Master in Computer Science and Engineering

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Game Design

Day V Game Design Sprint Report

Group 3:

Tomás Ferreira - 93193

Jiqi Wang - 99241

João Baracho - 99248

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1 Pre Interview

1.1 Preparing the interview

On Day 5 of the game design sprint, our main objective is to conduct player interviews and gather insights by observing their reactions to our prototype.

As we've learned in class, interviews provide valuable insights that cannot be obtained through extensive quantitative data, helping us understand the reasons behind what does or doesn't work. It's important to note that these interviews are not group activities; they are one-on-one conversations between two individuals.

We've chosen to interview a total of 5 people because of Nielsen's findings (1993), which highlight that 85 percent of the problems are typically identified after interviewing 5 individuals. During these interviews, one team member will interview five target players, one at a time. The interviewee will complete a task using the prototype, and it's essential to provide them with ample space for genuine feedback. The interviewer will ask a few questions to understand what the interviewee is thinking as they interact with the prototype, and the interviewer won't take notes during the interview.

Meanwhile, other team members will take notes, ideally remotely. However, in our classroom setting, remote participation was not feasible. Instead, the team remained physically present but at a distance, simulating a separate room known as the "sprint room" (with the interviewer and customer in the "interview room").

Before any actual testing begins, we made certain that the prototype was ready and fully functional, confirmed the suitability of the testing environment, and ensured that all necessary tools and materials were readily available. In addition, we designed a structured grid that featured columns for each interviewee and rows for each prepared question. This grid facilitated systematic data collection during the interviews, enabling us to capture and analyze feedback effectively.

1.2 5-act Interview setup

Before conducting the interviews, to ensure both the interviewee's comfort and the acquisition of valuable insights, we formulated a set of essential ideas and questions following the 5-act interview structure:

- **ACT 1 - Friendly Welcome:** In this initial stage, our objective is to establish a welcoming and comfortable atmosphere for the interviewee. So we decided to warmly welcome the player and put them at ease, emphasizing that we have no vested interest in the project, as it was not developed by anyone related to the interviewer. This reassurance allows the interviewee to feel free to provide candid feedback.

- **ACT 2 - Context Questions:** In this phase, it was supposed to engage in light and easy small talk to create a friendly rapport. For that purpose, we decided to have the interviewer initiate the conversation by asking simple questions like the player's name and istID number. Following that, we delved into his/her gaming preferences, including his/her experience with Endless Runner games. This interactive dialogue allowed us to gain valuable insights into the player's gaming history and their specific experience with Endless Runner games.

- **ACT 3 - Introduce the Prototype:** In this phase, we introduce the prototype, which is an endless runner game with a unique feature: every 10 seconds, the player can choose whether to change the map or not. In this part, we all agreed that the interviewer should reiterate to the player, emphasizing that our primary goal is not to evaluate their performance and encourages them to think aloud as the player interacts with the prototype. Additionally, we explain that we won't be testing elements like the game's difficulty level or the presence of an enemy that chases the player during this session.

- **ACT 4 - Tasks and Nudges:** In this phase, we should be observing the player navigating through the prototype independently. We thought about beginning with straightforward, open-ended nudges to guide their interactions such as **"What were your initial thoughts when you began?" and "What do you think about the transition between maps?"**. These nudges serve as subtle prompts to encourage the interviewee to express their thoughts while interacting with the prototype. Depending on the response and feedback from each interviewee, we empower the interviewer to ask additional follow-up questions as needed to gain a deeper understanding of the interviewee's thought process.

- **ACT 5 - Debrief:** The final act of the interview process is the debrief. For this phase, we set questions designed to prompt the player to summarize their overall experience with the prototype. We inquire about their thoughts, any challenges they encountered, and suggestions for improvement. To conclude the interview, we planned to express our gratitude for the player's participation and show them out.

To prevent any influence on the interviewee, we've established guidelines for the interviewer. This includes a focus on primarily using open-ended questions, as well as requiring the interviewer the skill to ask "broken" questions while maintaining a consistently warm smile to ensure the interviewee's comfort.
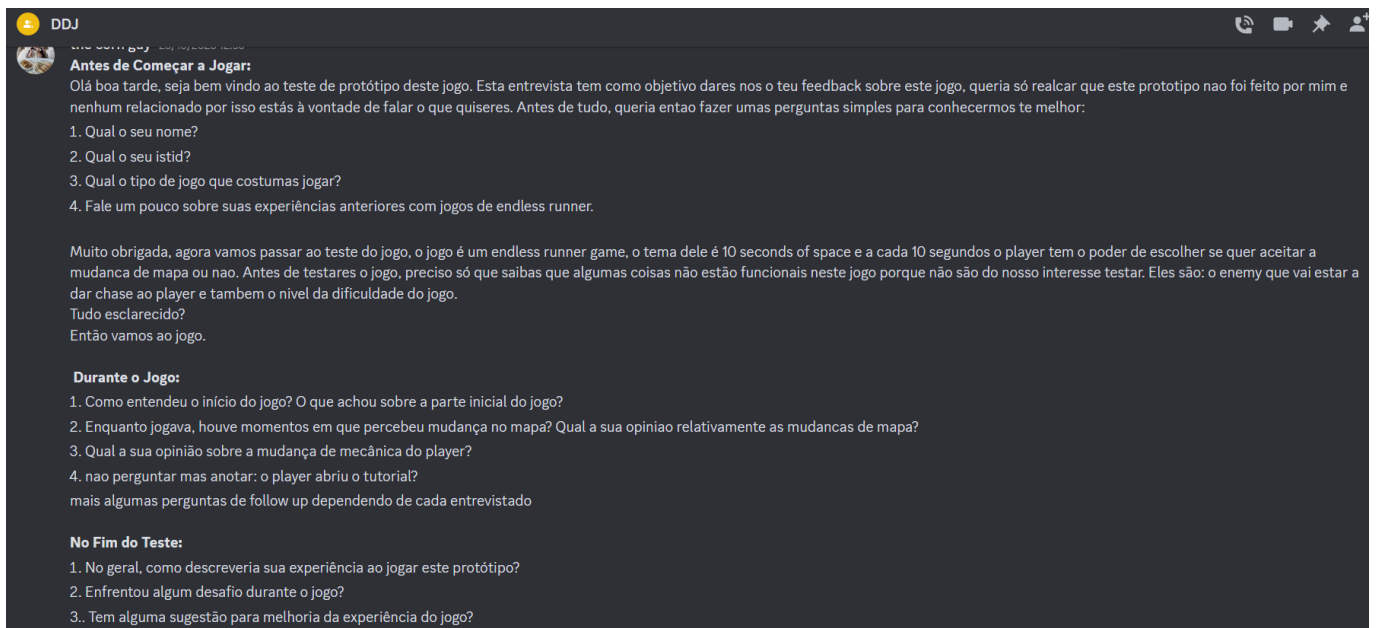

Figure 1: Prepared questions and ideas for the interview, done in class

Figure 2: Grid

2 Interview

2.1 Starting the interview

Based on the script we prepared in advance, we conducted interviews with five individuals during our play-testing sessions. As mentioned earlier, in the phase of testing the prototype, we began with three open-ended questions. Subsequently, we utilized a series of follow-up questions to tailor the interview to each player's unique experience, allowing them to provide free-form feedback.

It is important to mention that all the events referred to below were based on the notes we took during the class/interview. However, due to the haste with which the notes were written and the fact that they were made by different individuals, they became illegible.
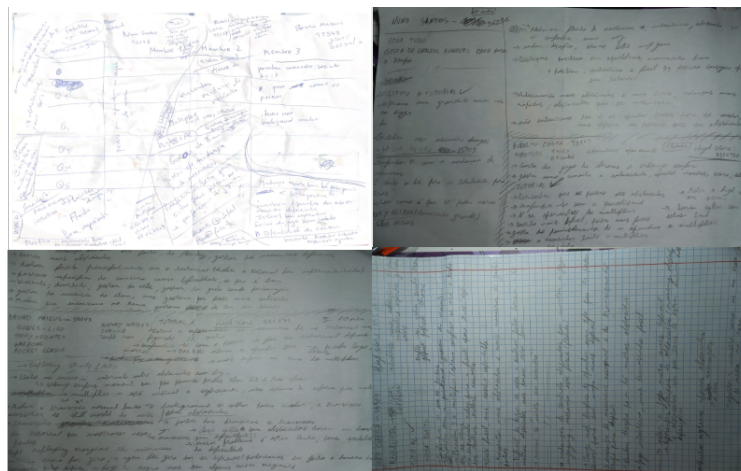

Figure 3: Illegible notes

For this reason, we provide a detailed description of the interviews in the report and summarize them in the following section.

2.2 Member 1

In our first interview Jiqi served as the interviewer and Tomás served as the scribe.

As mentioned earlier, Jiqi began the interview by creating a welcoming atmosphere and initiating a conversation to establish some context about our player's background. She commenced by introducing herself and proceeded to inquire about the player's name and IST ID. The player, Nuno Santos, provided his name and IST ID, which was 96296.

Following the introductions, Jiqi asked Nuno about his gaming preferences. He mentioned that he enjoys playing a variety of game genres and doesn't have a specific preference. When asked about his familiarity with Endless Runner games, Nuno indicated that he is quite familiar with them and considers them a great way to pass the time. He also shared that his favorite Endless Runner games are Subway Surfers and Google Chrome's dinosaur game.

After our brief introduction of the prototype, Nuno began playing the game. He immediately opened the tutorial to familiarize himself with the mechanics and then proceeded to play the game itself. Without intervening in Nuno's gaming experience, we allowed him to explore the game. Once Nuno had a brief experience with the game, we posed our first question:

- **What were your initial thoughts when you began?**

  His first impression of the game was that he expected a stronger gravity when he jumped. He promptly noted that this observation wasn't necessarily positive or negative; it was simply an observation, and he quickly adapted to the gameplay.

As soon as Nuno first switched between maps, he noticed a change in the game's mechanics, which immediately piqued his interest. Although he experienced some initial confusion with the new mechanics, he quickly adapted to the changes. Therefore, after some rounds of changing map, we moved on to our second question:

- **What do you think about the transition between maps?**

  In response to this question, Nuno shared his perspective on the shift between game environments and the corresponding changes in mechanics. He found the transition to be smooth and intuitive, and he particularly liked the gradual shift between spaces, which allowed him to prepare for the next map without much thought. Nuno considered the change in mechanics to be appropriate, acknowledging that he did experience some initial confusion but rapidly adapted to the new mechanics. He criticized that the time between catching the item to change the map and actually changing the map was slightly too much. He also noticed the functionality of the multiplier.

Nuno commented that he found it a bit frustrating that the player avatar couldn't reach the edge of the screen. He actively conducted experiments on different maps to explore various ways to encounter failure and gain a deeper understanding of the game's mechanics. This led him to conclude that he found it non-intuitive that there was a fish icon for changing to the ocean map, but in the ocean, he had to avoid the fish because they served as obstacles. Additionally, Nuno raised a concern about a particular type of obstacle but he thought that it might be more related to his own skill level.

To delve deeper into his feedback, Jiqi employed a follow-up question technique to inquire about

the specific obstacle. Nuno identified the obstacle as the one from the sand map. When questioned about other possible reasons aside from what he considered, Nuno suggested that the obstacle might have a larger hitbox than others, potentially making it easier for the character to die.

After the phase of testing the prototype, Jiqi led the debriefing session. She began by asking Nuno about his overall experience with the game. Nuno shared that he found the game highly engaging and described it as 'smooth.' He remarked that the game felt easy and intuitive, stating that anyone could play it without the need for a tutorial. He also highlighted his main criticisms, which were that he felt the game could have more obstacles and maps and that the time between catching the item to change the map and actually changing the map was slightly too much (as mentioned in one of the post-game experiences).

When asked about the challenges he faced, Nuno indicated that he did not encounter any significant challenges during his gameplay. When asked about suggestions to improve the experience of the game, Nuno reiterated his preference for a wider variety of obstacles such as moving obstacles and diverse maps. He also recommended reducing the time it takes between collecting the map-changing item and the actual map transition.

Nuno's high score was 15709 points and his interview lasted around 13 minutes with around 7 minutes of gameplay

2.3   Member 2

In our second interview Jiqi and Tomás kept the same roles of interviewer and scribe, respectively.

The second interview started much like the first one, with us and our player introducing ourselves. The player's name was Rodolfo Costa and his istID was 99117. He liked to play shooter games, story-oriented games, adventure, and open-world games. He's also quite familiar with endless runners and his favorite one is Subway Surfers. He also told us that what he enjoyed the most about these types of games was the increase in velocity as you played, the collecting coins, and trying to beat high scores(something that we witnessed during this interview).

After opening the game, Rodolfo immediately opened the tutorial. After some experience of the game, we asked Rodolfo some questions:

- **What were your initial thoughts when you began?**

    Rodolfo thought the game was very intuitive, addictive, and fun. He liked the art style and the fact that you play as a cat.

In contrast to our previous player, Rodolfo quickly grasped that the fishes in the ocean map were obstacles. Although he had a brief moment of confusion when entering the desert map and encountering quicksand mechanics, a few taps of the spacebar clarified things for him. From that point on, the game proceeded smoothly without any mechanical issues. Rodolfo noted that the desert map was the most challenging for him, while the ocean map was the easiest. When Jiqi asked for the reason, Rodolfo firmly attributed it to personal preferences and individual skill levels.

Rodolfo didn't notice the multiplier right away so Jiqi had to point it out. After comprehending the mechanics of the multiplier, Jiqi asked what he thought about the multiplier. Rodolfo expressed his appreciation for the idea of the multiplier resetting when a player doesn't catch an item to change

the map. He noted that it provides an incentive for players to switch maps and avoid always sticking to the easiest one, even if they are less comfortable with another map. Rodolfo also pointed out that he felt that the multiplier should either have a cap or increase at a slower rate, so as to not increase the points too fast from a certain point on.

Observing Rodolfo quickly adapting to the change map item, we proceeded to ask the second prepared question:

- **What do you think about the transition between maps?**

  When asked about his opinion on the changing of the environments and the change in mechanics that comes with it, Rodolfo thought it was quite fluid and he really enjoyed that there was a variety in mechanics throughout the game.

Following the questions and gathering feedback, we moved on to the debriefing phase. Jiqi initiated by inquiring about Rodolfo's overall experience with the game. Rodolfo expressed his liking for the transition between three maps, the variation in mechanics across each map, and his appreciation for the multiplier, and he found the game very interesting and colorful, fitting the theme "10 seconds of Space" exceptionally well.

When asked about the challenges that he faced, Rodolfo said he didn't face any challenges regarding the overall game because he felt the game was easy and the mechanics were very straightforward, especially after reading the tutorial. He also commented that he thought the tutorial was very well explained and implemented. He did mention that there was a specific position of the obstacle in the sand map, which was when the obstacle was in 1/4 of the sand, that was quite difficult to avoid and you really had to focus to be able to survive which he saw as a plus.

When asked for ways to improve the game experience, the player provided several suggestions. Rodolfo indicated a desire to see the items highlighted for better visibility against the background. He also suggested introducing a broader range of obstacles, displaying the high score on the screen to offer a clear goal, implementing a countdown timer until the next item appears, and the option to jump using the up arrow. He did note that the last point was more aligned with personal preference.

Rodolfo's high score was 3314750 points and his interview lasted around 15 minutes with around 9 minutes of gameplay.

2.4   Member 3

For our third interview João was the interviewer and Jiqi was the scribe.

This third interview started the same as the previous two, with everyone introducing themselves. The player's name was Bruno Mateus and his istID was 95543. Bruno likes to play souls-like games, story-oriented games, Call of Duty: Warzone, and Rocket League. Endless Runners isn't one of his favorite game genres, but he has played Subway Surfers, Temple Run, and Google Chrome's dinosaur game.

After opening the game, Bruno immediately started the game without opening the tutorial, this led him to have some trouble understanding the controls and mechanics for each map. After dying for the first time, Bruno visited the tutorial to familiarize himself with the mechanics.

Much like our first player, Bruno got confused and thought that having a fish in the item to change maps, and also as an obstacle was non-intuitive.

Unfortunately, due to the fact that our code generates the map you go to next randomly and because we only had three maps in this prototype, Bruno kept changing back and forth between the same two maps for too long, which led to some slight frustration with the game.

Once Bruno had some time to experience the game, João posed the first question:

- **What were your initial thoughts when you began?**

  His first impression was that the game was too slow and that even after some time passed and the game had picked up some speed, he wished it was faster and thought that the time between each obstacle was too much, making the game too easy for him.

Bruno initially didn't recognize that catching items also triggered a multiplier increase, so João clarified this for him. In response, Bruno recommended that we should give more prominence to this aspect of the game. He also expressed surprise that the multiplier resets when a player fails to catch an item.

After letting Bruno play for a good while and learning more about the game, João moved on to our second question:

- **What do you think about the transition between maps?**

  Bruno shared his opinion that he considered the transitions to be "ordinary." He suggested that the backgrounds might benefit from additional design enhancements. He also mentioned that it would be nice if the transitions required some skill.

When João asked what he meant by that final point, he explained that he would like that there were obstacles in the transitions themselves to make the game more challenging. After hearing that, João explained that transitions were intentionally obstacle-free to allow players to prepare the player for the upcoming change in mechanics. Bruno then suggested a potential compromise—having the initial transitions without obstacles, gradually introducing obstacles in subsequent transitions, or including a tutorial where transitions were obstacle-free to help players learn the mechanics before implementing transitions with obstacles in the main game.

After that, João guided the interview into the debriefing part, commencing with a question to Bruno about his overall experience with the game. Bruno emphasized his enjoyment of the overall experience, with a particular fondness for the desert level. He appreciated the game's concept, noting its familiarity within the genre, but also praised the incorporation of unique elements that breathed freshness into the gameplay.

When questioned about the challenges faced in this game, Bruno stated that he didn't face any specific challenges during the gameplay.

Later on, João asked Bruno about potential enhancements to the game experience beyond his previous feedback. Bruno proposed additional ideas. He recommended awarding bonus points for close calls with obstacles. Additionally, he suggested increasing the game's speed. In the context of the water level, he recommended a change where player movement would be reversed compared

to the sand level, with players constantly floating and needing to press a key to dive deeper into the water.

His primary critiques of the game centered around his perception of it being slow, lacking significant scalability in terms of difficulty, and a desire for the game to become substantially more challenging as the player progressed. Despite these concerns, Bruno still found the game enjoyable overall.

Bruno's high score was 541235 and he kept playing during the entire interview, bringing his total interview time to around 14 minutes with 12 minutes of gameplay.

2.5 Member 4

For our fourth interview Tomás was the interviewer and Jiqi was the scribe.

Our fourth player was João Barreira, with an istID of 99509. His preferred genre of games leans toward Roguelike games, with top picks including The Binding of Isaac and Enter the Gungeon. João also holds a strong affinity for Endless Runner games, finding them addictive and easy to jump into. He values their infinite gameplay and replayability, as well as their portability for playing anywhere. Among the Endless Runner titles he's explored are Subway Surfers, Temple Run, Zombie Tsunami, Jetpack Joyride, and Google Chrome's dinosaur game.

João opened the game and immediately visited the tutorial. After letting him get accustomed to the game and gain some experience, Tomás asked our first question:

- **What were your initial thoughts when you began?**

  He pointed out his immediate appreciation for the game's artwork, finding it visually appealing. However, similar to some of our previous players, he encountered confusion regarding the fishes. He mentioned that the game felt easy, which was a minor point of dissatisfaction, but he also noted that this issue could be easily addressed.

In the sand map, João immediately understood the quicksand mechanic and expressed his joy, regarding it as a big plus. He also spotted the multiplier but was initially uncertain whether it increased with time or upon catching items. So Tomás clarified that it was the items that triggered the increase.

When questioned about the speed increment, João stated that it was difficult to tell because there weren't enough obstacles, but that it seemed to be increasing at a good rate.

João playfully proposed a monetization idea for the game, jokingly suggesting that players could watch an advertisement to continue playing after a game is over. Following this light-hearted moment, we moved on to the other question:

- **What do you think about the transition between maps?**

  He stated that the map changes were fluid and seamless which was very pleasant, and that the change in mechanics kept the game engaging. He also mentioned that the change in mechanics was easy to understand and accessible to everyone and that the transition period allowed the player to prepare for what was ahead.

Following the testing phase, Tomás transitioned into the debriefing part of the interview. Tomás

started asking about the overall experience. He found the game highly intuitive and particularly appreciated the multiplier mechanic, which incentivized map changes, even if the subsequent map was more challenging. He also liked the ability to move both forwards and backward on the screen, which set the game apart from other 2D Endless Runner games.

After that, Tomás asked about the challenges João encountered, and he replied that he didn't encounter any major challenges because there weren't many obstacles,

Finally, when asked about suggestions to improve the game, João suggested that we could add more maps and different ways to win points.

João's high score was 352465 and his interview lasted around 15 minutes with around 8 minutes of gameplay.

2.6 Member 5

In our final interview, Tomás was the interviewer and João was the scribe.

Our fifth and final player was Alexandre Correira, whose istID was 93000. While he has a diverse gaming taste, he particularly enjoys adventure, exploration, and puzzle games. Although endless runners aren't his top choice, he finds them entertaining for passing the time. His preferred Endless Runner games include Subway Surfers and Google Chrome's dinosaur game.

Alexandre opened the game and immediately read the tutorial. He immediately expressed his dissatisfaction with the controls, as he preferred using the 'W' key for jumping instead of the spacebar. After allowing him some gameplay time, he shared his appreciation for the ability to move both forward and backward, a distinguishing feature from most games in this genre. It was at this point that Tomás proceeded with our first question:

- **What were your initial thoughts when you began?**

  He replied that he found the game simple and fun, further commenting that it was relaxing and satisfying. He also reiterated that he enjoyed being able to change directions, not just jumping, and also appreciated having a cat as a playable character.

As he continued playing, Alexandre didn't experience any confusion regarding the distinction between fishes as an item and obstacles. When Tomás mentioned that some players had faced this confusion, Alexandre pointed out that the tutorial had addressed this, and it didn't pose any issues for him.

When transitioning from the ocean level to the desert level, Alexandre encountered confusion due to the change in controls. He expressed his dissatisfaction with the controls, which led to occasional confusion during gameplay. He reiterated his desire to use the up arrow or the "w" key for jumping, instead of the spacebar.

Alexandre commented that he liked the look of the transition between maps and that the water map was his favorite because he could move freely.

When Alexandre missed an item to change maps, he expressed that it took too long for the multiplier to reset. Consequently, he didn't immediately understand why it had occurred. Tomás needed to

clarify that it was due to missing the item. When asked what are his thoughts about the game speed he said it was increasing a a good rate.

After he played for a while and gained a good understanding of the game, Tomás proceeded to ask the other question:

- **What do you think about the transition between maps?**

  He thought the transition between maps looked good and seamless. Alexandre enjoyed the change in mechanics between maps as it kept the experience engaging and exciting, but he said once again that jumping with the spacebar and not with "W" or up key confused him several times until he got used to it.

After the prototyping testing phase, Tomás transitioned to the debrief part and inquired about Alexandre's overall experience. Alexandre responded that it was enjoyable and mentioned that he would have it installed on his phone as a way to pass some time.

When asked if he found any challenges with the game, he replied that the only challenge he faced was that he lost because an item overlapped with an obstacle, Tomás explained that, unfortunately, this could happen because the position of both things is generated randomly and we didn't consider that this could happen.

Tomás then asked what suggestions he had to improve the game experience, to which he replied that he would change the jumping key, he also suggested changing the way points are presented on the screen, such as converting 50,000 to 50k. This was particularly important when the multiplier reached a certain point, as the numbers increased rapidly, making them difficult to read. Alexandre also stated that he would add more obstacles and obstacles of different types. He pointed out that due to the limited number of obstacles in the prototype and the ability to move back and forth the game, while enjoyable, felt too easy.

His high score was 5208359 and the interview lasted around 16 minutes with 13 minutes of gameplay.

2.7 Notes of each member labeled

During the sessions, the team member responsible for taking notes should categorize them as positive, negative, or informative/neutral. However, since note-taking was carried out by a single member of the team, we made the decision for all three team members to convene at the end of each interview session and collectively assign these labels to the notes, categorizing them as follows:

2.7.1 Member 1 - Nuno Santos 96296

Positive

- Found the transitions to be smooth and intuitive.
- Found out the multiplier.
- Found the game engaging and intuitive.
- Found the game easy to understand, even for players who do not read the tutorial.

Negative

- Found that the time between catching the item and actually changing the map is too much.
- Found that fish as changing map item might be confusing with the obstacle fishes.
- Wanted to have more obstacles.

Neutral/Informative

- Wanted more maps.
- Wanted the character to be able to reach the edge of the screen.
- Expected more gravity when jumped.

2.7.2 Member 2 - Rodolfo Costa 99117

Positive

- Found the game intuitive, addictive, and fun.
- Liked the art style.
- Understood the fishes as obstacles.
- Liked the idea of multiplier.
- Found the transitions fluid.
- Liked the change of mechanics in each map.
- Found mechanics straightforward.
- Found the tutorial well explained and implemented.

Negative

- Didn't notice the multiplier before pointing it out.
- Wanted to have more obstacles.
- Wanted the multiplier to increase slower.

Neutral/Informative

- Wanted to have more visual difference between background and items.
- Wanted to have the high score displayed.
- Wanted to have a countdown timer for the next item.
- Wanted to use the up arrow to jump.

2.7.3 Member 3 - Bruno Mateus 95543

Positive

- Found the transitions "normal".
- Found enjoyable.
- Liked the game concept.

Negative

- Was not able to understand the change of mechanics before watching the tutorial.
- Was not able to experience different maps at first.
- Found that fish as changing map item confusing with the obstacle fishes.
- Found the game too slow and easy.
- Found the time between obstacles too long.
- Wanted more difficulty.
- Didn't notice the multiplier before pointing it out.

Neutral/Informative

- Wanted to have obstacles in transitions.
- Wanted awarding bonus for close calls with obstacles.
- Wanted more design involved in backgrounds.

2.7.4 Member 4 - João Barreira 99509

Positive

- Found the game's artwork pleasant and visually appealing.
- Liked the sand maps mechanics.
- Found out the multiplier.
- Found the game's speed at a good rate.
- Found the map changes fluid and seamless.
- Found pleasant while changing map.
- Found engaging, accessible, and easy to understand the change in mechanics in each map.
- Liked the ability to move forward and backward on the screen.
- Found the game intuitive.

Negative

- Found the game a little easy.
- Was not able to understand multipliers functionality.
- Found that fish as changing map item confusing with the obstacle fishes.
- Found that there weren't many obstacles.

Neutral/Informative

- Wanted to have ways to continue to play after a game is over.
- Wanted more maps and different ways to win points.

2.7.5 Member 5 - Alexandre Correia 93000

Positive

- Enjoyed being able to move back and forth on the screen.
- Found the game simple, fun, and relaxing.
- Said that he would have the game installed on his phone.
- Mentioned that the tutorial helped him understand that the fish would be an item but also an obstacle.
- Found the transitions between maps fluid.
- Found the game's speed at a good rate.
- Found that the change in mechanics between maps kept the gameplay engaging.
- Found enjoyable.

Negative

- Found it confusing to jump with the spacebar instead of the "W" or up keys.
- Found that it took too long for the multiplier to reset after not catching an item.
- Wanted more obstacles.
- Found it unfair that obstacles and items can overlap, making you choose between losing or resetting the multiplier.
- Found the need to modify the way the points were displayed.
- Found the game easy.

Neutral/Informative

- Found it interesting to have a cat as a main character.

2.8 Note

Please note that, although we weren't testing the game's difficulty in this prototype, we chose to categorize feedback related to it as "negative". This decision was based on the fact that we took players' input into account, addressing and improving aspects that some players found somewhat disappointing during the testing phase.

3 Post Interview

After conducting all the interviews and categorizing the notes as positive, negative, or neutral/informal, we proceeded to place the notes in their respective columns and rows on the grid we had prepared beforehand.

	Member1	M2	M3	M4	M5
Name	Nuno Santos	Rodolfo Costa	Bruno Mateus	João Barreira	Alexandre Correia
1st ID	96296	99117	95543	99509	93000
game preference	plays all type of games	shooter story-oriented adventure open-world	Souls-like story-oriented Call of Duty: warzone Rocket League	Roguelike The Blinding of Isaac Enter the Gungeon	Adventure Exploration Puzzle
T.Runner experience	Subway Surfers Dinosaur Google	Subway Surfers	Subway surfers Temple Run Dinosaur Google	Subway Surfers Temple Run Zombie tsunami Jetpack Joyride Dinosaur Google	Subway surfers Dinosaur google
Q1	Expected more Gravity when jumped	Found the game intuitive, addictive and fun Liked the art style	Found the game too slow and easy Found the time between obstacles too slow	Found the game art work pleasant and virtually appealing Found the game a little easy	Found the game simple, fun, relaxing Enjoyed being able to move back and forth on the beach Found it interesting to have a cat as main character
Q2	Found the transitions to be smooth and intuitive Found out the multiplier Found that the time between catching the item and actually changing the map is too much	Found the transitions fluid Liked the change of mechanics in each map	Found the transitions " normal " wanted to have obstacles in transitions wanted more difficulty wanted more designs involved in backgrounds	Found the map changes fluid and seamless Found engaging, accessible, and easy to understand the change in mechanics in each map Found pleasant while changing map	Found the transitions between maps fluid Found that the change in mechanics between maps kept the game engaging Found it comfy to jump with spacebar instead of the "w" or up keys
tutorial?	opened at first	opened at first	NOT OPENED at first was not able to understand the changes of mechanics before watching the tutorial	opened at first	opened at first
NOTAS	wanted the character to be able to reach the end of the screen Found the fish as changing map item might be confusing with the obstacle fishes	Understood fishes as obstacles Didn't notice the multiplier before pointing it out Liked the idea of multiplier Wanted the multiplier to increase slower	Found the fish as changing map item confusing was not able to experience different maps at the final Didn't notice the multiplier before pointing it out	Liked the sand maps mechanics Found out multiplier was not able to understand multiplier functionality wanted to have ways to continue to play after a game is over	Found that it took too long for the multiplier to reset after hit an item Found the game's speed at a good rate Mentioned that tutorial helped him understand that the fish would be an item but also an obstacle
overall experience	Found the game enjoying and intuitive Found the game easy to understand even for players who do not read the tutorial wanted more obstacles	Found the mechanics straightforward	Found enjoyable Liked the game concept	Found the game intuitive Liked the ability to move forward and backward on the screen Found that there weren't many obstacles	Said he would have the game installed on his phone Found enjoyable
challenges	No challenges	no challenges Found the tutorial wall explained and implemented	no challenges	no challenges	Found it unfair that obstacles and items can overlap, making you choose between losing or resetting the multiplier
suggestions (some suggestions already done before asking the question)	Wanted more maps	Wanted to have more visual difference between back ground and items wanted to have highscore displayed wanted to have a cooldown timer for the next item wanted to use the up arrow to jump wanted to have more obstacles	Wanted quandry bomb for close calls with obstacles	Wanted more maps and different points to win points	Found the need to modify the way points were displayed Wanted more obstacles Found the game easy

Figure 4: Grid with notes

All team members collaboratively examined the grid and wrote down patterns (as indicated below). Certain patterns, such as playing a cat as the main character and the ability to move back and forth, were not included because they were mentioned by only 2 out of the 5 team members.

Upon comparing these patterns to our long-term goals and sprint questions, we drew several conclusions. Our primary objective for this prototype was to assess the concept of smooth transitions. While we did implement changes in mechanics for each map and included some obstacles, these weren't our primary focus during this phase. From our grid, it's evident that everyone appreciated the smooth transitions and the engaging nature of the mechanics but found a lack of obstacles and

variety to be a common concern. During the previous day of the game design sprint, Tomás had drawn his storyboard of various obstacle types and punishments, which had been one of our initial ideas. However, through collective decision-making, we initially prioritized the idea of immersive cues signifying map changes while maintaining smooth transitions.

While we successfully implemented smooth transitions, it became apparent that the aspect most criticized was the game's obstacles and difficulty. Consequently, we have identified our next focus, which will involve addressing the game's obstacles and enhancing its overall difficulty.
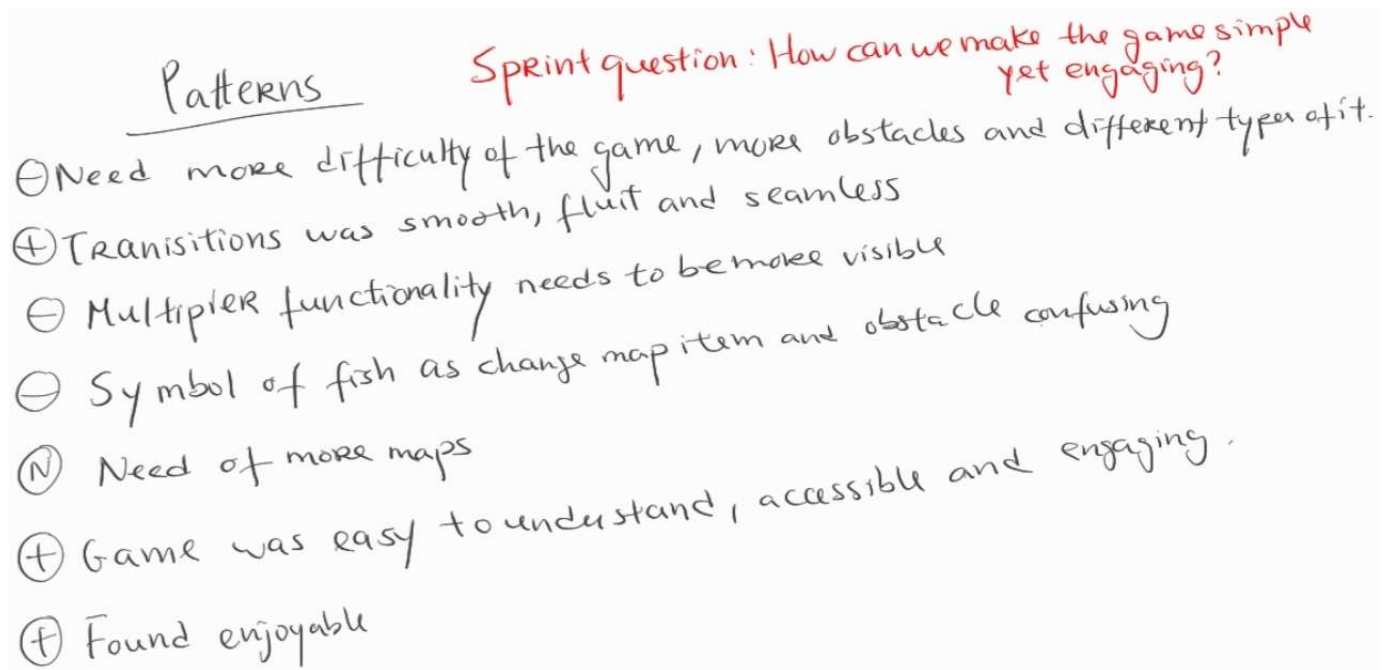

Figure 5: Patterns