



Playtesting Report:

Aquario Kart: Double Splash!!

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Playtesting: Organization and Participants

As the easiest way of collecting feedback is in written form, we prepared a post-game survey in Google Forms to allow players to evaluate our game after their playtesting session. We designed the survey to allow for playtesting to be done without our supervision, by providing instructions and a download link to our game build on the first page of the survey. This way playtesters could freely decide when to playtest the game. Nevertheless, we tried to be available during the playtesting session whenever possible. Our playtesting participants consisted of family members and friends, and we ended up receiving a total of 10 survey results.

Post-Game Survey Structure

Our survey contains questions about the playtesters' gaming behavior, play duration as well as which input device they have used (controller or mouse & keyboard). Furthermore, we asked questions about the following aspects of our game:

- Overall impression
- Vehicle (incl. handling and camera movement/positioning)
- Items and water tank system
- AI opponents
- Menus
- Race course

For each of the sections above we offered an optional field to allow participants to freely write any additional comments. The survey consists mostly of questions where the participants should give an opinion on a 4-point likert scale ranging from "Strongly disagree" to "Strongly agree", with a 5th option for people who didn't want to / were unable to answer. We also included a few multiple choice questions.

Results

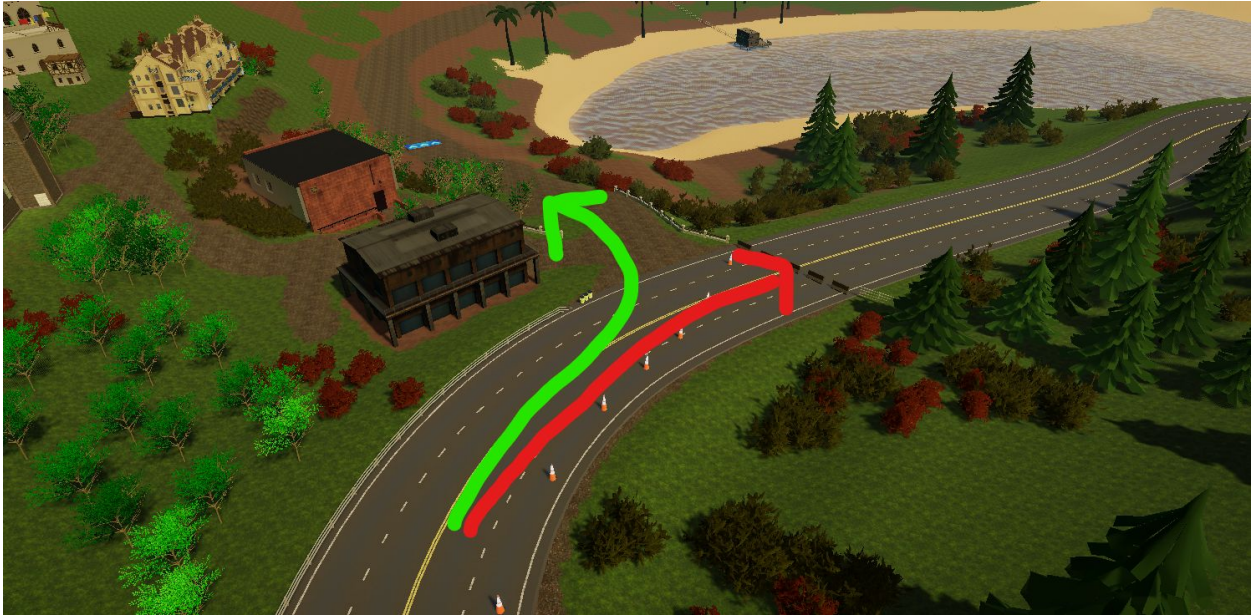
During playtesting it turned out the game was too difficult for most of our testers. Especially inexperienced players could not keep up with the AI and soon fell behind into last place. This shows the AI is too challenging for beginners and even for advanced players. Apart from the AI the testers also had trouble following the race course in some places due to a lack of signposting and in some cases where players fell too far behind, they could no longer use the AI cars as a guide to partially remedy these scenarios. As an example, our playtesters often failed to stay on track at the section where the vehicles have to jump off a bridge, probably because there was no explicit indication towards which direction they would have to steer in order to successfully overcome the bridge-jump. Such situations could lead to players spending significant amounts of time not following the race course or accidentally driving next to the track, which was noted to cause a too-extreme loss in speed. This was even more frustrating when some participants purposely drove off-road trying to find short-cuts, e.g. driving up the waterfall. These actions caused players to lose further time, making it difficult for them to catch up with the AIs again. In some cases they even fell far enough behind to face another disadvantage of driving out of the range of the other vehicles: the lack of water-providing puddles. This makes it nearly impossible to recover, considering most of the current items don't really help players who have fallen behind by more than half a minute's worth of AI-progress.

Another difficulty arose for players who don't normally play racing games and played on a keyboard. They struggled with steering the vehicle, presumably as they were unfamiliar with the tap-based interactions needed to achieve analogue-like steering input with a digital input device like a keyboard. As a result of being overwhelmed with just controlling the vehicle, inexperienced players tended to rarely use items, and frequently made mistakes when using them.

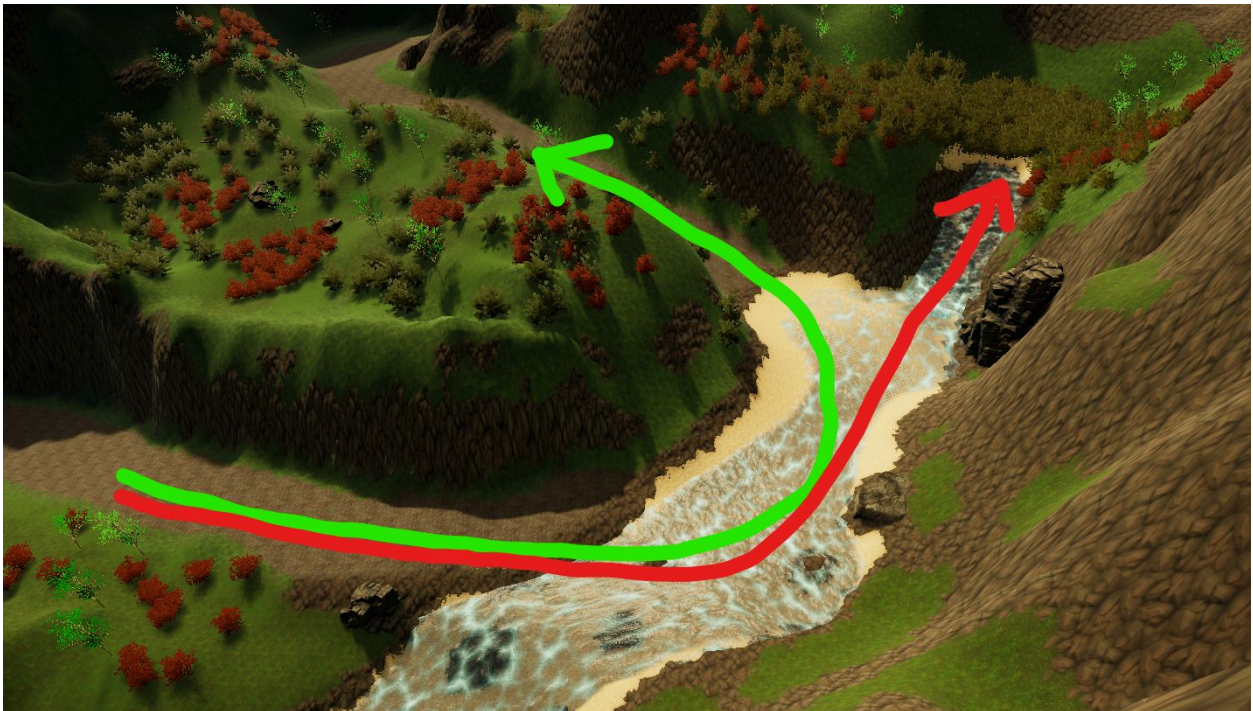
Furthermore, we detected some problems with the item themselves. For instance, the wave felt too slow and other items like the bomb or shield sometimes blocked too much of the view. Also, the alternate "jump" function of the jet booster item seemed rather useless as there are only a few obstacles to jump over. However, it was often triggered on accident as opposed to the primary boost function. This caused an unnecessary loss of water and made them unable to steer until they reached the ground again.

For some players the way of exiting drift mode was not very intuitive because it differs from the controls found in games like Mario Kart (hold drift button to drift vs. tap a key to enter drift and realign car to exit drift). Therefore, they needed some time to get familiar with our drift mechanics and accidentally drove off the road multiple times. Additionally, more visual feedback for the drift is needed to know for sure when the vehicle has entered or exited drift mode.

The following three images showcase major problem areas on our map:

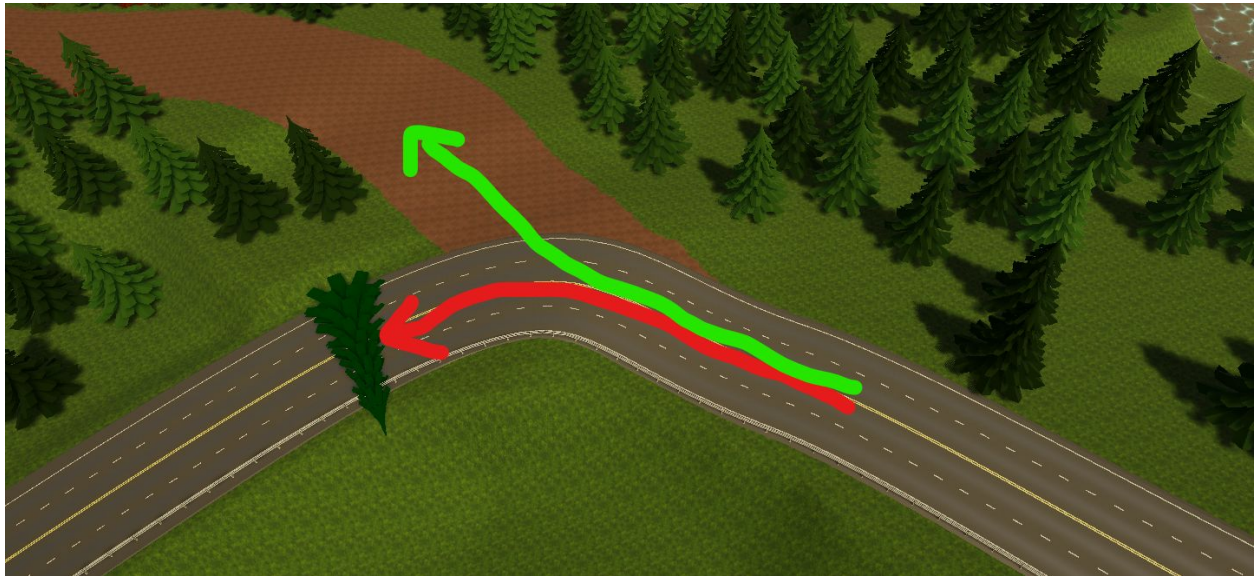


In this case the player should be guided by the traffic cones. Unfortunately, these can be pushed away by other cars, resulting in a loss of guidance, and are easy to overlook once you've already passed most of them.



In this situation some players entered the river and tried to drive up the waterfall because

they assumed it would be a short-cut or even the correct path. Due to the sharp turn to the left around a hill, the correct path is not really visible in advance.



This last location is near the end of the track. The road is blocked by a fallen tree and the player has to switch on the dirt track. Some testers didn't see the tree in time because the street leads slightly downwards after the curve. Therefore, they continued driving on the road and crashed into the tree, slowing them completely down.

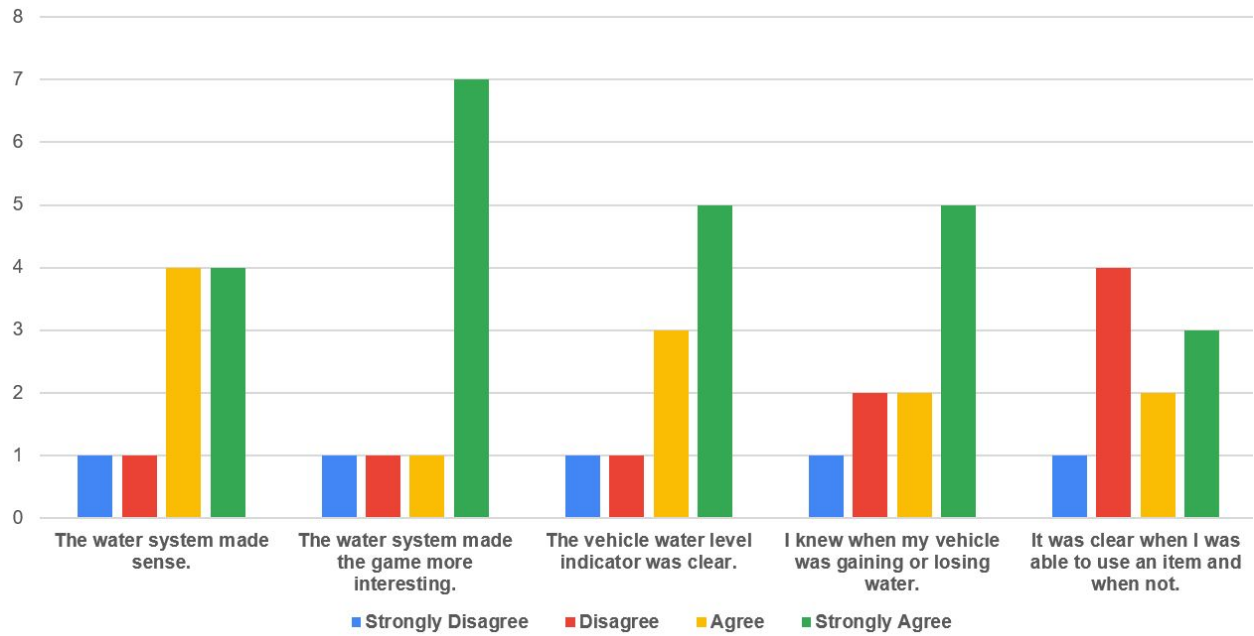
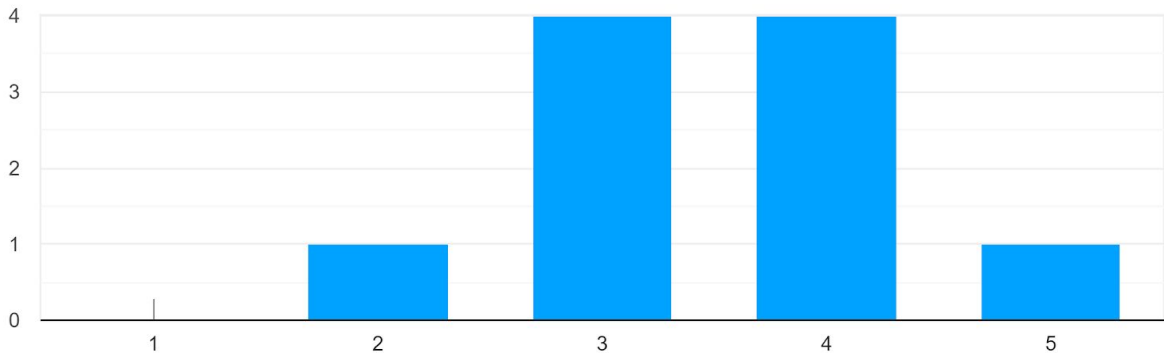
Last but not least, we got some feedback on our menus and the user interface during the race. The majority of our testers just were confused by the display of an item's influence on their water level. Even if the current water level seemed to be clear to them they didn't know when an item could have been used and what impact this would have on their water level. But apart from that, the testers were very satisfied with our user interface and the design of our menus.

Overall, the testers evaluated our game as a difficult but good racing game which needs a bit of tweaking and some options for regulating the difficulty. They liked the look of our game and how we integrated the water theme into it. Not only did the water tank system fit into the game but they found it added an interesting challenge, together with our items. Concerning the racing course, our testers liked the variance and the distinct sections of the track. Also, some details like the jump off the bridge were very interesting for the players even though they often fell into the river at that position. Regarding our AIs, some of the testers were positively surprised to not see any cheating AIs but still having a hard time beating them on the racing track. Another aspect that received a positive remark was how the vehicle maintains some speed when respawning.

Some Results from the Survey

How did you like the game overall?

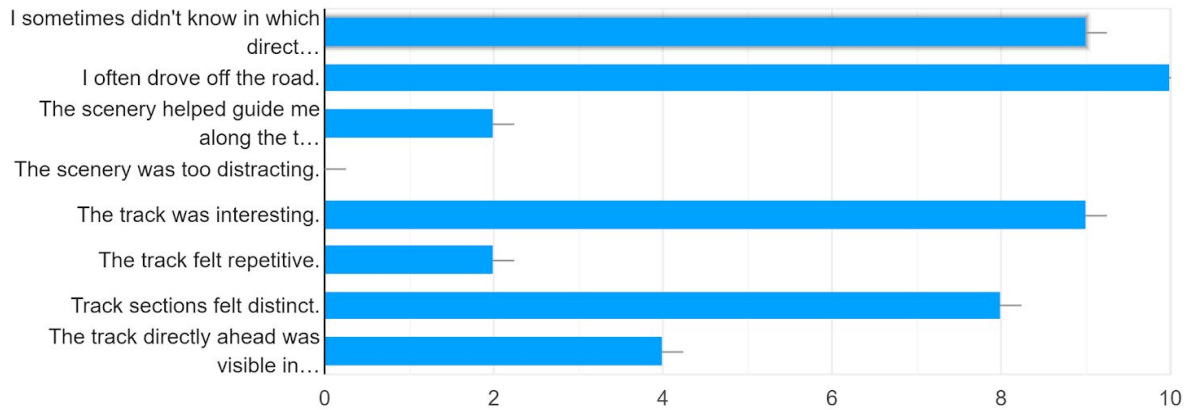
10 Antworten





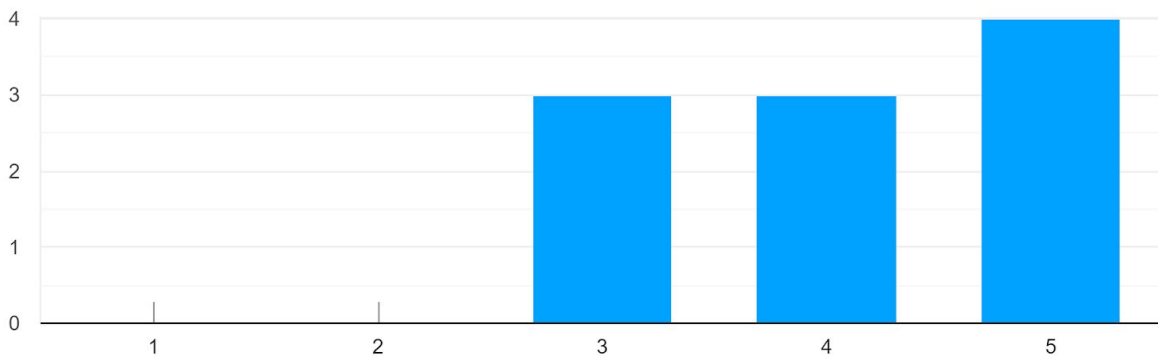
Which of the following statements apply?

10 Antworten



How visually appealing was the game to you?

10 Antworten



Planned Changes

Some of our playtesters, particularly beginners, struggled with the steering. An idea would be to add speed classes (equivalent to "50 CC, 100 CC, 150 CC, ..." in Mario Kart) to allow new players to learn the game and maps at a slower pace as mistakes are punished more harshly at higher speeds.

In general, we observed that the AI was too strong for most of our playtesters. Without a rubber banding concept for our AI, we noticed that it is quite challenging for our playtesters to catch up with the opponents once they have fallen behind. Hence, we are thinking of adding a "Bullet Bill" equivalent item that boosts a vehicle and automatically guides it along the track (for players in deep-last place). Furthermore, we plan to make changes to the AI that allow it to adapt to a player's performance, for example by restricting the AIs' speed if it gets too far ahead. We could imagine that optional driver assists might also help less experienced players enjoy the game, one idea was to create a system that prevents players from over-steering in turns. This would attempt to target the issues some playtesters faced when using keyboard controls.

Apart from the AI and the level of difficulty, we would improve the map readability with more/better signposting and less sharp turns in some places. More and better visual cues could help lead the player along the race track, so that it is easier to identify where the track continues. We also want to make some adjustments to the UI, making the pause menu more useful and the water display more readable. Finally, we would like to add music and sounds to our game as they would help provide a suitable atmosphere and emphasize our water theme.