GAME DEVELOPMENT METHODOLOGY

FINAL REPORT

FINAL DELIVERY

GROUP 1

UNKNOWN PLANET

76468 | 82022 | 82057 | 82121

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PLAYTESTING REPORT

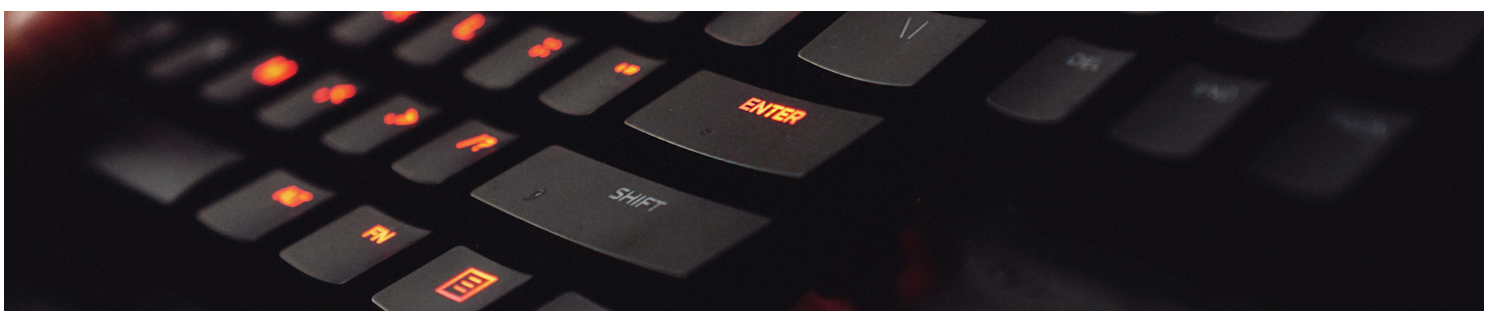
PLAYTESTING
PLAN

Brief presentation of the playtesting used.

The play testing plan went as follows:

- The **quick-start sheet** was given to the players along with a small talk/ ice-breaker introduction to our concept.
- Once the player felt confident we started **recording the screen** and asked the him to start the executable.
- The player went on to play the game. We observed and **took notes** of any relevant behaviour. Sometimes it was also necessary to give the players some extra indications along the test, since our prototype sometimes did not give the necessary feedback.
-The player finished playing the demo. We stopped recording the screen. We also asked the player to fill in our **questionaire**.
-We had a cooldown moment where we thanked the player for his collaboration and asked his thoughts on our concept and prototype.

We only tested 11 people since we only had 1 pc that could run the final version of the game with the complete map.



PLAYTESTING
ANALYSIS OF THE RESULTS

Analysis of the results obtained through the playtesting.

MAP EXPLORATION- DOES THE PLAYER SPEND AN EQUAL AMOUNT OF TIME IN EACH AREA?

From the Screen-recordings we are able to review the playtesting and take records of much time the player spent in each area. On average the players spent **3.36 minutes in the Forest** and **3.71 minutes in the Snow**. These values are very close to each other and allow us to answer this goal positively. However, we must note that some players spent more of their time either in one biome or the other, contributing to this average but deviating individually.

LEVEL OF CHALLENGE- IS THE CHALLENGE WELL BALANCED? IS THE GAME TOO EASY OR TOO HARD IN SOME PARTS? ARE PLAYERS EVER BORED?

From the notes we took while talking to people and the results of our questionnaire we have gathered that the level of challenge needs tuning. *Chart 1* below tells us that 36.4% of people classified the game as *Difficult* when compared to others they have played. From our field observation we can deduce that the difficulty came mainly from the effort put into finding the spaceship and not from keeping the energy/motivation/temperature bars balanced.

Chart 1

From *Chart 2* we gather that only 27.3% of people reported feeling challenged which is a low number for what we desire out of this game. For the final iteration of this project we should attempt to improve this to about 70%.

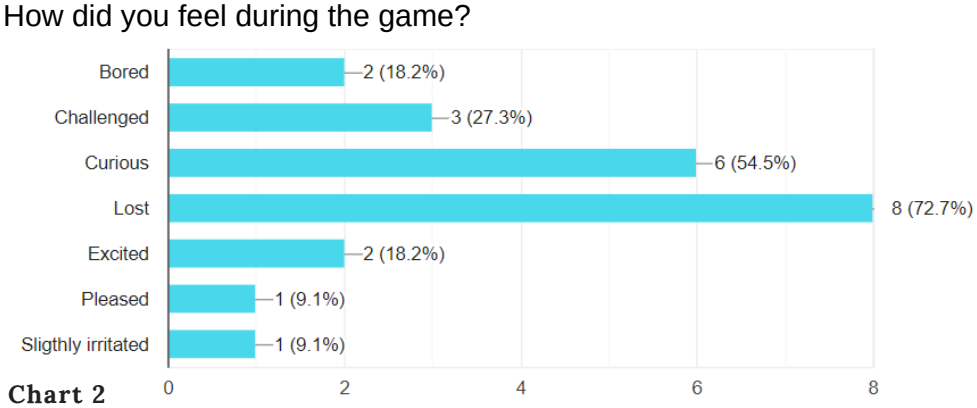


Chart 2

Although 72.7% of people felt *Lost* only 18.2% felt *Bored*. From talking to players and through this data we found that a lack of challenge did not immediately make the game boring and things like feeling *Lost* increased the *Curious* feeling for some people.

PLAYTESTING
ANALYSIS OF THE RESULTS

Analysis of the results obtained through the playtesting.

GAME FLOW- ARE PLAYERS FOCUSED ON THE GAME WHILE THEY PLAY OR DO THEY LOSE INTEREST ALONG THE WAY?

Average Score
(1- Not at All; 7- Very Much)

1. I felt just the right amount of challenge.....3.9
2. My thoughts/activities ran fluidly and smoothly.....4.0
3. I did not notice time passing.....4.2
4. I had no difficulty concentrating.....4.8
5. My mind is completely clear.....5.2
6. I felt totally absorbed in what I was doing.....4.3
7. The right throughts/movements occured of their own accord.....4.1
8. I knew what I had to do each step of the way.....3.4
9. I felt like I had everything under control.....4.5
10. I was completely lost in thought.....3.4
11. I felt like something important to me was at stake.....2.8
12. I felt like I musn't make any mistakes.....2.9
13. I was worried about failing.....3.3

The *Flow Short Scale* was our main tool for evaluating this goal. The components 1 to 10 measure the Flow experience while the components 11 to 13 measure the perceived outcome importance. From 1 to 10 most questions scored around 4, which tells us the players had a neutral reaction towards the game. This is coherent with the low scores on the last three components. Since players scored lower of the perceived importance of the game it make sense that the absorbtion of the game also didn't score very high. All in all we can gather that the results were bordeline "okay", which means that although there weren't any major setbacks in the gameflow there also aren't enough elements that draw in and capture the players attention the way we want.

PLAYERS UNDERSTANDING OF THE GAME- CAN PLAYERS PLAY ON THEIR OWN OR WILL THEY ASK US ABOUT THE RULES ALL THROUGHOUT THE DEMO?

From the beginning of our playtesting session we realized we would have to give the players some additional information besides the one we planned. Players seemed to understand the controls and story of the game only with the quick start sheet, but the session would run a lot smoother if they were told from the start in which **general direction to find the spaceship** and **how many items were hidden in the map**. We started giving that information away at the start of the session after noticing a pattern of players feeling lost and asking about those topics in the middle of the demo.

PLAYTESTING
GAME DESIGN&DEVELOPMENT IMPLICATIONS

Discussion of the implications of the results for the design and development of the game.

Map exploration- The quantitative results we obtained for this goal were quite balanced. Players did spend an equal amount of time in each area. However, from our observation and from *Chart2* we received the feedback that a lot of time players become lost in one biome and feel helpless in the progression of their exploration. To facilitate this, one possible design improvement would be to add a small game map in the corner of the screen that would give indications to the player relative to where he is, what areas he has explored already and clues to important landmarks he should visit.

Players understanding of the game - From the feedback we got, we could increase the players understanding of the game by giving him more feedback on whether or not he is doing the right thing such as going in the right direction to find the spaceship and items. When implementing the mini-game map mentioned above we could tackle this problem by making the mini-map colour coded and, for example, having a red overlay that becomes progressively more red as the player moves in the direction of a critical area (closer to the spaceship). Alternatively we could also have a compass that tells the player what general direction to move in. Another possibility would be to indicate in the map where some items might be, items that would lead the player in the right direction.

Level of challenge - Some of the feedback we got related increasing the level of challenge with the addition of more features to the game. The current prototype is weak in mechanics, but we have several ones planned out that have yet to be implemented and we believe would greatly improve this issue. For example, we have yet to implement actions such as collecting wood from trees to make a fire, as temperature critically lowers during the night.
Most of the game design is done in this area but a lot more time will have to be spent developing what we had planned in order for the game to reach the right level of challenge for the player.

Game flow- We believe that improving the flow of our game is very connected to improving the perceived importance of the game, which in our case is also connected to improving the level of challenge. We believe that by implementing the improvements we have detailed so far (improving the feedback given to the player in a mini-map and increasing the level of challenge through the mechanics) we will also improve the game flow to the level we want. In terms of game design this only means implementing what we have planned already, but in terms of game development we will need another iteration cycle where we test the new prototype after improving those features and verify if the game flow was really improved or not.

DEVELOPMENT AND EXPLOITATION REPORT

DEVELOPMENT AND EXPLOITATION

FUTURE RELEASE PLANS

Planning and scheduling of the main tasks until a future release.

To reach our final prototype, we estimate that we'll need approximately 10 more months of work, taking into consideration holiday breaks as well as class and exam periods. Our strategy of progression and organization for the development will be to intercalate the creation of the mechanics with the expansion of the map, so that we include everything we have planned in our game.

JULY

Character:
Replace our main character with the character designed by our artists

AUGUST

Mechanics:
Animal Hunting & Picking Fruit from the trees

SEPTEMBER

Map:
Complete the montain area & create 2 spaceship parts

OCTOBER

Mechanics:
Search Caves & Find Wild Fruits

NOVEMBER

Map:
Create the desert area & create 2 spaceship parts

DECEMBER

Mechanics:
Drinking water at the lake and water source & Bathing in the lake

JANUARY

CREATE 2 VERSIONS
TO PREPARE FOR TESTING AND START PRE-MARKETING

Map:
Create 2 danger transition areas

FEBRUARY

Tests:
Testing the current full version of the game to get feedback

MARCH

Bugs Fixing:
Fix bugs that come up during the tests and make small suggested changes

APRIL

Tests:
Finishing up the final version of the game

DEVELOPMENT AND EXPLOITATION

DEVELOPMENT COSTS UNTIL RELEASE

Realistic development costs until release the game.

SOFTWARE

UNITY 3D PRO **110,48€**

We will use free alternatives to paid software if they give us similar functionality. However, we think that it would be nice to use some features from ***Unity3D Pro*** which costs **$125** per month.

JUNIOR ENGINEERS

PROGRAMMING

1200 € *4 *10 MONTHS = 48 000 €

ARTISTS

GAME DESIGN + ART AND ANIMATION + AUDIO

1100 € *2*10 MONTHS = 22 000 €

QUALITY ASSURANCE PROFESSIONALS

1 OR 2 TESTERS

1- 800 € **OR** 1600€
2- 1000€ **OR** 2000€
(DEPENDING ON THE EXPERIENCE)

87.50€

SERVICES

PLAYFAB

We are planning to use use third-party services such as multiplayer service ***PlayFab*** which the most popular version costs **$99** per month.

MARKETING AND DISTRIBUTION

INFLUENCERS:

DIY, 3 000 €

EVENTS:

DIY, 2 000 €

AD CAMPAIGN:

DIY, 3 000 €

TOTAL

81 797.98 €

DEVELOPMENT AND EXPLOITATION

REVENUE SOURCES

Realistic discussion of the revenue sources of the game.

Revenue sources are the models used to acknowledge and identify ways to make money with our business, in this case with our game.
It's a fact that video game industry is booming with continued revenue, which means that we can use this model to our advantage and continuously monetize our game. One of the statistics that easily supports this statement is that more than half of teenagers play video games everyday, and this trend only tends to increase more and more.
In order to try to make our game blend into this vision and to make sure that all the costs and investments, spent during its development end up being rewarded, we chose three different revenue sources:

Free-game with in-game purchases
We want everyone that wishes to try our game to have free access to it. However, once the player gets hooked, unlocking more advanced features and options such as changing the scene and skin of the character is only possible after a purchase.

Subscription service
Our subscription service will give access to new updates and to mini-games related to the concept of the game and also allow to acquire exclusive items. While our traditional game requires a high-end PC, our mini-games will provide an extension of our main game on other devices. When subscribing, players can also receive stickers and a poster of our game and have access to some discounts.

Advertising
We will have some static and dynamic in-game advertising to maintain the visibility of the "brand" embedded in the game itself, as opposed to ads that usually appear as interruptive, which people skip most of the time. These may appear when an item is won in order to remember the idea that more items can be won by subscribing. We will also have advergames, providing interactive games on social media pages for customers to be drawn to the game.

DEVELOPMENT AND EXPLOITATION

PRE AND POST MARKETING

Realistic discussion of the pre and post marketing for the game.

PRE-MARKETING

Testing Marketing

Develop different small demos of the game as it is being developed so that we can have the feedback and reactions of the people and see if we are going in the right direction, or which of the versions they prefer.

We can put them to test on specific links in our Social Media pages as well as in more events similar to MOJO.

Social Media and Current Marketing

Facebook and Instagram - create a page for the game to describe its concept by announcing and teasing, in different ways, what the game will have and to announce details like release dates.

Blog - post weekly updates on the game work progress.

Stand Out and Viral Marketing

Make the names of our social media pages appear on Gaming Podcasts, so that gamers who are listening to those podcasts are curious and go searching for the pages. An influencer on Twitch can promote the game to their followers.

POST-MARKETING

Testing Marketing

Create short demos of different parts of the complete game, so that people can play them on game events and spike their interest in acquiring and playing the complete game.

Put some of them available on specific links in our Social Media pages.

Social Media and Current Marketing

Facebook and Instagram - constantly update the pages with news about the game like market numbers, updates made to the initial version released, photos of people playing it or events where the game will be presented.

Youtube ads - create two or three different ads to show a quick video gameplay with the link to play the complete game.

Stand Out and Viral Marketing

Make the game name and the ways of playing it, as well as its social media pages appear on some Gaming Podcasts.

Branch out the game to multiple App and Physical Videogames stores.

DEVELOPMENT AND EXPLOITATION

DISTRIBUTIONS CHANNELS

Realistic discussion of the distributions channels for the game.

Reaching our target audience is something that is always on our mind. We need to know who our focus group is and how we will get them to play our game. This goal is highly interdependent with our choice of platform used to distribute the game. The primary task that should be set is to find a clear business model with significant implications for the game distribution.

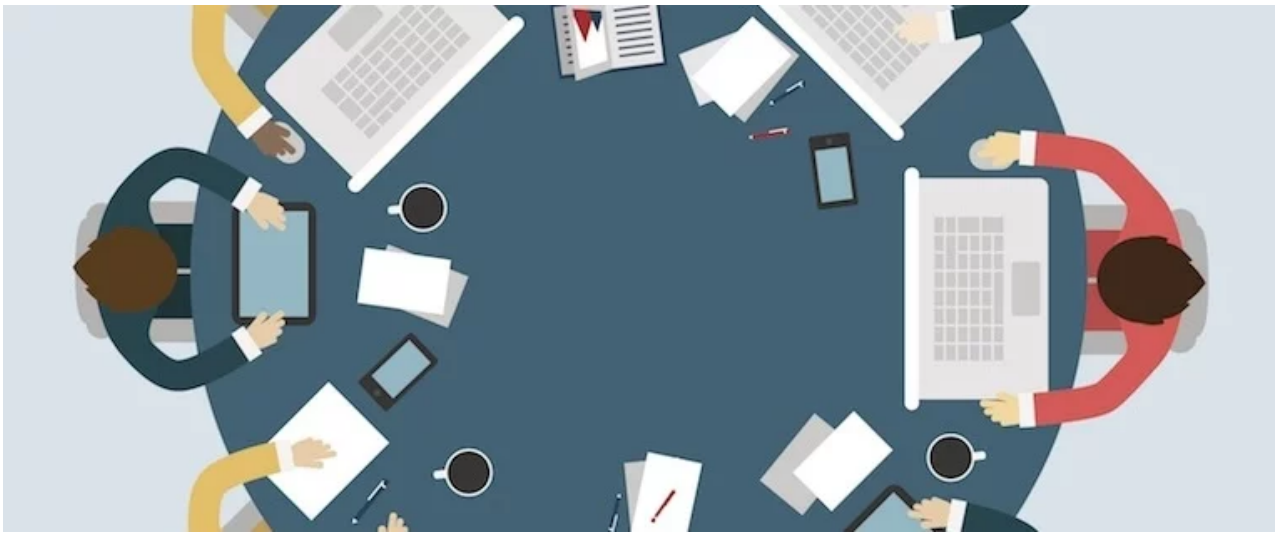
Existing Channels
Wherever it is possible, we want to exploit existing channels to reach our audience. Games integrated with famous social networks attract increasing levels of activity and attention from people.
Therefore we can find a website that attracts a high volume of traffic, and steer those visitors to try our game. For example, Reddit threads such as r/gameideas and r/gamedev or even Facebook and LinkedIn groups.

Non-Traditional Channels
We can take advantage of less traditional or obvious channels to distribute the game. One idea is to try to include the game in a particular niche sector. It could be interesting to take our game to waiting rooms of clinics or other public places where people are bored while waiting for their appointents. There we could have the chance to do a demo and giveaways of stickers and merch of the game.

Web Channels
Since computers are the most common platform for digital games, the Internet becomes the most common distribution channel. With a web channel we could partner up with other game creators and have our game be featured on their website. A way to do this would be to use meetup.com and join groups in Lisbon to meet other game creators, for example the Gamification World Meetups Portugal group.

Publicity Channels
Usually good publicity and marketing motivates people to try new games and also exposes a larger audience to the game's story, even if they have never played the game before.
We can make a deal with a marketing agency and allow them to spread our game's logo and brand to a larger audience. For example by having posters of our game spread at popular game events and conventions such as Lisbon Games Week.

POSTMORTEM REPORT



POSTMORTEM
LESSONS LEARNT WITH THE PROJECT

Discussion of the lessons learnt from the development decisions of the project.

Throughout the development process of our game and all the decisions made we went through different phases, some good and some less good, that left us lessons for the future or even for the rest of the way that would follow until we complete the full version of the game.

1. Define and follow priorities

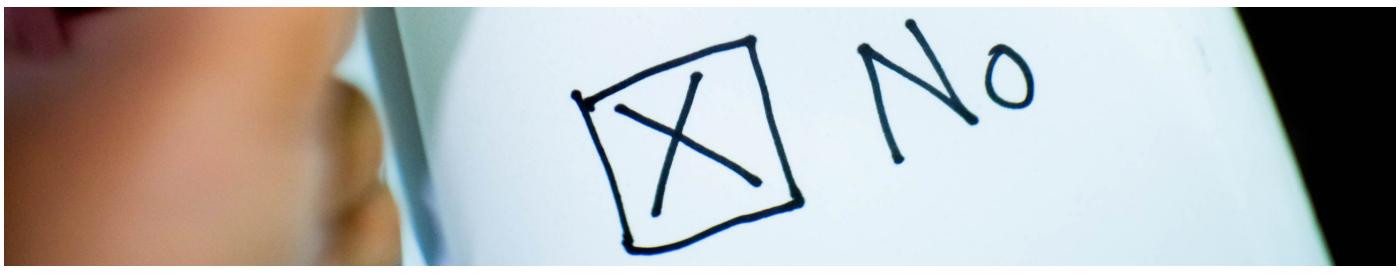
We should have started by focusing on the game mechanics before focusing on the game scene.
Since a game does not work without the player being able to interact with it, it was really a better priority to have looked first at how to make the character do the actions we planned, rather than focus on having a good scenario first. And in addition to it, we always had artists helping us in this part to get good scenarios. Since none of us had experience working with Unity, we should have first developed a small area of the map, less rich in detail, and started early to work on the mechanics. Once we had solid mechanics developed, then it would be a good time to expand and improve the map.

2. Organize better the available time

We should have set an early date to have everything from the artists.
The artists asked us if there was any deadline to finish doing their thing to give us, and we were saying that they could do it without limiting too much. This was because we did not know that we would have trouble putting things together, since until then everything had worked relatively well. It turned out that the last version they designed for the character ended up not being able to be included in the game, because the animations were not working and, within the time available, nothing we experienced worked. At the same time we ended up spending time on it that could have been used to work on mechanics. It also turned out that the last version of their map was too big to run in most of our laptops, because of this we only had one to do the user testing at MOJO and we tested with fewer people than what we expected.

3. Analyze more platform options for game development

We should have a better understanding of what the chosen technology entails.
Initially we did not have many hesitations when choosing the technology, we always thought that using Unity was the best option and that it would not be too complicated to learn to program there. However it would have been more positive if we had looked at the implications more closely, and perhaps chose another platform to develop the game, best suited to our capabilities for best results.



POSTMORTEM

REFLECTIONS OF THE ENTIRE ROUTE

Reflection of all activities from the beginning until post MOJO activities

#1 CYCLE

FEB 25 - MAR 27

Conceptual documents
Low-fi prototypes
Tech feasibility prototypes
User feedback

Initially the ideas for the game we wanted to create converged with relative ease into a cohesive concept that led us to define from a very early stage several details of what we wanted to see. In spite of that, the short-term objectives were complicated to define because of the large amount of ideas we had for a complete prototype, which we would never fully realize. That many ideas facilitated the writing of the first **conceptual documents.** We enjoyed the result of our **physical prototype** that for us turned out to be a great board game, even if that was not the initial plan. At one point we thought we would have too many rules but it turned out well and the **feedback** we got from the users was proof of that. People could not always play at first, but after they got the gist of it, they really liked it. Our first **tech feasibility prototype** was also within what was asked at that stage.

#2 CYCLE

MAR 28 - APR 24

Co-Design Workshop
Conceptual documents
Tech prototypes
User feedback

The **co-design workshop** with users went well and we were able to adjust our prototype to their needs, criticisms and ideas. This was essential to understand better what was more important to implement in the tech prototype in order to create an interesting gameplay. We felt the need to make small adjustments to our **conceptual documents** due to the prioritization of ideas but nothing very significant, since the docs included a lot of information relative to the final prototype. We also added to it the controls and presentation schemes. Our **tech prototype** was still a little far from where we wanted it to be at this stage so the tests done with users were very much about testing options of some controls and getting **feedback** on which options the users preferred.

#3 CYCLE

APR 26 - MAY 28

Conceptual documents
Playtesting plan
MOJO preparation

We improved one more time some aspects of the **conceptual documents** and we wrote more content that specified the progression of the game, which was relatively easy to think about and plan but nevertheless was not implemented in full in the end. In order to make the best use of the **MOJO** experience and to make people's contact with our game as good as possible, for them to give us positive and negative criticism, we created a **playtesting plan** trying to cover everything that we considered relevant to evaluate.

MOJO

MAY 28

MOJO made us feel like our game went a little beyond a purely academic project which made it an important growing experience. However the final result makes us realize that there was still a lot of work to do as the prototype was far from what we wanted. As our last reflection, we feel that doing MDJ allowed us to get a good start on what it would be to develop a serious game from beginning to end.


HOW LONG CAN YOU SURVIVE?
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