

## Challenges

- 1) Join both datasets such that each event is associated with the correct coordinates of the corresponding player at the given time. The units for time, x, and y can be chosen as you like.

The output table should look like this:

event_id	half_time	time	player_id	team_id	event	x	y
0	1	0	358112	1935290	Kick Off	5267	3374
...	...	...	...	...	...	...	...

- 2) Calculate the length of the ball trajectory from the initial kickoff to the first "Ball Out of Play" event. The unit should be in meters.
- 3) Add a new column to the first table that flags for each pass and cross event if the pass was successful or misplaced.
- 4) Which player had the most passes, which had the best pass completion rate in percent?