Tony Game Interactive

**Script:**

The playtesting begins with an explanation of the games rules, and how the game’s win condition is structured. You, the player, must survive 5 rounds, each consisting of 3 waves. The next round does not begin until all monsters from the current round has been destroyed, but this does not apply to wave. Waves begin at timed intervolves which change depending on the which round you are currently in. The victory condition is met when the last monster from round 5 has been destroyed, and the lose condition is met if the player at any point dips below 1 hp. Slaying a monster will provide a chance of a drop occurring, these drops can be weapon upgrades, special weapon effects, potions, or an environmental effect. These environmental effect drops are harmful to both the player, and the monster; and provide interactions between other environmental effects (ie: if a fire drop occurs next to an oil drop, the oil drop will become a fire drop). The weapon power ups are applied just by picking up the power up, and the description of the modifiers will be left out of this description to create a sense of discovery and to avoid priming the user to want a particular drop before he gets it. There are 5 unique monsters which can spawn, each of them with different speeds, health, special attacks, and environmental drops. The description of what the special attacks are, the range of environmental drops, and their interactions will be left out for similar reason as the attack modifiers as well as creating a similar experience to someone just pick up the game for the first time. The potions available are health potions, haste potion, and clearing potions. The health potion will restore 25% of your max health and is bound to the “q” key. The haste potion will temporary boost your speed and is bound to the “e” key. The clearing potion will clear out all environmental effect around you for a small radius and is bound to the “r” key. The movement controls are bound “w” “a” “s” “d”, with firing/shoot being bound to both “space bar”, and “mouse1”.

After the player has played three games that length from medium to short, or two long games we follow up with a list of questions, which will repeat again after another session with the game so we can understand the feelings and opinion of the game as the player goes from new, to more experienced with the mechanics and balance.

1. Level of difficulty overall?
2. Level of difficulty of each round?
3. Which effects/power ups confused you?
4. Which power up was the most fun?
5. Which monster special attack stood out to you?
6. What do you like about our game?
7. What don’t you like about our game?
8. What would have been useful info before starting?
9. Anything else you want to talk about (open ended comments)?

These questions were asked to majority of the testers; it is important to note that some of these testers did multiple sets of testing in each balancing of the game, and some abilities and effects have been modified, with at least one major rework of the balance so the testing report might clash because they come from different versions of the game. Also, important note: The testers Henry and Aidan each tested the game for 2-3 hours total before we did the testing reports, while the rest of the testers reports where based off the first time they played.

**Testing:**

Tester One: Aidan – Average Gamer – 15-20 hours a week.

V1: The overall difficulty is way too hard, success past the first few rounds are more tied to power ups then anything you feel like you can control. Both quaking a vine are confusing, but this is more because they don’t have any indicators that they are working or what they are damaging. The ricochet ability is really fun because it’s just crazy all over the place. The monster that stood out to me is the stone guy because having him run into the large crowd of other monsters and “cleaning house” is really funny. The game is super chaotic which is really great, but it lacks enough variation because of the limited power ups. The useful info before starting would have probably been to start praying to the gods for ricochet quake.

V2: The game is still hard but it’s getting closer to become fair. Not getting power ups will still cause you to lose, but not getting the right power ups is way less punishing. The rounds seemed fine besides round 2 feeling really easy, its either you make it 3, or you die before round 2 starts. The power ups are now less confusing, not sure if that is the amount of times I have played this or if the indicators for damage on monsters, or the telegraphs for the quake effect.

The game is still missing the enough powers up to make the replayability good.

Tester Two: LauraLee – Light Gamer – 8-10 hours a week.

V2: The game feels really difficult, and would be really fun to try and complete it. I was confused about the poison splat, it just appears out of nowhere and then disappears and takes a while to understand what is going on. My favorite power up was the vine thing, it just pulls everyone together which makes it easier to get the stone guy to smash them. My favorite special attack was the stone charge because of the previous reason and because it’s not just a standard projectile. I liked the difficulty and how clean the game feels, but the map isn’t that interesting and the kiting get repetitive. I wished they explained the power ups better because it wasn’t very obvious.

Tester Three: Henry – Average Gamer – 15-20 hours a week.

V1: Difficulty is near impossible without quaking, ricochet, and vine. The quaking power up with the most confusing because it took forever to find out what it was due to the lack of an effect. My favorite power up was the vines, it was just something you don’t see often. The stone monsters attack was by far the best, it takes you by surprise every time. The game lacks replayability and needs to be have more descriptive in the power ups so you can tell what is going one better.

V2: Difficulty was still tough but able to be completed. The poison monsters spitting attack is confusing because it isn’t telegraphed beforehand other than the splat. The quaking power up is starting to feel very good now that is telegraphed, and because you can tell it works on wall so you can position so that they funnel into the quake. The stone monster is still the most fun of the effects. The games telegraphing is becoming much better, it still needs to be tuned down in difficulty.

Tester Four: Lisa – Average Gamer – 20-25 hours a week.

V2: The difficulty is moderate, to tough depending on you power ups. Most of the powers up where confusing at first, and the poison on was hard to understand for a long time. Ricochet was a fun power up, mainly because is worked well with other abilities which made it fun to get. The ice monster was interesting, the field also stunning enemies becomes handy and dangerous. The game is slow at the start, but does increases at a good tempo.

Tester Five: Jenna – Hard Gamer – 30-40 hours a week.

V2: The game is tough, and could probably be tuned down. The effects are pretty confusing at the start but once you see them a few times it becomes easier to understand, the most confusing is poison. Quaking is a fun effect, it helps with a lot and does go with all the other abilities nicely. The best special attack was the stone monster, it just felt good. The game has a cool twist with the effects that drop on the ground, it is another element to think about. The game is short, and lacks a range of power ups. A description of the powers up feels needed.

**Report:**

Problem One: Ricochet: We encountered a balance issue with Ricochet, in which the ricochet arrows would apply all arrow effects to each instance of the arrow bouncing between enemies. This was intended during the design stages but after play testing we found that this feature when working as intended alongside the other weapon bonuses (quake, stun, poison, and vine), was way too strong. It could destroy enemies when grouped closely together far too easily, the vine would continuously proc grabbing all enemies and pulling them in, this would make ricochet bounce even more, and the cycle would continue; if you then applied quake to the mix you would be spawning a pit of death where everything trapped inside would never get out, and quake would continue to stack dealing enough damage to destroy everything inside. Due to the random nature of the weapon bonuses dropping if you have ricochet, it would make the abilities you've picked up work at twice if not three times their normal efficiency. This made ricochet by far the most powerful ability in the game as it was essentially a double buff to any and all abilities that you would pick up. The largest issue with this problem is that through playtesting feedback we were made aware that both the vine quake combo, and the ricochet bouncing an infinite amount of time apply effects were both highly praised. This meant we wanted to keep what people liked about the abilities without taking them away. While also the later levels had to be balanced around have one if not both of the combos, which meant if you got unlucky and arrived at the later levels without one of the combos it was game over. To counter this issue, we limited the addition of some ability effects (vine & quake) after the arrow had struck its first target, while nerfing the other abilities which still applied on ricochet. This reduces ricochets value, as it no longer doubles the effects of all other abilities, which also allowed us to better craft the later levels to be completed with all types of power up combos.

Problem Two: Map size: Initially we had the map to a scale which we later deemed to be far too large. This scale was an 80 x 80 array of squares which lead to 6400 squares. This was largely problematic because we found that even when running a total of 500+ monsters (per game), the map would be barely populated with environmental drops. The environmental drops being a large part of our game, and the execution leaving them practically non-existence meant we had a problem. The larger map would also increase the resources needed for

each enemy A.I. had to search through in order to determine the best path to follow, avoid all threats in the immediate area, and locate where the player is upon each update. This took up far too much memory and processing power and would require a use to build a sequencer for later levels to deal with mob density while running through large mazes. We then implemented a fix by resizing everything in which we cut the array in half, into a 40 x 40 array, giving us 1600 squares. Making it far easier to search through the array for the player, the path, and the threats on the map. It made the game run far more smoothly, and made it more feasible to update the path more consistently and allowed us to not need a sequencer for larger mob densities at later levels. Most important this caused our environmental effects drop position to feel much more important as the levels continues and the map becomes more flooded with effects and caused an overall increase in the importance of our clear potion which was being neglected in testing.

Problem Three:  Balance of Spawns: In the first instant of our game there was several problems with our spawn rates. Firstly, due to the ricochet quake vine the spawns rate had to be insane to be any kind of challenge, while leaving it impossible without the combos. After the ricochet fix this allowed us to address this problem and have a fairer spawn rate. The second problem was that each round was time based and not kill based, this cause some an overall feeling of dread when the next round began, not because the difficulty increased but because the player still had mobs up from the last round. We fixed this by separating our spawning into two types, waves and rounds. There are three waves in a round, and the waves are spawned on a timer, however the rounds do not advance until all the monsters have been destroyed. This allowed us to keep the feeling of urgency in killing the monsters fast but allows the player to move up to the next round/difficulty when they are ready and allows the player to not feel as rushed if they want to do more kiting for placement of the last spawn of monsters.