## Discovery and Building of Exploits in Gaming

Anna is a character in Tekken 8 with a slapping move that has unique property. This slapping command can be reversed with female characters, in

(It might be important to note, that only Anna and Nina can \*initiate\* responses. All female characters, must wait for the "prompt" in which they have a small window to respond with the same slap move, which is usually not available to them (input it is: b2))

After a patch in the game, it was discovered that after some days that the men had access to a response normally restricted from them. Breaking a fundamental aspect of the game that's been around for decades.

## Expected



## Unexpected



This was breaking a "rule" in the game's expected state, such that characters coded male were not typically able to access the response to Anna's slapping prompt.

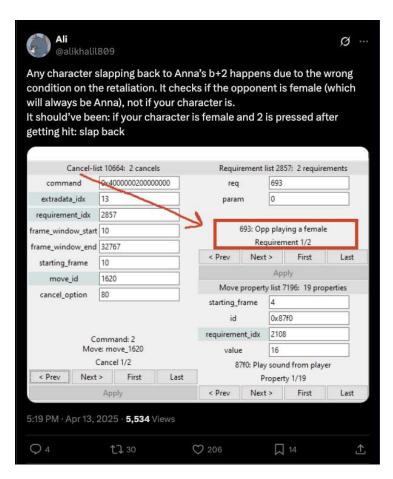
People found this fascinating enough that they tinkered with this some more, and found that for a short period, the <u>male characters</u> could also perform other moves that Anna had, instead of the slap.

With Anna's move set temporarily stolen, you could input (2~1+2 after a <u>1 frame delay</u> on her, and after doing so if you go into one of her stances, CJM, and if successful, you now had access to her entire move set after the "slapping prompt".)

Even further, it was discovered that, if Anna was hit by a projectile, from her own stolen move set, she would then have complete access to the offending characters move list, thus swapping them and further mutating the exploit.

## (Video of user recreating exploit:

https://www.reddit.com/r/Tekken/comments/1jwbgk3/anna\_glitch\_explainer\_have\_fun\_be fore\_they\_patch)



This exploit even further developed to the point that users were able to access memory addresses that had moves for characters not even yet added to the game.



It's not important to understand the moves, stances, and other fighting game jargon. However, I did think it was relevant to our project as it is an instance in which, through unexpected input, users were able to consistently and reliably change to unexpected result and then through trial-and-error, build syntax off it in which to exploit it deeper. The result is something that completely changes the programming of each of the characters, something often rigid, and breaches other assumptions of the game's intended experience.