# Step 1. Identification of the problem.

Identification of necessities.

* They need to be able to register 7 to 10 hours riders.
* They need to order hours rides in order of registration.
* They need to register the bettors when the racecourse doors open.
* The registration time of bettors is 3 minutes.
* it must be possible to visualize the winners of the race.
* Users should be able to quickly check, from their ID, the record of their bet where it should also appear now if their horse won or lost the race.
* The racecourse needs a rematch option that be able to create a new race.
* if the rematch button was used, then the rider who won the race must be in the last position and the last one to arrive will be in first place.

Problem definition.

* The “El indomable spirit” need to incorporate a system where the flow of the entire racecourse operation can be managed.

# Step 2. Information gathering.

Definitions

Racecourse:

The racecourse is an arena suitable for horse racing. The interior has bleachers on the perimeter, and the center is made of earth or grass. In the center there is an oval bordering the steps that form the track. Horse races are played on the track. The tracks can be dirt or grass.

Career:

A race is a speed competition, in which competitors have to complete a certain path or distance using the shortest possible time, or travel as long as possible in a certain fixed time.

# Step 3. Search for creative solutions.

Alternative 1.

Use structures like queues together with the hash table to be able to handle the process flow of the racecourse.

Alternative 2.

Create our own structures in order to do everything we need in an efficient way.