

## CyJump

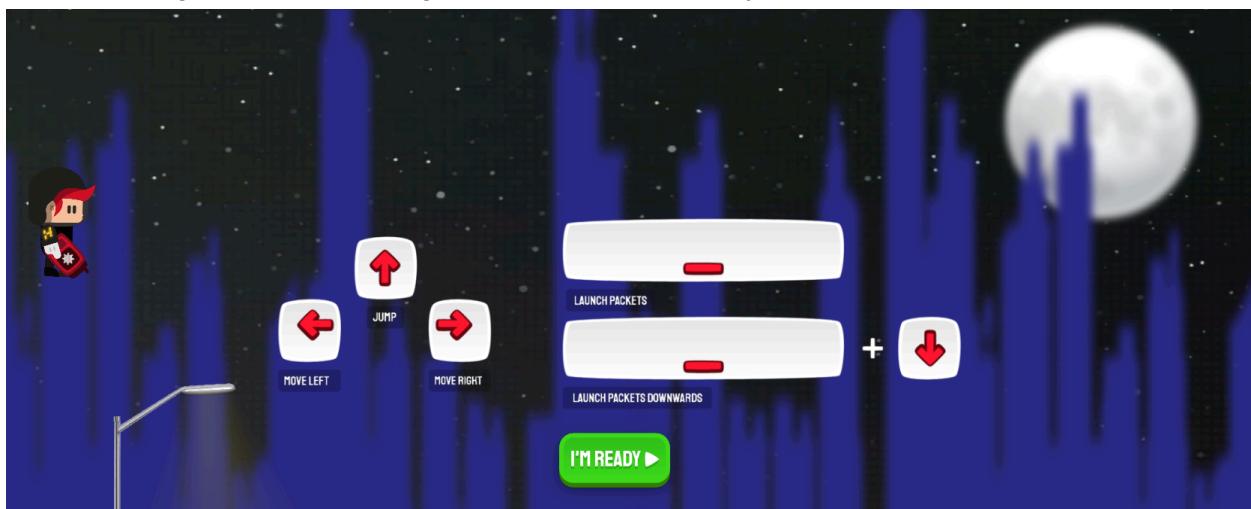
Your friend Danny, who is taking a game development course, sent you his first web-based game. Danny tried to fool you by sending an impossible-to-win version of the game. The short video reveals “Small changes can make a huge difference.”

### Your goals

Use the arrow keys [ $\leftarrow\uparrow\rightarrow\downarrow$ ] and space bar to control the character within the game.

Play the game and defeat the boss to complete the level.

Reach the flag at the end of the game (hack it if necessary)

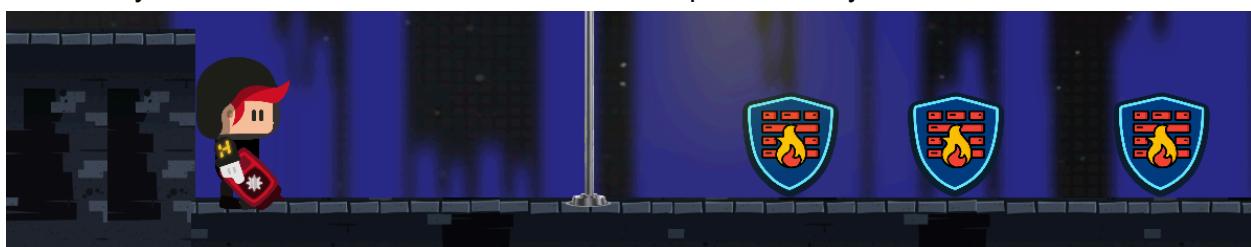


### My Process

First, I examined the short video clip which explained that this was a first-person shooter type online game with the phrase “Small changes can make a huge difference.” This is a clue.

Then, I played a round of the game to get a feel for how “impossible-to-win” it is.

Those shields are approaching fast, and there’s so many it was hard to capture a screen-grab before they eliminated me. It would be nice if I had rapid-fire ability.



I managed to blast through the first round of shields, but then I reached a brick wall with a sign “If I could only jump higher.” A wish I have in real-life, too, LOL! However, no amount of arrow combinations worked to achieve a greater jump ability.



OK, Danny, it's looking pretty impossible-to-win. But I'm persistent.  
I examined the URL of the game.

```
host-wmmydsy0-prod.prod.cywar.xyz:32863/?jump=10&delay_between_packets=18
```

Interesting. That address reveals two things:

- jump=10
- delay\_between\_packets=18

Then I remembered the clue from the video: "Small changes can make a huge difference."

Wait, this looks like a Parameter Tampering challenge!

So I played with the **jump** and **delay\_between\_packets** directly in the URL

- jump=(number greater than 10) To Infinity and BEYOND!
- delay\_between\_packets=(number smaller than 18) No breath between blasts!

```
host-wmmydsy0-prod.prod.cywar.xyz:32863/?jump=100&delay_between_packets=0
```

Ran through the game again with the updated URL and ...

WOOHOO!



| Submit flag ▶ what is a flag



Ready to submit your answer?

▶ Submit