the objective which were not interpreted correctly? Was anything missed? If yes to any of these questions, why?
- Did the game effectively communicate? Could this communication be removed, modified, or effectively designed in well-thought out manners which do not disrupt the attention-span of the player?
- How does the player's impression or abilities change as he progresses through the game? Does the game progress at an appropriate rate which keeps the player engaged?
- Which parts of the game were interesting, satisfying, stimulating, or exciting? Were there any aspects which were the opposite of the properties or frustrated the user?

Balance

For a battle royale nature of this game, it is important that the game have an inherent balance with itself. A game will not be fun if there is one vehicle which is more powerful than all others. This will remove any incentive for players to pick other vehicles and will destroy the strategy involved with the advantages and disadvantages

of each vehicle. At a higher level, the game should also strike appropriate balances between skill, chance, mental calculation, and physical dexterity.

- Does the player believe the game depends more on skill or chance? Does the player prefer games which tend toward one end of the spectrum? Which direction?
- Does the player believe the game depends more on mental calculation or physical dexterity? Does the player prefer games which tend toward one end of the spectrum? Which direction?
- Do the combinations of vehicles interact with each other in a balanced an interesting way? Do the user's selections provide different strategies for winning for different types of vehicles?

Physics

For a game which is heavily dependent upon physics and player interaction with the internal physics of the world, the game must provide an interesting spectrum of possibilities for the player to explore. Much of the "fun" aspect of such a physics-based game stems from the permutations of possibilities that the player moves throughout. The simulation should draw interest for the player to engage with the system to learn and understand the response to his own interactions.

- Are the physics of the virtual space fun to interact with? Can the user get stuck or trapped in any scenarios or orientation?
- Can the player easily navigate the physical space based upon his intent? When he cannot, does it represent a legitimate challenge or an arbitrary or random dependency?
- Do the limitations of the navigation provide interesting challenges to the player?

Procedures, Rules, Interface, & Controls

The user should be able to easily navigate the games menus without getting stuck, exhaustively searching for options, or the crashing the game. Do any of these elements of the game have problems which affect the user's navigation or intent?

- Were rules clear and easy to understand?
- Were controls simple and satisfying or arbitrary and difficult? For our type of game (and many others), this point is quite salient.
- Could the user find everything he needed within the game's menu interface? Were there any places to get stuck? Do all permutations work?
- Did anything feel awkward?

III. Playtest and Design Question Approach

Being able to see the application through a new user's eyes is the most important aspect of performing our playtests. This user will instantly pick up on elements of the game that the designer did not think to analyze. He is so caught up in the development of the application, that he cannot see some aspects which are obvious to a user with a fresh perspective. So in our playtest records, being able to capture this perspective is crucial. For our procedure, we asked users to create a test video before beginning and to record their initial playback. We asked that they enable their cameras and discuss all thoughts out loud as they progressed through the game. This provides us with the invaluable evidence of a player's first impression of our game. At any point, we can return to this footage to explore how the player perceives different elements of the application. We provided software and detailed instructions to make it quick and easy for the user to capture their play session and live audio. We also required them to fill out a questionnaire at the end of their playtests, which allowed the playtesters to provide qualitative and quantitative feedback of their experience by answering specific questions about various aspects of the game.

IV. Results Summary and Analysis

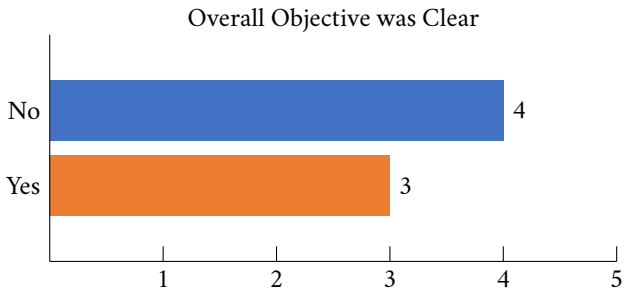
Our early playtests indicated that players did not understand the purpose of the game, how to interact with the player, or how to win or lose. The game delivers players into an arena with one simple player, an enemy vehicle, and environmental power-ups and hazards. The environmental elements functioned but performed trivial actions which we would later add into the game. The player vehicle was a robot with a propeller attached to the vehicles which must be charged to pick up speed that the player could then use to crash into the enemy with speed and force after picking up propeller momentum. The enemy chases the player and attacks with a flamethrower. Thus, the player must escape the enemy and gain distance to charge the propeller which he can then use at full force to attack the enemy. However, none of this was obvious to the playtester. They would press buttons to use the propeller, but the propeller takes a few seconds to gain momentum. There was no audio feedback as the propeller slowly began to spin. The entire player vehicle was uniform in material, chrome in appearance. It was not inherently obvious to charge the propeller. The playtesters did not see or hear any feedback, and they did not know to hold down the propeller to charge it. Even the fellow game designers on the team experienced the

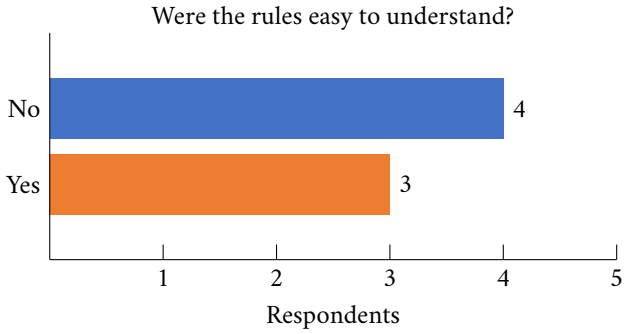
same confusion. As a result, we added obvious sounds that communicated the state of the propeller: whether it is charging up or losing speed after release. We also gave the propeller a new material with damaged corners to communicate that it can be used as a weapon. This was well-informed advice provided directly from a playtester. A screen showing the controls before the user enters the arena could enhance and clear up this confusion. This combination of fixes should clear up both the objective of the game and encourage the discovery of how to use the propeller. We will also have to keep these thoughts in mind when introducing other weapons.

To expand on issues users experienced, player control issues were also frequently reported. Players reported a non-smooth player motion experience including issues such as difficulty turning, high acceleration rates that leave you crashing into the side of the arena, and the inability for the bot to recover after crashing into the side of the arena. These issues left the player in an incredibly precarious position–be too gentle with controls, hardly move, and have the enemy handily win, or be aggressive with controls and risk flipping yourself over the side of the arena. These changes, however, should not be difficult to fix. Creating a smoother player control scheme should eliminate most of these concerns.

V. Playtest Result Visualization

During our playtest phase, we received data from 9 different participants. As we can seen from Figure 1, 40% of the playtesters identified the navigation menus as strong game elements. The remaining items noted as positive elements were: background music, enjoyment, and interactive elements. Figure 2 identifies negative aspects of the game as mentioned by the playtesters. The top three difficulties mentioned were game's primary objective, the player's propeller function, and player's vehicle control.





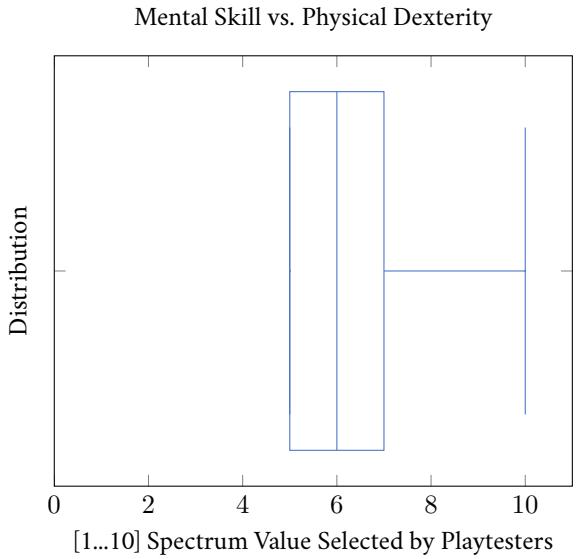


Figure 1: *Playtesters were asked to choose where the game lies on the spectrum of mental calculation vs. physical dexterity: whether the game was more dependent upon the player's mental calculation (1) or physical dexterity (10). The figure shows the distribution of responses from all testers.*

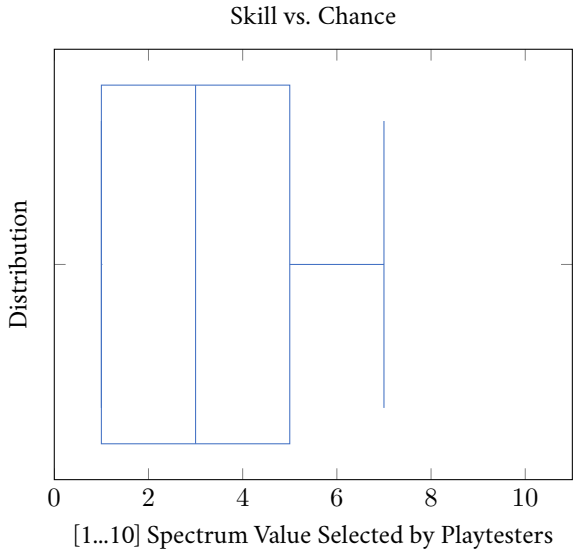


Figure 2: *Playtesters were asked to choose where the game lies on the spectrum of skill vs. chance: whether the game was more dependent upon the player's skill (1) or arbitrary chance (10). The figure shows the distribution of responses from all testers.*

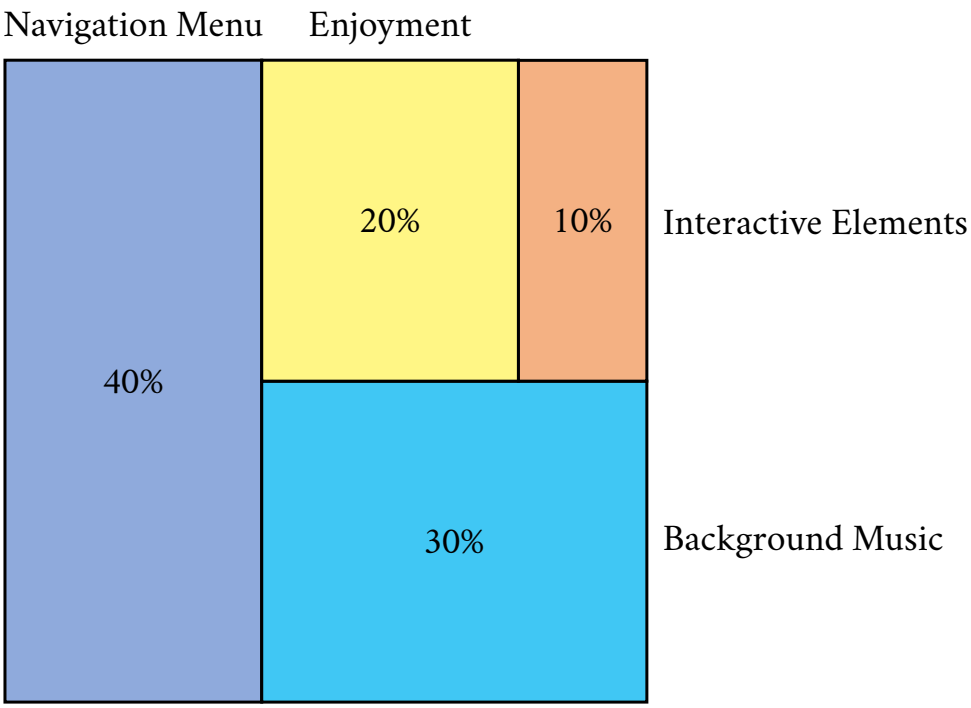


Figure 3: *Positive Elements Identified by playtesters (as % of total playtesters)*

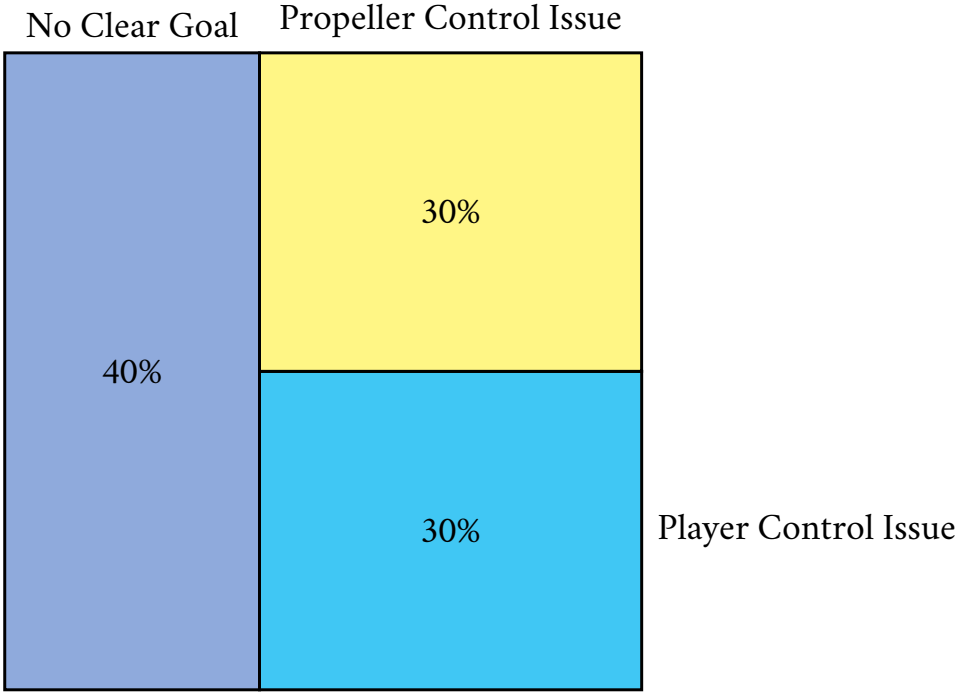


Figure 4: *Negative Elements Identified by playtesters (as % of total playtesters)*

VI. Action Items and Future Work

Since playtesters were asked to analyze a very early version of our game, the majority of the feedback provided identified critical, game-breaking issues. There are, however, benefits to this. By playtesting the early prototype, it allows us to determine what high-level actions don't make sense, which need re-organization or re-planning, and which project goals prevent the team from focusing on aspects of the game which do not augment its quality. Moreover, it provides fresh direction on what the team should prioritize. "It is much, much better to playtest your ugly prototype than to wait and playtest a more polished project. A playtest is not a presentation. If you feel ready and comfortable to present and playtest your design, you have waited too long–it is probably too late to make substantial changes. Is it too early to playtest? If the answer is yes, then playtest anyway." [3] For this reason, we would like to contact playtesters who are willing to perform repeat tests after features have been added to identify how their attitudes have changed as well as what types of feedback they have on the features that have been added. Based upon our feedback from the playtesters and the game design team's overall goals, the following are the high-level items which need to be addressed before the completion of the game's development:

- Fine-tune the controls for player vehicles based off feedback provided by the playtesters; make sure players cannot get arbitrarily stuck in the environment
- Add weaponry to any existing and new vehicles
- Vehicle Selector
- Add one or two more vehicles for play variety
- Fix conflicting menu layers which block player's game navigation
- Balance physics and vehicles
- Polish UI, sounds, and add decorative assets
- Ensure there are no navigational dead-ends or layer conflicts

References

[1] Koster, Raph. A Theory of Fun for Game Design. Second ed. 2013.

[2] Steve Swink. 2008. Game Feel: A Game Designer's Guide to Virtual Sensation.

[3] Fullerton, Tracy., Christopher. Swain, and Steven Hoffman. Game Design Workshop: Designing, Prototyping and Playtesting Games. San Francisco, CA : Berkeley, CA: CMP ; Distributed in the US by Group West, 2004. Print.