**The iterations on the friction game mechanics and elements in the game scene.**

**Basic mechanics.**

The basic mechanics of our game, is that each player (2) has a ramp and a player character that slides down the ramp, being affected by the friction in-between the objects, and on a key press, they stop the player character in a “end zone” and the player to stop closest to the middle, of the end zone wins that round or game.

**Mechanics and elements and their iterative process.**

* **Ramps.**

The ramps basic set up is a set length, set distance and set angle ramp that the player character can slide down.

The iterations for the ramps have been considered further and this is the current plan for iterating the ramps. The ramps will have certain levels of surface friction that slow down and speed up, the surface tension will be levels of bumpiness that can slow down the player character or even bounce the object up and down potentially taking away control from the player.

The ramps will also have different lengths and angles, increasing or decreasing player speed and how long the player must wait for the moment where they must stop, this will create suspense and tension as they don’t know when the goal is coming up.

The number of ramps will also be a late game iteration, using either multiple ramps that the player must top stop multiple play characters on, or one whole new level following another after a drop, this will be play tested.

* **Player Character.**

Iterations for the player character where then further looked at these were;

The player character for the game can be iterated by increasing or decreasing the mass to affect the speed.

The player character will also have different surface tension and friction to affect it speed or control the player will have over the timed stop.

The shape of the player character will be play tested to see if it is a good way of affecting control the player has and the momentum the player character gains from the object, we will also play test changing the size as it changes the difficulty of landing in the end goal.

Another concept we will playtest that will be late game to increase the challenge is the aspect of multiple player characters that must be stopped with different key presses.

* **End Goal.**

The end goal is a vicinity that will be shown by iconography to be the “finish line2 or in this games instance the win condition as whoever stops their player character closest to the centre of the end goal will win the round/game.

The main iteration we will focus on, will aim to raise the level of difficulty through the end goal moving making it harder for the players to time up a perfect result, we will playtest different moving speeds and distances it can move.

One new concept I have created is that the end goal will either be raised or lowered compared to the ramp, either with a drop or a jump, so an element of timing could be implemented, this will need playtesting.

Multiple end goals will be an iteration, so that the players will be scored on their performance with all goals, this will work as a key press will happen when they reach the first goal, after pressing that and stopping, iconography will show it is not over and they will be given a countdown before continuing down the slope to the next goal.

The size of the goal can change so that the margin for error becomes smaller.

* **Other iteration ideas/concepts.**

These were other ideas and concepts to iterate elements of the game that may not be visible in the game scene. Some of these were;

* Elements of what friction such as concepts and how they would apply, for example speed wise of game wise.
* Friction from above, as in platforms above the player character that would sometimes appear and either surprise slow down or increase momentum.
* And additional abilities the player could apply to their object at a choice, such as oil or grit salt to slow down or speed up friction.