Haptic Module: Usability testing

~Bringing the Outside to You

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Project Overview

Rapid Prototype of Haptic Feedback

Modular system

Vibration Feedback from Rumble/Coin Cell motors

Feedback

From Usability testing we were given some very constructive feedback that we will be implementing into our design. We were given this feedback from a survey as well as verbal feedback. The main topics that we wanted to focus on was the following:

Which motor do they prefer?

Was the motors in the relevant potion?

Do they feel that their experience was enhanced?

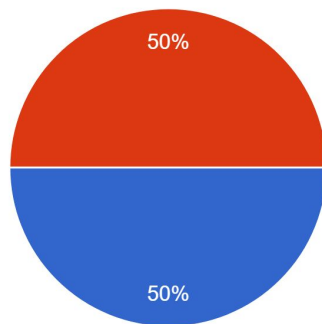Do they feel like feedback was strong enough?

Motor Preference

We found that from our survey that the preference was the same for both motors.

From verbal and written feedback we found that people that people like the response time of the vibration motors but preferred the feel of that the rumble motor provides

Which type of motor did you prefer?
10 responses

- Rumble (Right Arm Module)
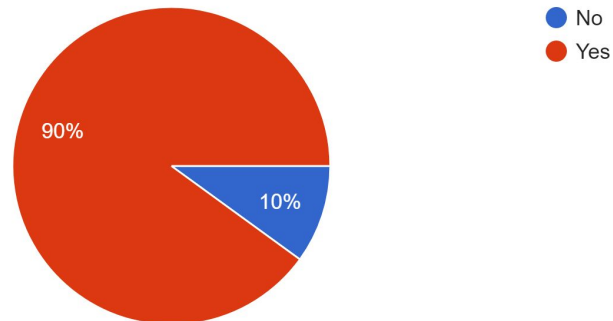- Coin cell (Left Arm Module)

50%

50%

Relevant Motor Position

We found that most people felt that the arm straps would be relevant for our game.

However we did receive some feedback that would suggest that a glove module would be a good addition

Where the motors in a relevant position?
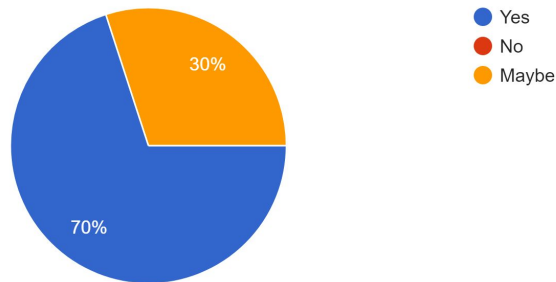10 responses

- No
- Yes

90%

10%

Do they feel that their experience was enhanced?

Overall it would appear that the Hapics did improve the user's experience and immersion.

Do you feel like the Haptic Feedback improved your immersion and experience in the game?

10 responses

- Yes
- No
- Maybe

70%

30%

Do they feel like feedback was strong enough?

We found that we had some mixed results

Overall we think that we need to provide a wider variety of feedback which should accommodate most users

Did you think that the feedback from the motors is strong enough or too strong or too weak?

9 responses

I'm a big boy I could handle more

i found that was strong enough

The rumble was strong enough to be realistic

Too weak

perfectly balanced, as all things should be

Rumble took a while to wind up, but good power. Vibration motor was very responsive but not as good

The rumble motors were definitely too strong, coin one wasnt so bad but was still distracting

Coin cell potentially too weak. Rumble motor strong enough.

Slightly weak

Going Forward

We have decided to make a new module that will have both types of motors incorporated into it. Our plan is to use two Coin cell motors on the outside edges of the module with a rumble motor in the centre.

With the use of both motors we plan to create multiple variations of feedback

Have fully integrated VR

Fix current bugs in communication code