

[https://github.com/Helodity-M/Game2\\_SnowSurfer](https://github.com/Helodity-M/Game2_SnowSurfer)



A few of the changes I made after the videos consisted of improving the flip detection and improving the look of the UI. Flip detection had the potential to become desynced after longer levels. This occurred because it did not account for overshooting. For example, if the player's total rotation changed from 354 to 362 in one frame, the flip detection algorithm would set the total rotation to 0, offsetting the marker for an entire flip by 2 degrees. This error compounds for every flip and could potentially lead to noticeable desync. To fix this, I instead subtracted 360 from the total rotation, allowing any overshoot to remain and keeping the flip marker fixed. To improve the UI, I implemented a script that slowly updates the score. This makes activities that increase your score more noticeable without putting much visual noise on the screen. This better communicates that doing flips earns score, though having a sound effect and particle effect would also help.

One difficulty I ran into was preventing the goal post from triggering multiple times. This occurred primarily due to the player containing multiple colliders. However, it could also occur if the player were to reenter the goal post's hitbox before the next scene was to load. I solved this problem by adding a boolean onto the goal post that got set to true after any suitable hitbox collided with the goal post. This ensures that the goal post can only ever be triggered once regardless of how it may be triggered.