Sync & Ecco Testing Plan

V1.3

Version History

Version	Date	Editor	Notes
1.0	02/09/2024	Brodie Austin	● Initial document construction
1.1	09/09/2024	Kian	● Updated basically everything
1.2	10/09/2024	Kian	● Updated Outsourced Tests to include questions ● Removed collected data section in Outsourced Tests ● Minor word updating
1.3	13/11/2024	Brodie	● Updated doc now with tests 4,5 and 6 ● Linked raw results for tests 1-6 ● Added takeaways and action section for tests 1-6

Contents

Vision & Overview

Sync & Ecco is a co-op twin stick shooter focusing on asymmetric kits given to the players, and using them to conquer different floors of an AI overrun facility.

This document is an overview for the tests which will be conducted for Sync & Ecco throughout its development from Alpha to Gold. The aim of these tests is to ensure the player experience is as good as possible, there are minimal bugs, and that any other necessities are accounted for during production and release.

Participants

Designers - will be the primary and initial testers for any updates to the game in engine or for any core gameplay mechanics.

Team members - will be secondary testers where applicable, getting secondary opinions without outsourcing testers.

External testers - includes any testers outside of the group who will be provided with a version of the game to test and be provided with questions to answer for feedback. Note, a large number of these external testers will be students from AIE, all being from a similar group of players, possibly skewing the results.

Environment Requirements

Hardware Requirements

Necessary for all testing:

- Computer
- Monitor
- Controller (playstation, xbox, or other supported controllers)

Necessary for certain tests:

- Headphones (or other sound playback devices)
- Keyboard
- Mouse

Software Requirements

Necessary for all testing:

- Game build (specific build dependent on test)
- Windows (10 or 11 ideally)

Necessary for certain tests:

- Google suite (primarily google forms)

Objective

The goals of the tests are to find what bugs and glitches exist within the game and what causes them so that the errors can be fixed before gold release, and if any features don't feel fun/enjoyable to players and how changes could be made to change that.

What are we testing?

We will be testing gameplay & gameplay mechanics to make sure that the game not only performs smoothly but also works with no errors and if there are, we will inform those who would be associated with the error so that it can be fixed.

The gameplay aspects we will be focusing on through testing include:

- Movement controls and combat systems for the playable characters (Sync and Ecco)
- Enemies (AI, variables, combat counterplay)
- Level layouts (arenas, obstacles, puzzles)

Any primarily bug focused testing will be done through internal testing with bugs reported directly to the appropriate member and tasks created in Hack N Plan for said bug.

How will feedback be collected?

Outsourced feedback will be collected through the use of a google form where any individuals who participate will be asked to fill out the form provided. Additionally, the conductor/s of the test will take notes of the actions taken by the participant for further investigation.

Internal feedback will be discussed with the appropriate member/s, any form of documentation will be taken where needed, and if needed, tasks in Hack N Plan will be created to cover it.

Test Schedule

Internal Testing

Internal tests will be conducted by the associated member/s when the subject to be tested is available. Internal tests will always occur prior to external tests.

External Testing

Phase	Dates	Involved Testers	Actions
Ecco controls		Outsourced tester -	Get feedback from outsourced testers on Ecco's controls
Sync controls		Outsourced tester -	Get feedback from outsourced testers on Sync's controls
Multiplayer test		Outsourced testers -	Get feedback from outsourced testers on general gameplay and game flow.

Outsourced Test 1 (ECCO CONTROLS)

Overview

The first test will be focused on testing the controls of Ecco as well as their general gameplay, such as combat, to ensure that they are fun to play with and does not feel awkward to control.

Test Method

This test will be conducted with 1 outsourced tester and at least 1 conductor from the group. The outsourced tester will be provided with a controller for Ecco while the conductor will control Sync, reason being to imitate the camera of the game following the 2 characters.

Questions

- https://forms.gle/XJD1a1zeSpWtWz958

Features present and missing

The features present within the game are:

- Models (blockouts for Sync, Ecco, enemies)
- Basic level layout
- Ecco movement (includes turning, acceleration, reversing, boost)
- Sync movement
- Camera following and zoom for both characters
- Enemies (includes health and taking damage)

The features **NOT** present within the game are:

- Sync attacks
- Heal ability
- Functional puzzle elements
- Enemy AI
- Sounds
- Visual Effects (relating to particles)
- UI
- Checkpoints

Outsourced Test 2 (ECCO CONTROLS)

Overview

The second test will be focused on retesting the controls of Ecco, attempting to get a conclusive answer to the control scheme used. This is due to inconclusive results from the first test due to small oversights surrounding the initial test around the world space control scheme.

Test Method

This test will be conducted with 1 outsourced tester and at least 1 conductor from the group. The outsourced tester will be provided with a controller for Ecco while the conductor will control Sync, reason being to imitate the camera of the game following the 2 characters.

Questions

- https://forms.gle/HJL1KC1NFh62i84N6

Features present and missing

The features present within the game are:

- Models (blockouts for Sync, Ecco)
- Basic level layout
- Ecco movement (includes turning, acceleration, reversing, boost)
- Sync controls (includes movement)
- Camera following and zoom for both characters

The features **NOT** present within the game are:

- Animations (specifically for Sync)
- Functional puzzle elements
- Heal ability
- Sounds (for other aspects)
- Visual Effects (relating to particles)
- UI
- Sounds (Sync specific sounds)
- Enemies (includes health, taking damage, basic AI)

Outsourced Test 3 (CHARACTER FEEL TEST)

Overview

The third test will be focused on testing the core gameplay with 2 players to see how less experienced players work together and complete levels. Additionally, this test will focus on the controls and combat elements of both characters.

Test Method

This test will be conducted with 2 outsourced testers with at least 1 conductor from the group overseeing the test. The outsourced testers will be provided with controllers for Sync and Ecco and the feedback forms provided will be dependent on the character they play.

Questions

- https://forms.gle/QFmeeFdcGd6HoDB6A

Features present and missing

The features present within the game are:

- Models (blockouts for Sync, Ecco, enemies)
- Asset collisions
- Test level layout (with art assets included, textures for walls and floors)
- Ecco movement (includes turning, acceleration, reversing, boost)
- Sync controls (includes movement and attacks)
- Enemies (includes health, taking damage)
- Camera following and zoom for both characters
- Placeholder puzzle elements

The features **NOT** present within the game are:

- Animations
- Advanced combat
- Heal/revive ability
- Functional puzzle elements
- Visual Effects (relating to particles)
- UI (For Sync and Ecco)
- Sounds

Outsourced Test 4 (BF4, KK1 LEVEL TESTS)

Overview

The fourth test will be focused around testing different levels. The test will focus on 2 levels provided to the testers, getting their feedback on game flow and length. This test will additionally get feedback on general gameplay.

Test Method

This test will be conducted with 2 outsourced testers with at least 1 conductor from the group overseeing the test. The outsourced testers will be provided with controllers for Sync and Ecco and the feedback forms provided will be dependent on the character they play.

Questions

- https://forms.gle/Sm62LBQSKZiy4h666

Features present and missing

The features present within the game are:

- Beta Models
- Asset collisions
- Main menu and tutorial
- Level 1 & 2
- Ecco movement (includes turning, acceleration, reversing, boost)
- Sync controls (includes movement and attacks)
- Heal ability
- Enemies (includes health, taking damage, advanced AI)
- Camera following and zoom for both characters
- Functional puzzle elements
- UI (Health values for Sync and Ecco)

The features **NOT** present within the game are:

- Animations (specifically for Sync)
- Visual Effects (relating to particles)
- Sounds

Outsourced Test 5 (A01 LEVEL TEST)

Overview

The fifth test will be focused on testing different levels. The test will focus on 1 level provided to the testers, getting their feedback on game flow and length. This test will additionally get feedback on general gameplay.

Test Method

This test will be conducted with 2 outsourced testers with at least 1 conductor from the group overseeing the test. The outsourced testers will be provided with controllers for Sync and Ecco and the feedback forms provided will be dependent on the character they play.

Questions

- https://forms.gle/SxNstp87uxhQ5yj69

Features present and missing

The features present within the game are:

- Beta Models
- Asset collisions
- Main menu and tutorial
- Level 3 (Test run)
- Ecco movement (includes turning, acceleration, reversing, boost)
- Sync controls (includes movement and attacks)
- Heal ability
- Enemies (includes health, taking damage, advanced AI)
- Camera following and zoom for both characters
- Functional puzzle elements
- UI (Health values for Sync and Ecco)

The features **NOT** present within the game are:

- Animations (specifically for Sync)
- Visual Effects (relating to particles)
- Sounds

Outsourced Test 6 (IGDAM TEST)

Overview

The sixth test will be focused on general public testing. The test will focus on the menu, the tutorial and the first two levels. We will still be getting more feedback on game flow and length from this test, however, we are keeping in mind we cannot make any major changes at this stage.

Test Method

This test will be conducted with 2 outsourced testers with at least 2 conductors from the group observing the test at IGDAM. The outsourced testers will be provided with controllers for Sync and Ecco and the feedback forms provided will be dependent on the character they play.

Questions

- https://forms.gle/HMk1tpY56cpvGh75A

Features present and missing

The features present within the game are:

- Gold Models
- Asset collisions
- Main menu and tutorial
- Level 1 & 2
- Ecco movement (includes turning, acceleration, reversing, boost)
- Sync controls (includes movement and attacks)
- Heal ability
- Enemies (includes health, taking damage, advanced AI)
- Camera following and zoom for both characters
- Functional puzzle elements
- UI (Health values for Sync and Ecco)
- Animations (specifically for Ecco)
- Ambience lighting
- Some particles

The features **NOT** present within the game are:

- Sounds (No speaker/Headphones)

Critical fixes & Feedback

Test 1 Raw data

Takeaways & action:

- Ecco felt clunky
- Majority preferred local steering
- Turning circle needs to be tighter

Test 2 Raw data

Takeaways & action:

- Ecco still felt clunky, however a bit less
- Majority preferred global steering this time, so that's what we're locking in
- The turning circle needs to be tighter still on Ecco so we will make it smaller

Test 3 Raw data

Takeaways & action:

- Not enough player feedback, needs particles and audio
- Turning circle could still be tighter
- Syncs railgun feedback is bad - we're adding a UI for it now

Takeaways & action:

- Cooperations
- Felt good exploring/puzzle solving
- Combat felt awkward and more individual
- Only really worked together for healing ability (which isnt always needed due to eccos self heal)
- Felt easier/stronger for Ecco to ram enemies instead of using the refraction shot

- Combat
- On average, Sync players felt more useless/weaker during combat
- Partly due to how much longer it takes to kill enemies (single target for snipe shot, long charge time and awkward to aim for overclocked shot)
- Ecco players felt extremely powerful able to do many things single handedly, especially with the health siphon
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- Additional
- Doors are annoying - Ecco
- More feedback/ui
- Unclear on mechanics (siphon) - remember to teach in tutorial
- Could have the refraction shots also bounce (give higher reward for the attack)

- Level 1
- Length
- 3 on average
- Very happy with length

- Difficulty
- 2-3 on average (lower difficulty)

- Puzzles
- 1-3 on average
- Felt too easy

- Character movement
- Struggled to control Ecco
- Ecco would often fall behind Sync due to getting stuck when turning
- Sync controls felt fine
- Sync slightly slower than Ecco, was able to keep up due to easy turning

- Level 2

- Length
- Average 3-4

- Difficulty
- Average 2-4 (medium difficulty)

- Puzzles
- 2-3 on average (still easy but slightly more difficult)

- Character movement
- Door pain point - Ecco
- Sync a bit slow
- Better to move in open spaces
- Mostly the same answers

- Additional
- Fix door in office room (reopens once returning to main room)
- Could raise the stakes with timer or enemies

- Enemies
- Health
- Too tanky for Sync players
- Too weak for Ecco players

- Damage
- Average of 3 across both Ecco and Sync players
- Feels good?

- Speed
- Average 2-3
- Could be a little bit faster

- Amount
- Average 3-4
- Seems good, on the higher end on number of enemies

- Additional
- Feedback on enemies (explosions)
- Felt overwhelming for Sync

- Final
- Difficult to line up shots for refraction shot
- Player feedback and clarity
- Can make puzzles more difficult

Raw obs data

Brodie Level (Level 1)

Deaths: 8

- Bollard hardish to understand at the start of the level (tut should fix)
- Liked the trick ending - a bit too tricky to find though so the ending elevator room was a bit hard to find
- Punishment for skipping enemies so players cant rush to end of level
- Separate Ecco at some point, activate button and then sync gets attacked by enemies and Ecco needs to rush over.
- Shipping containers fun

Kian Level (Level 2)

Deaths **4**

- The start was a bit hectic, need some breathing room
- Kian plate puzzles work well, made the players think and forced them to separate a few times which was enjoyed.
- **The audio** bugged out hardcore, second-half level especially. (Programmer)
- Ecco cut off by sync with pressure plates was funny
- Ecco was getting stuck in the meeting room (hard to navigate)
- Hard to see what the first plate does in the first room
- The split path idea is awesome
- Unclear how enemy spawning works in some areas (the triggers)
- The last door broke - reopened and closed etc.

General

- Healing is only time coop is really used? Feels a bit forced, could tap in more to the prismatic shot to encourage more fun coop.
- **Ecco is so op sync under powered**
- Feedback missing for pressure plates
- Healing feedback needed
- Ecco boost on UI
- introduce enemies explosive (in tut)
- Need halfway **checkpoints**
- Destructible pallets?
- Fix colliders - remove and add
- Enemy ai extremely buggy
- Enemies really need feedback
- Have more unfinished/placeholders in

- Double Ecco health bar UI
- People were having fun with the asymmetrical gameplay

Ecco

- Ecco shouldn't be able to boost at low health - it kills them.
- Ecco's health siphon value should be lowered, instantly healing
- Acceleration is too quick on ecco
- Ecco could take less damage faster they go?
- Ecco sometimes random damage ?
- Ecco doing too much damage at low speeds
- Unclear on boost health reduced
- When laggy, ecco started spinning on boosts
- Pushing Sync when charging is cool
- Players seem to prefer moving backwards with Ecco (smaller turning circle)

Sync

- Reflection shot should hit More enemies? Rainbow beams could ricochet? Buff this shot. The prismatic shot needs to be easier and more focused and easier to hit.
- Shoot faster
- Darker and thicker laser for sync?
- Max Charge shot on Sync is not conveyed well (visually indistinguishable from snipe)

Test 5 Raw data

Takeaways & action:

- Level A01 needs te be more difficult
- Need to make the area easier for Ecco to navigate

Test 6 Raw data

Takeaways & action:

Igdam notes

Bumper/triggers for controls

Barrels exploding

Longer aim indicator

Went down in the container area

Camera zoom out is good

Ecco taking damage when boosting

Bit lost in the shelf area

Game stutter on enemies spawn

Bit confusing on the non linear aspect of the warehouse

Aim assist on sync

Ecco-sync balance

Once level has been mostly completed, much less communication is had

Could do checkpoints to help

Put plate in right room closer to door

Struggle to get into doorways

More feedback on damage

More feedback on death

Trying to hit 1 enemy can be difficult

Feedback for when characters are behind walls

Sync shot comes out within its collider

Enemy navigation

Make heal more prominent in tutorial

Sync doesn't use right joystick

Plate in bottom section is a bit hard to see