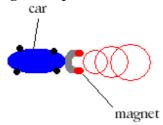
Final Project Proposal

Picture a bumper cars arena with 2 cars/players. Now imagine there are massive holes in this arena, and each player's objective is to knock the other player into a hole. Now, to take it to the extreme, imagine that each bumper car has a massive magnet attached to the front. The magnet has the ability to attract or repel other objects, including the other player's car.

To elaborate, there are two players and each player is represented by a car. The main objective is to drive around the arena and collect coins which randomly pop up around the arena. The player who collects a certain amount of coins first is the winner. The two hero objects, or cars, will also be able to interact with each other by pushing and pulling each other into the holes using their magnets. When a car falls into a hole it will re-spawn back at its base, and have to drive all the way to the middle again to start collecting coins (most of the coins spawn in the middle).

Magnet Implemented as Bounding Circles:



This is a basic demonstration of how the magnet works. A collision with the inner most bounding circles results in the most repulsion/attraction, and the outer circles have the weakest repulsion/attraction. We could also implement a particle effect for the area that the magnet covers.

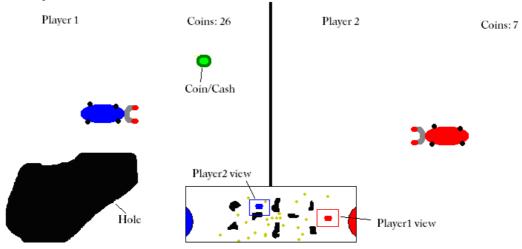
Controls:

For the Xbox 360, each player would have their own controller. The controls work as follows:

- The right trigger accelerates forward.
- Left trigger accelerates backwards.
- The left analog stick steers the car.
- The right analog stick controls the magnitude of the magnetic power on the y-axis.

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Example Game View:



The game is played as a split screen, so there is one view per player. There is also a third shared zoomed out view of the world, which players use to spot each other and coins.

Tactics:



Here the blue car has an easy opportunity to push the red car into the hole by using the repulsion of her magnet. Alternatively she could pull the red car towards her, and then drop it in the hole for a merciless takedown.

Power ups: We could have power ups spawn randomly across the map to give bonuses such speed boost, and bigger battery for the magnet (the magnet uses a regenerative battery to recharge after use).