MOJO Playtesting Plan

Through the Misty Gate

Introduction

For the MOJO, we plan to have two versions of the game: one will be a cut-down version of the game, where the player will follow a relatively linear progression arc, while the other will be a testing sandbox, where the player can try out different mechanics and encounters than what they might in the cut-down version.

The reasoning for having two versions is simple. On the one hand, having a cut-down version of the game means the player might finish a satisfying portion of the game in the limited time window they have to play; if the world were too open, the player might spend too long feeling lost or thinking how to progress further. This version of the game is more linear than the final game would be, and aims to give the player the same sense of progression and narrative than the full game would.

On the other hand, the testing sandbox allows us to show off all we've accomplished. This version of the game will consist of an open level design, with a few different areas that correspond to the different biomes of the full game. Daring players might choose to fight one of the bosses available, using the tools at their disposal; creative players might instead try to find the spell and item combinations that will allow them to be at the height of their power. The main drive behind this version of the game is allowing the player to experience all that *Through the Misty Gate* has to offer in a short and action-packed play session.

Furthermore, these two versions are complementary in terms of collecting playtesting data. The first version will serve to see how the players interact with the environment of the game, how keen they are on exploring the game world, and how they react to challenges appropriate to their knowledge of the game. It will be a journey of discovery in the very same sense that *Through the Misty Gate* will; the player will have to discover more about their abilities and themselves and use this knowledge to overcome the challenges ahead of them. The sandbox will, in its more open-world nature, have all the spells and items unlocked for the player which would normally be locked behind the progression arc of the game. This allows for testing of the key systems of combat and equipment in a far more comprehensive scope, and would let us know what builds or tactics the players gravitate towards.

Playtesting Metrics

The following metrics will be gathered for every play session individually; a case-by-case analysis of the results can then be made to determine how these metrics are affected by the profile of the player (which would consist of, for instance, the player's experience in gaming, familiarity with the genre, etc). An average of the values obtained can then be calculated at the end to provide us with a general view of the gameplay statistics and the performance of different components of the game.

Spells (Do spells feel balanced?)

- Number of times each spell was cast. This allows us to see which of the spells prove to be most useful to the player. Different players might have different playstyles and opt for different spell sets, however seeing one spell being consistently underused by all of the players would be an indicator of the existence of potential flaws in the design of the spell.
- Time duration each spell was in the hotbar. While some spells might be used more frequently than others, some of them can remain in the hotbar for a significantly longer period of time, even if not used as often, as they make part of the player's core skill set (at least one healing spell, for example, might feel useful to have at all times). This metric allows us to determine which of the spells the player found strategically most useful.
- Total damage dealt by each spell. The spells should be generally balanced in such a way that one spell is not significantly overpowering the rest. The spells have different areas of effect, damage and cooldown values, and we might discover that certain combinations of these values give either too much or too little power to the player, negatively impacting the gameplay experience by making it either too easy or too difficult.
- Spell accuracy while in combat. With different projectile speeds and sizes, some spells might turn out to be too difficult to use. The spell accuracy would be represented by the number of times a spell hit an enemy, H, divided by the number of times that spell was cast during combat, N_c, described in the following formula:

$$accuracy = \frac{H}{N_c}$$

- Health points restored by each relevant spell. This gives us an overview of how useful to the player each healing spell is, with more health points restored equalling higher usefulness.

Items (Do items feel balanced?)

- How long did the player wear each item for. This allows us to see which items and item mechanics players enjoyed the most or found most relevant during their playthrough.
- Damage dealt while wearing each item. Some items can affect the player's defence, mobility or damage dealt. It is important to measure whether some of the items become too powerful and disproportionately boost the player's damage potential.

Enemies (Are enemies' as powerful as intended?)

- Damage received from each enemy. This allows us to see whether an enemy is under- or over-powered, or whether there's a fault in the level design. Basic enemies are not supposed to be very challenging. However, in order for the gameplay to be well balanced, the player should sometimes get caught by surprise and receive some damage. Receiving close to 0 damage from all the enemies would be a sign of inadequate enemy AI or poor level design.
- Deaths caused by each enemy type. Similarly to the metric above, the number of deaths determines whether the game's enemies are too easy or too difficult. The deaths caused by basic enemies should be close to 0, as they appear more frequently and their role is to make the playthrough more challenging and engaging, but not frustrating. The inverse applies for the types of enemies that are supposed to be challenging, such as bosses. If the number of deaths to a boss is 0, then the gameplay is too easy and boring for the player and would indicate that there's a need for further adjustments.

Exploration (Is there enough incentive to keep exploring?)

- Player's position heatmap. A heatmap clearly visualises the places the player has spent the most time in and allows us to discover bottlenecks and whether the player is following the expected path.

Extra Metrics

- Time taken during the entire playthrough (entire demo). We have an expected time window during which the player should complete the demo level (corresponding to the cut-down version, as the sandbox does not necessarily have an "end"). If some of the players struggle with completing the demo within that time, it would mean that the game might have too high of a learning curve.
- Number of deaths during the playthrough (entire demo). The number of deaths should be very close to 0, since the beginning area (where the demo takes place) is supposed to serve as an introduction and only contains basic enemies.

Subjective Metrics

In addition to the objective metrics that we have described, we would also take this opportunity to measure the player's subjective enjoyment of the game. These would come in the form of an optional short Google Forms questionnaire at the end of every play session. The questionnaire is available at (https://forms.gle/nbNJ8W6kRukVbMBNA) and includes two distinct sections: a player profile section, where we try to build a rough profile of the type of the player, and a feedback section, where we ask the player about their experience with *Through the Misty Gate*, specifically.