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Game Physics Ideas

Knockback Formula:

$$F_k = \frac{s}{100} \left(\frac{14(p+d)(d+2)}{w+100} + 18 \right) + b$$

Where p is a character's current percentage. The other variables come from the following

Moves :

- d (float) - base damage of move
- b (float) - base knockback of move
- s (float) - knockback scaling/growth
- l_d (Vector2) - launch direction relative to player?

Characters :

- w (float) - weight
- f (float) - max fall speed
- stunned (bool) - whether or not a character can move

Side Notes:

We apply a force F_k to the character being hit, but do we need an opposing force to slow down the launched character?

some moves will not scale with a characters damage percentage.